Report on the findings from Module 1

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Acknowledgements

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Table of contents

Section 1: Executive Summary of Engage to Change study - Module 1

Context for the study

This study was carried out on behalf of the Public Service Pay Commission (PSPC), which identified particular recruitment and retention difficulties in certain areas of the public service. Within the health sector, the Commission identified evidence of specific recruitment and retention difficulties in certain grades these include; consultant, non-consultant hospital doctors and nurses, as well as a range of allied health professionals' (e.g. radiographers, psychologists, paramedics).

The study is a:

> *nationally representative study on recruitment and retention of key professionals within health services, namely, nurses, consultants and non-consultant hospital doctors.*

A scoping review of the literature was carried out and the findings from the literature provide clear evidence that decisions made to enter or leave work, organisations or professions are based on judgements about the "*whole of the advantages and disadvantages*" of different employments (Eberth *et al*., 2016; 783). While pay is one of these factors, many other areas relating to individual, job and organisational characteristics are also important in decisions to join, stay or leave. Consequently, this study takes account of a wide range of factors, as the resolution of a limited number of issues may not result in improvements in retention and recruitment of staff. The output from the study will be used to inform the development of options to address any identified recruitment or retention issues.

Methodology

A mixed methods sequential explanatory design was adopted to this study. Separate studies were conducted with nurses and with consultant and non-consultant hospital doctors. Key elements in the conduct of the study are presented in Figure 14.

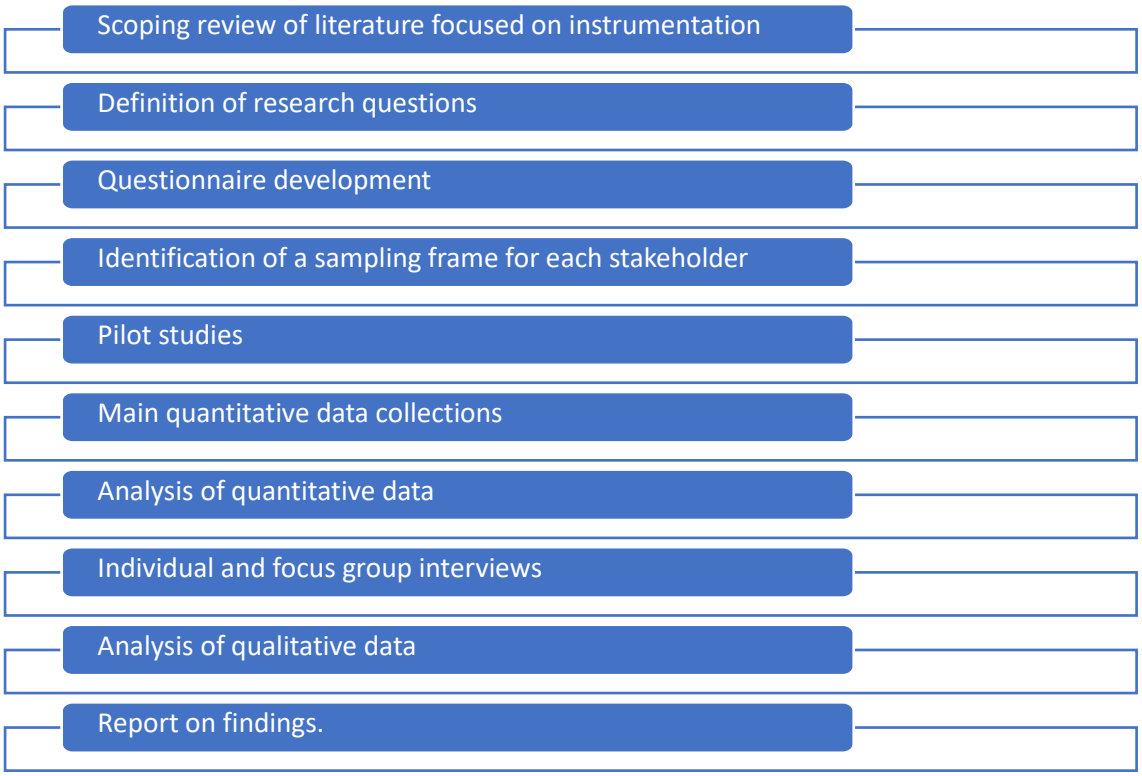


Figure 1: Key elements of study process

Methods

An online survey methodology was used to collect quantitative data from each stakeholder group. In addition, focus groups and individual interviews were conducted with nurses, consultant and non-consultant doctors from a range of grades, regions, and contract types.

Table 1: Number of participants and source of data

	N	Commentary
Nurses' survey	3,769	Data weighted by grade, full / -part-time status and sector (acute / community setting)
Doctors' survey	1,438	Data weighted by gender / grade / in training / not in training
Nurses' interviews	44 nurses interviewed	1 focus group (1 with directors of nursing) 38 individual interviews
Doctors' interviews	50 doctors interviewed	Focus groups (n = 3; 30 NCHD participants) 20 individual interviews (12 with consultant doctors)
HR personnel	6	1 focus group

Data analysis

Quantitative data was exported from the internet survey provider (SurveyMonkey™) into IBM SPSS (Statistical Package for the Social Sciences v24.0). The data were weighted to provide nationally representative estimates on the basis of the characteristics used to compute the sampling weights. Open-ended and unstructured question responses were coded separately and re-merged into the original datafiles. Descriptive and inferential analysis of quantitative data was carried out with the use of both Excel and SPSS. All interviews were audiotaped and transcribed, and all steps taken to ensure that anonymity was safeguarded. Thematic analysis was undertaken, and NVivo software was used to assist in structuring the data.

Ethical approval

Ethical approval for this study was sought from, and granted by, the School of Nursing and Midwifery Research Ethics Committee. Key areas considered in the ethics application related to confidentiality, anonymity and the protection of data.

Key findings from the study – nurses

Findings from the study of nurses are presented separately in respect of the quantitative and qualitative findings.

Key quantitative findings from the survey of nurses

Figure 2 shows the mean scores on the questionnaire indexes included in the survey of nurses. Group differences were examined on each of these indexes, on the basis of age group, country of initial qualification, gender, grade, geographic region, full- / part-time status, sector and intention to stay in or leave current job over the next two years.

Nurses had the highest scores on impact of their work, perceptions of co-workers and employee engagement (these ranged from 73-82%). In contrast, scores were lowest on intention to leave the nursing profession, information sharing and satisfaction with pay (23-40%).

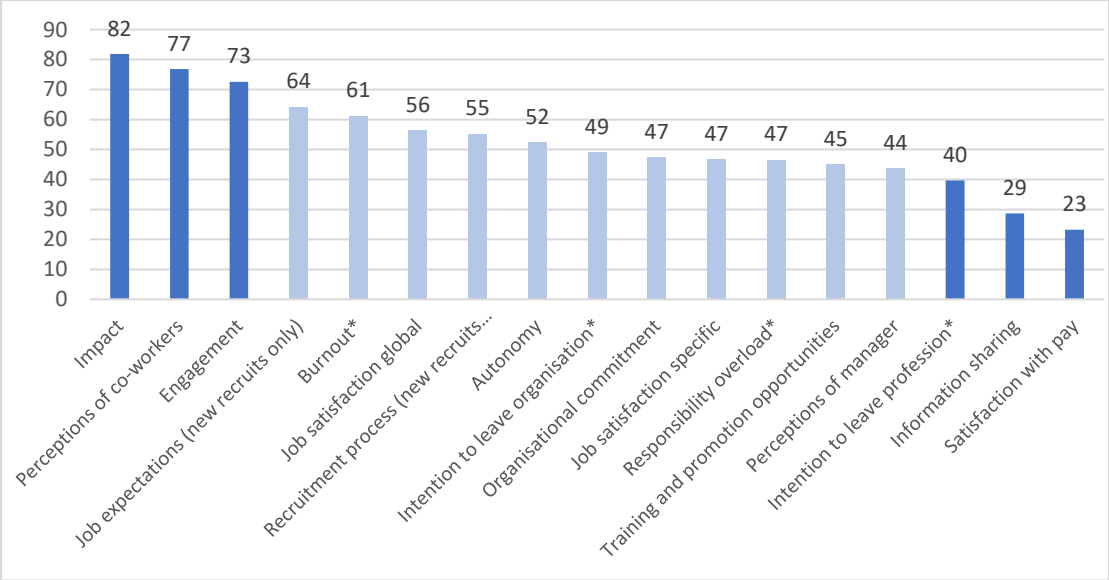


Figure 2: index means for nurses

Note. Higher scores indicate a more positive outcome, with the exception of indexes marked with *. Scores can range from 0-100.

Each of these indexes was further examined with regard to the impact of age group, country of initial qualification, grade, full- / part-time status, sector and intention to stay in or leave current job in the next two years. Some key outcomes of these comparisons indicate that:

- Older respondents (aged 51 or older) tended to have more favourable outcomes on these measures.
- Nurses who obtained their initial qualification in a non-EU country also tended, broadly speaking, to report more positive outcomes than their counterparts who qualified in Ireland or another EU country.

- Nurses working in Dublin had more favourable scores on a majority of these measures than those of respondents working in the rest of Leinster, Munster and Connaught.
- Across the various nursing grades, staff nurses and student interns tended to report less positive outcomes, while directors / assistant directors, managers, and in some cases, specialists and public health nurses, reported more favourable outcomes.
- Broadly speaking, respondents working full-time had more positive perceptions than those working part-time.
- Views of nurses working in the acute sector tended to be somewhat less favourable than those of nurses working in the community sector.
- A little under two-fifths of nurses (36%) intended to leave their current job in the next two years. Nurses who intended to leave had much less favourable perceptions of their job and the organisation (as measured by these indexes) than those intending to stay.

In addition to these measures, nurses reported that:

- While 11% worked overtime with pay at least once a week, almost two-fifths (37%) did so without pay.
- About 22% worked overtime with time in lieu at least once a week.

The results of these three sets of models indicate that the following are of key importance in that they are predictive of a higher likelihood of leaving the job, the organisation, and / or the nursing profession:

- Younger age
- More time taken to get to work
- Less than two years in current job
- Fewer training and promotional opportunities.
- Lower global job satisfaction
- Higher levels of burnout
- Lower levels of organisational commitment

The models also show that the relationship between satisfaction with pay is mediated by aspects of the work relating to satisfaction, burnout and commitment. In other words, low satisfaction with pay may be symptomatic of lower general satisfaction and less favourable working conditions.

Additional analysis also showed that for new recruits, in addition, job expectations emerges as an important predictor of intention to leave the organisation. Given the importance of global job satisfaction, burnout and organisational commitment in predicting nurses' intentions to leave, it is relevant to note that a range of characteristics predict these three 'impacts':

- Satisfaction with pay, autonomy, impact, effort-reward ratio and responsibility overload 'drive' global job satisfaction

- Training and promotion opportunities, autonomy, impact, perceptions of co-workers and information sharing 'drive' organisational commitment, and

- Responsibility overload, effort-reward ratio, satisfaction with pay and autonomy 'drive' burnout.

As a set, the regression models of these three outcomes provide initial indications for policy formulation at both organisational and structural levels. In particular, they provide information on (i) groups in the population that are more likely to intend to leave and (ii) specific aspects of the work that could be the targets of policy. That is, positive (negative) scales with low (high) overall means and significant relationships with intent to leave, or with significant relationships with the impact measures of global job satisfaction, organisational commitment, and/or burnout, merit policy focus.

Respondents who indicated an intention to stay in their current job over the next two years (55%) were asked to rate the relevance of a range of factors to this intention. Two of these factors – suitable working hours / days and personal or family reasons – were rated as highly relevant by over half of respondents, while convenient location was rated as highly relevant by 45% of respondents.

Respondents who indicated an intention to leave their current job over the next two years (36%) were asked to rate the relevance of a range of factors to this intention. The two factors with the most frequent rating of highly relevant were that staffing levels are a problem (66%) and the work environment is too demanding (53.5%).

Qualitative findings emerging from interviews with nurses

The qualitative findings are presented in three parts, viz. issues relating to the work of nurses, to the organisational context and reasons to stay and leave.

Summary of issues relating to the work of nurses

- ***Positive findings*** in respect of nursing emphasise its versatility and the ability to work almost anywhere. Job satisfaction was highlighted as being high in situations where individuals are able to work in an area that interests them, use their skills and expertise, make a positive impact, and be valued by patients.
- ***Demands and staffing:*** the source of the most challenges arising in respect of nurses' work is firstly, an increase in the level of demand (due to increases in the number of patients and in the complexity of problems arising) and secondly, inadequate staffing levels.
- ***Outcomes from inadequate staffing levels:*** where staffing levels were identified as being inadequate, negative impacts on patients and nurses were identified. It is clear from the examples given, and the passion and emotion with which nurses spoke about these issues, that there are significant consequences arising from these shortages. These consequences were identified as having:

    - An unreasonable workload
    - Burnout
    - Responsibility overload
    - Negative working relationships
    - Fear of making mistakes
    - Challenges in working hours due to the need to provide round-the-clock care.

Summary of issues relating to the organisation

- ***Pay and remuneration*** accounted for the most extensive commentary in respect of the organisation. Specifically, the following issues were raised:

- The overall level of pay was identified as being too low, particularly in the context of pay cuts, additional taxes, and the requirement to work extra hours since the austerity measures had been put in place. Working in the Dublin area was identified as impacting on the extent to which nurses were able to manage on their pay.
- Inequities in the level of pay relative to others was a source of anger and unhappiness, and many unfavourable comparisons were made with the pay received by other healthcare workers (e.g. healthcare assistants, cleaners), other members of the multidisciplinary team (e.g. OTs, physiotherapists) and those working in similar type professions (e.g. teachers).
- The pay for nurse managers was highlighted as problematic and personal examples were given of nurse managers' take-home pay being reduced on promotion.
- Unpaid working time was also highlighted as a significant problem, and this arises mainly because of the requirement to provide a *"round-the-clock service"*, resulting in nurses having to stay after completing a shift to give a handover to those staring on the next shift, as well as not being able to reclaim time in lieu.

- ***Organisational culture, including relationships with others, training and development and promotions***
  - *Relationships* with others, including working as part of a team.
    - The coordinating role across various team members was highlighted, as well as the need for some tasks currently undertaken by nurses as being inappropriate.
    - Relationships with nursing colleagues were generally very positive and were highlighted as a reason for staying.
    - Relationships with managers were generally less positive and issues arising related to responses to ongoing staffing problems or excessive workload.
    - Outcomes from the organisational culture experienced by nurses included:
      - Not feeling valued
      - Not being involved, listened to, or responded to
      - Basic supports, such as appropriate lifting equipment and beds not being provided.
  - *Training and development*, including ongoing education and promotional opportunities, were also identified as an issue, particularly in terms of lack of support and time off or payment for travel to take part in continuous professional development. The busyness of the service was highlighted as particularly problematic in this regard.
  - *Promotion* was identified as an issue and, in addition to a potential reduction in take-home pay, it was suggested that the promotional process at local level may not be as robust as it should be.
  - *Recruitment* issues arising related to:
    - The long and drawn-out process, particularly in respect of nurses from overseas
    - The need to do more about retaining new graduates
    - Challenges in respect of recruiting managers – potentially reduced take-home pay and requirement to be a person in charge of a designated service for HIQA
    - The availability of alternative opportunities.

Reasons why nurses stay / leave, based on the qualitative data

Based on the qualitative data, nurses stay working in their current position for four main reasons and these are:

- They enjoy the work they do
- They work in a supportive environment
- They have personal reasons for staying, including living in a location that suits them
- They have limited opportunities to move elsewhere.

Reasons why nurses leave are presented in Figure 16 below.

Figure 3: Reasons nurses leave

Key findings from the study – consultant doctors

The findings from the quantitative and qualitative study of consultant doctors are presented separately.

Findings from the survey of consultant doctors

Consultants had the highest scores on impact of their work, employee engagement and perceptions of co-workers (76-85%). In contrast, scores were lower on intention to leave the medical profession, information sharing, satisfaction with pay, and responsibility overload (30-32%) (Figure 4).

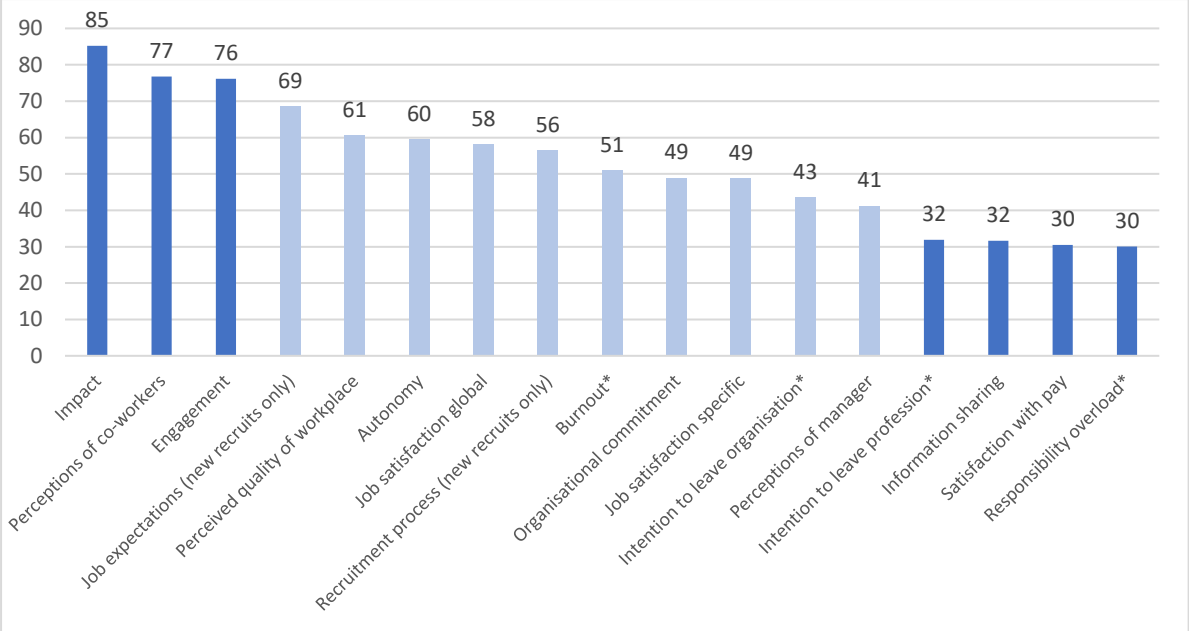


Figure 4: Index means for consultants

Note. Higher scores indicate a more positive outcome, with the exception of indexes marked with *. Scores can range from 0-100.

Each of these indexes was further examined with regard to the impact of age group, country of initial qualification, gender, geographic region, full- / part-time status, sector, setting (hospital / other consultant), and intention to stay in or leave current job over the next two years. Highlights include:

- Some variation in results for consultants who obtained their initial qualification in Ireland (as opposed to in another EU or non-EU country) that indicated more favourable perceptions in some areas, but less favourable outcomes in others.
- Less favourable outcomes for female than male consultants on about one-third of the indexes.
- Generally, more favourable outcomes for consultants working part-time as opposed to full-time.
- More favourable outcomes for consultants working in private settings, when compared to those working in public and both public and private settings.
- Somewhat less favourable perceptions among hospital consultants than among other consultants.
- Much less favourable outcomes for consultants who expressed an intent to leave their current job in the next two years (29%), compared with the outcomes of those intending to stay.
- Few differences by age or geographic region.

Responses of consultants on questions about working overtime indicated that:

- It was common for consultants to work overtime without pay: 61% did this once a week or more often.
- About 36% of consultants worked overtime with pay once a fortnight or more often.
- It was less common for consultants to work overtime with time in lieu. About 83% indicated that they did this very rarely or never.

A total of 28 individual, employment, structural and perceptual / attitudinal characteristics were examined simultaneously, to establish which were the most important predictors of three outcomes:

- Intention to stay in or leave current job in the next two years
- Intention of leaving the current organisation
- Intention of leaving the medical profession.

The models indicate that the following characteristics are predictive of a higher likelihood of leaving the current job, the organisation, or the medical profession among consultants:

- Being less than two years in the current job
- Qualifying in Ireland (as opposed to outside of Ireland)
- Having higher effort-reward ratio (i.e. more perceived effort for lower perceived reward)
- Having lower satisfaction with pay
- Working in public (as opposed to private, or both public and private) settings
- Working part-time
- Having lower global job satisfaction
- Having lower levels of organisational commitment
- Having higher levels of burnout.

Given the importance of global job satisfaction, burnout and organisational commitment in predicting consultants' intentions to leave, it is relevant to note that a range of characteristics predict these three 'impacts':

- Satisfaction with pay, perceived quality of workplace, information sharing, autonomy, effort-reward ratio, responsibility overload and perceptions of co-workers 'drive' global job satisfaction

- Perceived quality of workplace, perceptions of manager, perceptions of co-workers, information sharing, satisfaction with pay and impact 'drive' organisational commitment (with absolute values of partial correlations ranging from .13 to .24), and

- Responsibility overload, perceived quality of workplace, effort-reward ratio and information sharing 'drive' burnout.

As a set, the regression models of these three outcomes provide initial indications for policy formulation at both organisational and structural levels. In particular, they provide information on (i) groups in the population that are more likely to intend to leave and (ii) specific aspects of the work that could be the targets of policy. That is, positive (negative) scales with low (high) overall means and significant relationships with intent to leave, or with significant relationships with the impact measures of global job satisfaction, organisational commitment, and/or burnout, merit policy focus.

Respondents who indicated an intention to stay in their current job over the next two years (68%) were asked to rate the relevance of a range of factors to this intention. Two of these factors – suitable working hours / days (40%) and personal or family reasons (51%) – were rated as highly relevant by over two-fifths of respondents.

Respondents who indicated an intention to leave their current job over the next two years (29%) were asked to rate the relevance of a range of factors to this intention. The two factors with the most frequent rating of highly relevant were that staffing levels are a problem (44%) and that there are better job opportunities elsewhere (43%).

Almost equal proportions (just over 30%) of consultants who intended to leave their current job in the next two years planned to leave Ireland without returning or planned to leave Ireland but to one day return. One in 10 (10.4%) planned to stay in Ireland, while 28% were not sure of their plans over the next two to five years.

Findings from the qualitative analysis

Throughout the collection of data from consultants in this study, it was clear that there were significant concerns that the information provided would not be sufficiently anonymised and this was an unexpected feature of data collection with this group. The qualitative findings are presented in three parts, viz. positive aspects of being a consultant, challenges arising, and reasons to stay and leave.

Positive aspects of being a consultant

- Working with patients
- Being able to work in areas that are of interest to them
- Having autonomy.

Challenges arising

Pay and remuneration

Pay was identified as one of the biggest issues arising. While recognising that relative to others, consultants are well paid, it was suggested this needed to be balanced with the investment made in their training and careers, and in the sacrifices made to achieve consultant level. Key issues identified included:

- The actual amount of pay
- Opportunities for much higher levels of pay in other jurisdictions, or the private sector in Ireland
- Inequity in pay for consultants who had joined the service in recent years.

Organisation context and culture of the HSE

- A lack of trust and goodwill due to *"the breach of contract",* in respect of newly appointed consultants
- A lack of transparency about problems and a lack of involvement in decision-making by consultants, even in situations where their patients were directly affected
- Leadership, although there were different perspectives, depending on whether the focus was on autonomy
- Inequity and lack of transparency in the allocation of resources throughout the service.

Relationships

Relationships with other members of the medical team and with other professionals within the multidisciplinary team were generally reported to be very good. Relationships with HSE managers were mainly reported to be negatively experienced as:

- A lack of value and respect for the work done by consultants
- A lack of recognition of their knowledge and achievements by managers.

Reasons to stay / leave

Based on the findings from the qualitative data, the following reasons were given for consultants staying in their job.

> ***Family reasons*:** in terms of intention to stay or leave, there was a striking focus on family reasons (e.g. children in school, settled in the local community, being able to do the activities they want) as the main impetus for remaining in the service. The following reasons were identified by a small number of consultant doctors:
>
> - ***Feeling a sense of pride in their work***
> - ***Challenges of having to start over again***
> - ***Feeling a sense of responsibility to their team and to the country.***

Reasons for difficulty in attracting consultants

There were three main issues arising and these were:

- The post was not considered attractive in terms of pay and conditions.
- Pay and conditions in other jurisdictions, and in the private sector, are more attractive.
- The recruitment process, which was described as slow, cumbersome and frustrating.

Key findings from the study of NCHDs

The findings from the quantitative and qualitative study of non-consultant doctors are presented separately.

Findings from the survey of NCHDs

NCHDs had the highest scores on impact, engagement and perceptions of co-workers (73-83%). In contrast, scores were lower on training opportunities, information sharing and satisfaction with pay (30-39%).

Figure 5 shows the mean scores on the questionnaire indexes included in the survey of NCHDs.

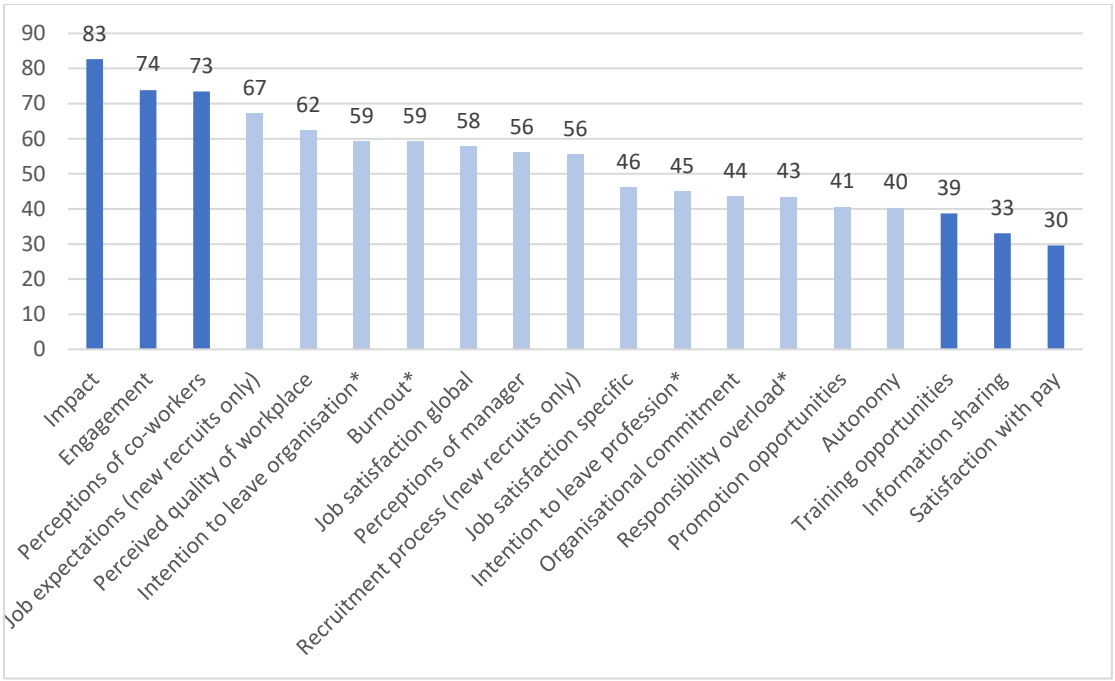


Figure 5: Index means for NCHDs

Note. Higher scores indicate a more positive outcome, with the exception of indexes marked with *. Scores can range from 0-100.

Group differences were examined on each of these indexes, on the basis of age group, country of initial qualification, gender, geographic region, full- / part-time status, sector, training status (NCHD in training / not in training), and intention to stay in or leave current job over the next two years. Highlights include:

- Generally, less favourable outcomes for younger NCHDs (aged 30 or younger).
- Variation in results for NCHDs who obtained their initial qualification in Ireland (as opposed to in another EU or non-EU country), which indicated more favourable perceptions in some areas but less favourable perceptions in others.
- Generally, more favourable outcomes for NCHDs not in training, compared with those for NCHDs in training.
- Much less favourable outcomes from NCHDs who expressed an intent to leave their current job in the next two years (60%), compared with outcomes from those intending to stay.
- Few differences by gender, geographic region and sector.

Responses of NCHDs on questions about working overtime indicated that:

- It was common for NCHDs to work overtime with pay: 82% did this once a week or more often.
- About 48% of NCHDs worked overtime without pay once a fortnight or more often.
- It was less common for NCHDs to work overtime with time in lieu. About 76% indicated that they did this very rarely or never.

Findings from the regression analyses

A total of 30 individual, employment, structural and perceptual / attitudinal characteristics were examined simultaneously, to establish which were the most important predictors of three outcomes:

- Intention to stay in or leave current job in the next two years
- Intention of leaving the current organisation
- Intention of leaving the medical profession.

The models indicate that the following characteristics are of key relevance in NCHDs' job and career intentions (i.e. are significantly predictive of a higher likelihood of leaving the current job, the organisation, and / or the medical profession):

- Fewer opportunities for training
- Fewer opportunities for promotion
- Younger age
- Training status (with higher likelihood among NCHDs not in training, compared to those in training)
- Higher levels of burnout.

The models also showed that the relationship between satisfaction with pay tends to be mediated by aspects of NHCDs' work environments relating to training and promotional opportunities. This implies that low satisfaction with pay is symptomatic of opportunities for professional training and promotion.

Further analysis of NCHDs' job intentions demonstrated the central importance of global job satisfaction, burnout and organisational commitment. It is relevant to note that a range of characteristics predict these three 'impacts':

- Perceived quality of workplace, impact, satisfaction with pay, effort-reward ratio, training opportunities, information sharing and perceptions of co-workers 'drive' global job satisfaction

- Perceived quality of workplace, information sharing, impact and perceptions of co-workers 'drive' organisational commitment

- Responsibility overload, satisfaction with pay, effort-reward ratio, training opportunities and impact 'drive' burnout

As a set, the regression models of these three outcomes provide initial indications for policy formulation at both organisational and structural levels. In particular, they provide information on (i) groups in the population that are more likely to intend to leave and (ii) specific aspects of the work that could be the targets of policy. That is, positive (negative) scales with low (high) overall means and significant relationships with intent to leave, or with significant relationships with the impact measures of global job satisfaction, organisational commitment, and/or burnout, merit policy focus.

Respondents who indicated an intention to stay in their current job over the next two years (35%) were asked to rate the relevance of a range of factors to this intention. Two of these factors – suitable working hours / days (42%) and personal or family reasons (47%) – were rated as highly relevant by over 40% of respondents.

Respondents who indicated an intention to leave their current job over the next two years (61%) were asked to rate the relevance of a range of factors to this intention. The two factors with the most frequent rating of highly relevant were better job opportunities elsewhere (64%) and better training opportunities elsewhere (69%).

Almost two-fifths of NCHDs who intended to leave their current job in the next two years (38.5%) intended to leave Ireland without planning to return, while 27% planned to leave Ireland but to one day return. One in six (17%) planned to stay in Ireland, and a similar proportion (18%) were not sure of their plans over the next two to five years.

Qualitative findings from interviews with NCHDs

The qualitative findings are presented in three parts, viz. reasons why doctors are attracted to medicine, issues arising, and reasons to stay and leave.

Reasons why doctors are attracted to medicine are:

- Being able to make a difference to people's lives
- Being proud of the work they do
- Having opportunities for further development.

Challenges arising

A number of issues relating to the work and lives of doctors were highlighted throughout the interviews and these relate to the requirement for them to continue their training for many years, promotional opportunities, their workload, pay and remuneration, and relationships with others.

Training and development

Extensive training period, which commences with an internship following their undergraduate degree and continues through basic specialist training, higher specialist training and a fellowship, after which they become eligible for a consultant post.

Training schemes: it was suggested that about two-thirds of NCHDs are on a formal training programme and, while this is preferable to not being on one, a number of key difficulties were raised.

Issues arising in respect of the formal training scheme

- A requirement to rotate, which, due to a lack of regionalisation, can result in significant disruption to their personal lives. Given the lengthy period of training, many doctors have family and other commitments and this requirement to move to different parts of the country was identified as negatively impacting on their partners and children.
- A lack of flexibility around the training programmes.
- Impacts on their professional life, particularly in building relationships with individual consultants with whom they may be working, and other staff working in hospitals.

Issues arising in respect of not being on a formal training scheme

It was suggested that doctors who are not on a training scheme are more likely to be non-Irish national doctors. The following issues were highlighted as problematic:

- These doctors are required to undertake continuous professional development
- These doctors do not have the same opportunities for getting experience
- These doctors do not have the same proportional opportunities as those on training schemes.

Promotion: uncertainty around promotion and the limited opportunities was also noted to be challenging, and it was suggested that there is a need for clear pathways to be mapped out. Some debate took place at focus groups about alternatives to consultant posts, such as the service level post in the UK, which was described as a level between registrar and consultant.

Workload: a number of doctors spoke about having a very busy workload, which is compounded by the on-call requirements and the lack of replacement cover. Issues were also raised about a lack of an IT infrastructure which, it was highlighted, is wasteful of doctors' time, but also has implications for patient care and safety. Some doctors spoke about doing many tasks that could be done by others, particularly nurses, or that should be done by other more senior doctors.

Issues around pay

- ***Amount paid:*** the amount paid was highlighted by some as being insufficient.
- ***Inadequate administrative processes:*** most of the commentary around this issue related to frustration with the administrative structures in place.
- ***Requirement for rotation:*** challenges are compounded by the requirement of doctors to rotate regularly, which results in significant costs, but also in their being on emergency tax and out of pocket for extended periods of time. This has a real and negative impact on their lives.
- ***Additional costs associated with practising as a doctor*** were also highlighted and these included the cost of training, only some of which is reimbursed by the HSE, and the cost of registering with the Medical Council.
- ***Unpaid work:*** doctors reported that they are not always paid for time worked and it was suggested that some rostered time is unpaid. It was also suggested that the recoupment process for being paid for additional hours worked is unnecessarily complex.

Relationships

- A small number of doctors spoke about their relationships with the medical team and it was noted that the consultant plays a very important role in these relationships.
- Relationships with colleagues were also highlighted and, in general, these were deemed to be positive.
- It was suggested that in comparison with doctors in the NHS, there is not a strong sense of organisational commitment to the HSE or even, sometimes, to the hospital where they work.

Reasons for staying / leaving

One of the main reasons why doctors stay in Ireland is their family and personal circumstances, and many spoke of the need to consider their partners and children in any decisions they make. It was suggested that doctors leave Ireland at two points in their career: first, following their internship, and later, in their specialist training to gain experience, training and fellowship opportunities.

- It was also noted, however, that many of these doctors do not come back and this is particularly the case where family members travel with them.
- The pull of other countries was also highlighted, in terms of doctors being better paid, better treated, and more valued.

Section 1: Introduction

The Public Service Pay Commission (PSPC) was established in 2016 to advise the Government on public service remuneration policy across a range of sectors, including the civil service, local authorities, non-commercial state agencies, and the health, education, justice and defence sectors. In progressing its work, the PSPC utilises and analyses existing datasets and reports, as prepared and published by existing state and other agencies, as appropriate. The first report of the Commission[1] identified particular recruitment and retention issues within the health sector, particularly in filling consultant and non-consultant doctors' and nurses' posts, as well as posts involving a range of allied health professionals (e.g. radiographers, psychologists, paramedics). This report, commissioned by the PSPC, presents the findings from a:

> *nationally representative study on recruitment and retention of key professionals within health services, namely, nurses, consultants and non-consultant hospital doctors.*

A scoping review of the literature provides clear evidence that decisions made to enter or leave particular work positions are based on judgements about the "*whole of the advantages and disadvantages*" of different employments (p783).[2] While pay is one of these factors, many other areas relating to individual, job and organisational characteristics are also important in decisions to join, stay in, or leave an organisation. Consequently, this study takes account of a wide range of factors, as the resolution of a limited number of issues only may not result in improvements in retention and recruitment of staff. The output from the study will be used to inform the development of options to address any identified recruitment or retention issues within the relevant sectors.

This report is presented in seven sections. *Section 2* presents a short overview of key issues relating to retention and recruitment, based on grey and peer-reviewed literature. *Section 3* describes the methodology used to conduct this study, which adopted a multi-method sequential design using both online surveys and semi-structured interviews with key stakeholders. *Section 4* presents the quantitative and qualitative findings relating to nurses, according to characteristics of the job, the organisation, and intentions to stay or leave. *Section 5* presents similar findings relating to consultant doctors and *Section 6* presents the findings relating to non-consultant hospital doctors (NCHDs). *Section 7* summarises the key findings relating to each group – nurses, consultants and NCHDs. The report concludes with a list of *References* used to inform the scoping review of literature. The *Appendix* provides a full compendium of findings relating to each group.

In presenting this report the term *"nurses"* is used to refer to *"nurses and midwives"*.

Section 2: Scoping review of literature

This section considers key issues relating to the national and international context for this study; the impact of nurse / physician shortages; the retention of medical and nursing staff, including costs; and issues of staff turnover, as well as individual work and organisational characteristics associated with intention to stay of leave.

National and international context

The availability of an adequate and effective health workforce is central to delivering a high quality health service and such a workforce includes medical practitioners, nurses, allied healthcare professionals, as well as management and other public health personnel.[1, 3] Nationally and internationally, however, significant challenges in maintaining such a workforce have been identified. According to Deloitte (2017),[4] there is a mismatch of supply and demand due to:

- *Population and societal trends* (e.g. demography, non-communicable chronic diseases, migration, urbanisation, ageing personnel)
- *Health system trends* (e.g. ambition of universal coverage, service integration, individualised and personalised medicine, task shifting, feminisation of medical profession, ethical global recruitment)
- *Individual trends* (e.g. expectations of the system by patients and clients, and expectations of career and employer, including preferences for working patterns).

They conclude that the resolution of this mismatch requires a multifaceted approach.

In Ireland, additional issues arise from the austerity measures put in place to deal with the sovereign debt crisis in 2008, including the implementation of the Financial Emergency Measures in the Public Interest Acts (FEMPI). A 2012 report[5] from the European Observatory on Health Systems and Policies, commissioned by the Department of Health, noted that the reduced spending on health services over the period of austerity was achieved, in part, through reductions in workforce pay, restrictions on recruitment, ceilings on staffing, redundancy schemes, and incentivised early retirement. A decrease in the number of nurses and doctors working in the public health service over the period of austerity was recorded. The total number of nurses and doctors working in the public health sector in Ireland at December 2017 is presented in Table 1 below.[6]

Table 2: Number of nurses and medical staff employed in the health services at December 2017

	WTE December 2017
Consultants	2,971
NCHDs	6,331
Medical (other) + dental	820
Total medical / dental	**10,122**
Nurse manager	7,434
Nurse specialist	1,706

	WTE December 2017
Staff nurse	25,315
Public health nurse	1,514
Nursing student	500
Nursing (other)	308
Total nursing	**36,777**

Role of migration

Shortages of healthcare workers are recognised as a global problem and the World Health Organisation (WHO) estimates that there is a global shortage of about 4.3 million healthcare workers.[7] In most European countries, a shortage of nurses already exists or is predicted for the near future,[8] and this is also the case in respect of medical personnel.[9] The 2012-13 OECD Health System Characteristics Survey, for example, reported that almost all of the 34 OECD countries included in their survey considered the distribution of doctors within and between jurisdictions to be problematic. In the United States (US), the annual physician workforce projections indicate that there will be a shortage of between 40,888 and 104,900 physicians in that country by 2030.[10]

Migration of doctors

Shortages of medical personnel in Ireland have been well documented over many years[9, 11-14] and migration has been identified as a key issue. There is an increasing reliance on non-Irish-national doctors in the Irish health system. Bidwell *et al.* (2013),[9] for example, report that between 2000 and 2010, the proportion of foreign-trained doctors rose from 13.4% in 2000 to about one-third of all doctors practising in Ireland in 2010. This proportion continues to increase and in 2017 it was reported to be 38% of all registered doctors and 77% of non-trainee junior hospital doctors in Ireland.[15] The number of new entrants to the Medical Council register from outside Ireland increased by 98% between 2014 (n =552) and 2015 (n =1095). While Bidwell *et al.* (2013) note that the proportion of non-national doctors is similar to other developed countries, such as New Zealand (39%) and the United Kingdom (UK) (32%), this is nevertheless contrary to the WHO Global Code Of Practice in recruitment,[16] which seeks to reduce and mitigate the effects of increased health-worker migration on resource-poor nations. Humphries *et al.* (2017)[17] identify a number of issues arising from widespread doctor migration, including:

- A consultant recruitment crisis
- A high reliance on internationally trained doctors
- Interference with medical workforce planning projects
- Doctor shortages or speciality imbalances
- Those who best understand the system being prevented from contributing to change
- The health system being deprived of potential leaders.

Emigration of medical personnel from Ireland to other countries is also a feature of the Irish healthcare system. Campbell (2015), for example, conducted an analysis of the medical workforce in Ireland and the European Union[15] and noted that, while Ireland produces the most doctors per capita in the EU, many are intent on emigrating after graduation. This is borne out in the Health Service Executive (HSE) Tracking Study[18] of 513 interns, where it was found that by 2012 almost half (45%) of the 2010 / 11 interns were no longer practising in

the Irish public health service. Walsh and Brugha (2017)[19] report that the percentage of Irish doctors on the Medical Council of Ireland register fell from 65% in 2012 to 62% in 2015, despite an almost doubling of the number of Irish / European Union graduates from 370 to 725 in Ireland between 2006 and 2015. While Humphries *et al.* (2017)[17] suggest that some of the shortages arise from a historical culture of medical migration (where doctors in Ireland emigrate for postgraduate training, to gain international experience and to access better working conditions), they also note that it has become increasingly difficult to attract them back to the country. However, a recent report by the Irish Medical Council (2017)[20] on trainee doctors found that the number of trainees who do not see themselves staying in Ireland for their long-term future has decreased considerably, from 21% in 2014 to 14% in 2016.[20]

Migration of nurses

Similar types of issues arise in respect of nurses. Although the Nursing and Midwifery Board of Ireland (NMBI) report that there were 67,559 nurses on the live register in 2016, an increase of 3.6% nurses (n = 2,861) over the previous year, the 2016 report of The Expert Group on Future Skills Needs Activity Statement 2016[21] identified a skills shortage (defined as where domestic supply and skills / labour are insufficient to meet demand) in this area.

The role of emigration in creating this shortage was highlighted by the Irish Nurses and Midwives Organisation (INMO, 2017)[22] in their survey of student interns. Findings from the survey of fourth-year student nursing members (n = 1,096; response rate 40%) showed that 78.1% of respondents were considering emigrating from Ireland upon qualifying. Further, it was reported that 70.2% of the respondents had been approached by overseas nursing companies to recruit them into their service. There is also evidence from the NMBI that emigration is an increasingly important characteristic in respect of Irish nurses. The NMBI reported an increase in the number of Certificate of Current Professional Status requests, which are issued for nurses who may wish to register abroad (although it does not necessarily equate to the numbers who travel) from 1,179 in 2015 to 1,288 in 2016 although the numbers continue to be considerably lower than those issued in 2008 (n = 3,299).

Dependence on non-Irish nurses has also been a common characteristic of the Irish health services and the European Observatory on Health Systems and Policies (p60)[23] reports that at 47%, Ireland has one of the highest dependencies on foreign nurses in Europe. Humphries *et al.* (2012)[24] have reviewed this trend and report that Ireland began actively recruiting nurses internationally in 2000. Between 2000 and 2010, 35% of new recruits into the health system were non-EU migrant nurses – a higher proportion than similar type countries such as the UK, New Zealand or Australia. NMBI registration data show that the number of non-Irish registrations far exceeded those of Irish-trained registrations in 2016. In addition, the number of applications to register with the NMBI from overseas has grown rapidly from 2,534 in 2015 to 4,323 in 2016, an increase of 70% (Table 2).

Table 3: Number of new nurse registrations with the NMBI in 2016

	Number in 2016
Irish-trained registrations	1,820
EU registrations	1,028
Non-EU registrations	1,820

Source: NMBI Annual Report 2016[25]

Retention of nursing and medical staff

Retention of health service personnel has been subject to considerable review, with interest in this area generally arising from shortages of personnel, due to retention and recruitment challenges. In the healthcare sector, shortages of staff leading to inadequate staffing levels have been shown to have negative consequences.[26] Some of the consequences identified in respect of nurses, by Aiken *et al*. (2013),[27] in a 12-country study titled *RN4Cast,* including Ireland, were: an inability to complete needed care because of a lack of time; being unable to provide comfort and talk with patients; and lower levels of patient satisfaction with their care. A recent systematic review of literature undertaken on behalf of the Department of Health (2016; p19-21)[28] focused on nurse staffing levels across a number of nursing variables relevant to this study. While urging some caution in the interpretation of the findings, due to methodological limitations of the studies reviewed and the largely US-based international evidence that may not be generalisable to an Irish context, a number of issues were identified (Figure 6).

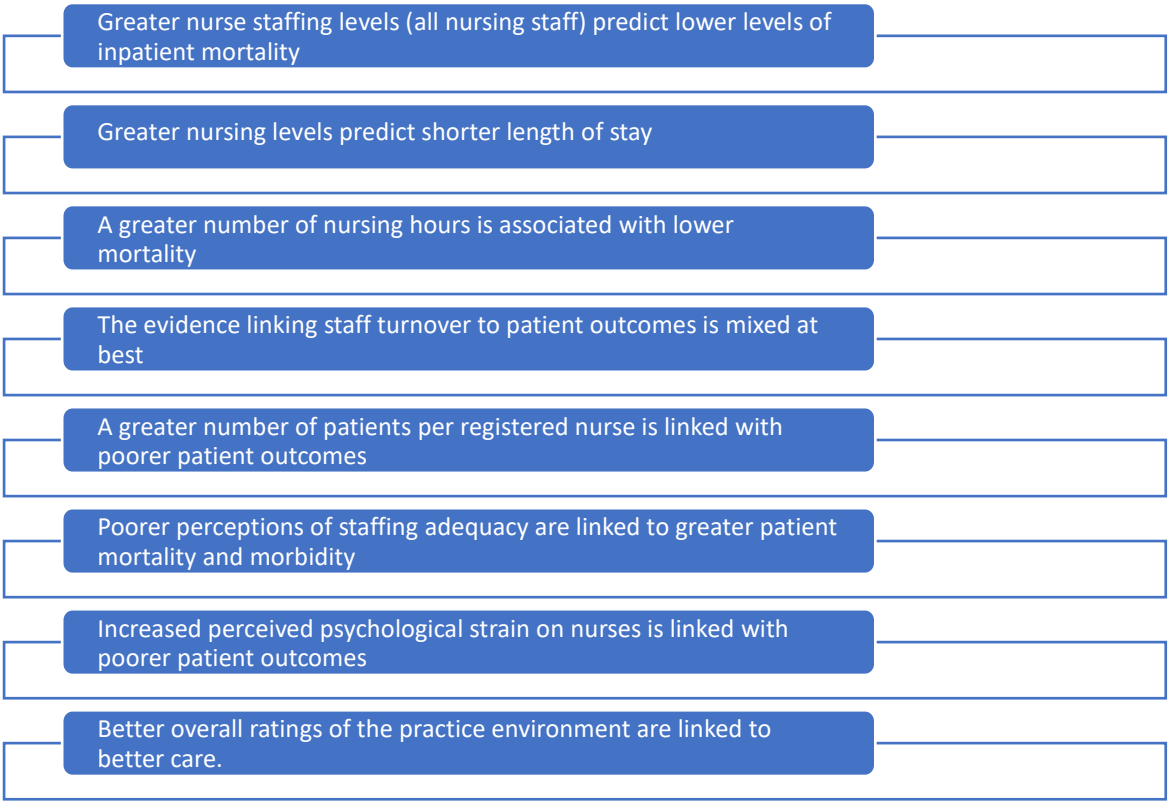


Figure 6: Consequences of staffing levels on patient and nurse outcomes

Shimp (2017; p239),[29] in a summary of the views of the American Nurses Association, reports that adequate staffing levels results in:

> *reduced medical and medication errors, decreased patient complications, decreased mortality, improved patient satisfaction, reduced nurse fatigue, decreased nurse burnout and improved nurse retention and job satisfaction.*

Similar type issues are identified in respect of doctors and high levels of professional burnout have been reported to negatively impact on the quality of care, patient safety, physician turnover, and patient satisfaction.[30]

Turnover of staff

While some positive benefits of staff turnover have been identified (e.g. increased productivity from more closely matching the skills of personnel with job requirements, and opportunities for the employer to change the composition of the workforce), in general challenges are more commonly documented.[31] It has been noted that when trained and experienced staff leave, their knowledge and skills often go with them. This, in turn, reduces the overall capacity of organisations to provide services.[32] In a review and synthesis of findings from a number of studies, Knight *et al.* (2017)[33] identify a number of negative impacts where levels of physician turnover are considered to be high as follows:

- Poor patient satisfaction
- Lower levels of adherence to medication
- Higher use of health services
- Increased healthcare costs
- Increased mortality.

Turnover costs

In addition to issues arising in the quality of care and patient outcomes, there are significant costs associated with turnover of staff. A review of the cost of nurse turnover, based on 10 studies undertaken in the US, Australasia and Canada, reported costs per nurse turnover relative to nurses' salary to range from 0.31-1.3.[34] These costs arose from a need to orientate and train newly hired staff; costs of temporary replacements; and wider costs, such as patient deferral costs and productivity costs for supervisors and other staff. Direct and indirect costs associated with turnover were considered in a recent Australian study by Roche *et al.* (2015)[35] (Figure 7).

Direct turnover costs

- Advertising and training (e.g. recruitment personnel salaries and expenses, job fairs, seminars, advertising)
- Vacancy / unfilled positions (e.g. temporary nurses, overtime, closed beds, patient deferrals)
- Hiring (e.g. interviewing personnel time, employment processing, bonuses, search firm costs).

Indirect turnover costs

- Orientation and training (e.g. training personnel salaries and expenses, supplies, equipment, preceptors)
- Decreased new nurse productivity (e.g. new nurse productivity during *"learning"* period. Supervisor / co-worker productivity)
- Decreased pre-turnover productivity (e.g. departing nurse, co-workers, supervisor)
- Termination (exit interview personnel time, supplies and expenses, early retirement).

Figure 7: Direct and indirect turnover costs

Based on the costs outlined in Figure 7, Roche *et al*. (2015)[35] estimate the mean average turnover costs for full-time equivalent nurses in Australia to be AUS $49,255 (€31,368).

Turnover rates among nurses and doctors

While it has been suggested that standard measures of turnover are calculated according to the total number of staff who left a unit (numerator) by the average number of the staff in the unit over the same period (denominator), a lack of conceptual clarity in the term *"turnover"*, and differences in calculations, create significant difficulties in the calculation of comparative rates. One study, which reviewed turnover rates across 10 European countries, identified nurse turnover rates of 12%-21%.[34] A Canadian study on nurse turnover in Canada estimated a rate of 19.9%[36] and a recently reported Australian study calculated the annual nurse turnover rate to range from 12.6% in New South Wales to 16.7% in Western Australia.[35] The HSE reported the adjusted turnover rate for 2016[37] in the Irish public health services (calculated as a % headcount of leavers as a proportion of average monthly headcount) as 6.5%. A higher level of turnover was identified for consultants (8.9%) and staff nurses (7.9%) and a lower level for nurse managers (5.8%), nurse specialists (3.4%) and public health nurses (3.4%).

Recruitment

Much of the literature on staff turnover relates to intention to stay or leave. Although there is much overlap in recruitment challenges and challenges in retaining staff, some differences need to be taken into account. Recruitment[38] is defined as:

> *the demonstrated capacity to attract the professionals with the required skills and qualifications to occupy defined positions in health services in line with the strategic health plan. (p7).*

There is evidence of unsuccessful attempts to fill vacancies (a post that has been advertised but it has not been possible to fill it) in the context of recruiting nurses and doctors. The Department of Public Expenditure and Reform (DPER) submission[39] to the PSPC, for example, notes that the National Recruitment Service has had particular difficulty in filling posts in the following areas:

- Psychiatry – consultant and NCHD
- Mental health nursing
- Nursing in many other divisions (i.e. general acute, paediatric)
- Clinical nurse specialists in some specialty areas.

At the professional entry level, Ritchie *et al.* (2018)[40] highlight the importance of attracting the right candidates to apply for training and education programmes, so as to ensure fitness to practice on qualification. In the UK, a Values Based Recruitment (VBR) Framework is adopted to select candidates and it has been suggested that this approach helps attract and select students, trainees and employees whose personal values and behaviours align with the NHS values. The process of recruitment adopts varying activities, including:

- Structured interviews
- Multiple mini interviews
- Selection centres
- Situational Judgement Tests (for screening).

Others have highlighted the importance of *"realistic job previews"* (RJPs), which include gathering information from new and long-term workers about the positive and negative characteristics of the job; summarising information that recruits are unlikely to know or are likely to have unrealistic expectations about; developing a strategy to present the information to recruits before they decide whether to take the job; and implementing and evaluating the RJP.

A study of immigrant workers from different sectors, undertaken in 2009 in Ireland,[41] highlighted a number of key issues relating to their recruitment. These included issues relating to the individuals themselves (e.g. a lack of proficiency in the English language, a lack of understanding of cultural norms in Ireland) and issues relating to employers (e.g. the requirement of some Irish employers that recruits should have Irish experience and the failure of some recruitment practices to conform to labour market standards).

Areas taken into account in measuring intent to stay / leave

The literature on intention to stay or leave highlights the multiplicity of factors that influence employees' intentions and, as noted earlier, decisions to stay or leave employment involve a weighing up of the "*whole of the advantages and disadvantages*". Dimensions identified by Field and Abelson (1982),[42] more than 30 years ago, include:

1. Autonomy / control (the feeling of being their own boss and not having to be double-checked on their decisions made)
2. Structure (responsibility, decision-making authority, and formal reporting relationship with others in the organisation)
3. Rewards (reward identifies the feeling of being rewarded fairly and equitably, as well as the perceived organisation's promotion policies)
4. Consideration, warmth and support (a leader acts in a friendly and supportive manner, shows concern for subordinates, and looks out for their wellbeing).

Illustrative examples of variables taken into account in more recent Irish, cross-country studies and systematic reviews of nurses and doctors are presented in Table 3.

Table 4: Illustrative examples of the multiple variables taken into account in studies on staff turnover

Name of study	Study type	Key variables identified
Systematic review of systematic reviews on adult nursing staff turnover, Halter *et al.* (2017)[43]	Systematic review	Leadership, pay, work environment, culture, commitment, work demands and social support
The Registered Nurse Forecasting in Europe project (RN4Cast study) See: http://www.rn4cast.eu/	Cross-European including 12 countries	Nursing work environment, burnout, job satisfaction, nurse-perceived quality of care, nurse staffing levels (number and education), demographics
Nurses Early Exit Study (NEXT study) http://www.next.uni-wuppertal.de/EN/index.php	Cross-European including 10 countries	Quantitative demands, emotional demands, influence at work, meaning of work, role clarity, quality of leadership, sense of community, insecurity at work, job satisfaction, health problems

Name of study	Study type	Key variables identified
Integrative review of 17 studies on physicians' intention to leave direct patient care, Degen *et al.* (2015)[44]	Integrative review of physicians	Demographics, family / personal domain, working time and psychosocial working conditions, job-related wellbeing, career-related aspects
Factors influencing trainee doctor emigration in a high-income country: a mixed methods survey Clarke *et al.* (2017)[45]	National survey of Irish trainee doctors and migration	Working conditions, training and career progression opportunities, work-life balance, quality of training in Ireland, family or personal reasons, intent to stay / leave
The JOINT model of nurse absenteeism and turnover: a systematic review, Daouk-Oyry *et al.* (2014)[46]	Systematic review	Individual (demographics, personal characteristics, job attitudes, health and wellbeing Interpersonal (relationships, job demands, job control) Organisational level (HR practices, structure, labour supply) National level (legislation)
Systematic review of turnover / retention and staff perception of staffing and resource adequacy related to staffing, SHIMP (2018) [29]	Systematic review (n = 10 studies on retention)	Variables included in various studies Workload Management Nurse participation, autonomy and professional development
Concept analysis of turnover intention, Takase (2010)[47]	Concept analysis	Organisational characteristics, organisational climate / culture; interpersonal relationships within organisation Work-related factors (stress, workload, financial rewards, characteristics of working conditions, employees access to power) Employee factors (demographic factors, employees behavioural / attitudinal responses External factors (work-life balance, external job market)

Some consideration is now given to the literature relating to the work carried out and the environment within which it takes place; systemic and organisational issues; characteristics of the individuals; and finally, perceptions and attitudes arising in relation to the job, the organisation and work-life balance. The relation between these and intentions to leave or stay are highlighted.

Measurement of intent to stay or leave

There is not a consensus about the definition of the term *"turnover"* and it has been variously described as "*any job move*", "*leaving the organisation*", "*leaving the profession*", and "*leaving voluntarily or "involuntarily*".[26] In a review of literature, Hayes *et al.* (2012)[26] identified the following definition as being commonly used: *"the process by which staff members leave or transfer within the employee's organisation"* (p888).[26]

These authors highlight two main types of turnover:

- **External turnover**, referring to the number of people who leave an organisation for various reasons
- **Internal turnover**, which involves job changes within an organisation.

Others have focused on the voluntary nature of turnover, noting that is can be defined as: *"Employees' willingness or attempts to leave the current workplace voluntarily"* (p4).[47] This voluntary intention is generally considered in terms of intention to leave and this was reported in an integrative review of physicians' intention to leave direct patient care,[17] which highlighted a range of different ways in which it is considered:

- Intention to quit their job
- Thinking about quitting their job
- Intending to practise until retirement
- Likelihood of leaving their job in the next five years.

Intention to stay has been subject to considerably less attention than intention to leave. According to Woon & Tan (2017; p130),[48] "*intention to stay refers to employees' conscious and deliberate willingness to remain with the organization",* while others have defined retention as:

> *the capacity to maintain health workers in the healthcare system, limiting unjustified ("voluntary") losses to other organisations, sectors or geographical areas, within and out of the country.[38]* (p7)

The authors note that there is a difference between employees' retention (which takes account of what the organisation does to retain its employees and therefore represents more of a pull strategy for employees) and employees' willingness to stay in the organisation (which takes account of the intrinsic factors that enhance the willingness of employees to stay and is therefore more of a push strategy). Specific areas for measurement in this study include intention to stay or leave the job, the organisation and the profession.

Measurement of the work and work environment

Areas typically taken into account in the measurement of intentions to leave / stay include workload and available resources, the type of work undertaken, and key issues relating to factors such as autonomy. A number of studies and reviews of literature[49, 50, 29] have concluded that heavy workload is a factor of importance in staff turnover. Difficult workloads may involve mental, physical and emotional energy.[4] A recent study on New Zealand nurses' intention to leave,[51] underpinned by a job demands-resources framework, reported that greater workload and greater work-life interference result in higher burnout and, in that study, were identified as the strongest predictors of intentions to leave.

Similar type findings emerge in respect of doctors. Tziner *et al.* (2015),[52] for example, suggested that many doctors work unreasonably long hours and have poor work environments, with too many patients. These issues have also been identified in respect of doctors in Ireland,[53] where unrealistic workloads, characterised by staff shortages, extended working hours and irregular and frequently interrupted breaks, emerged as key themes in a qualitative study of Irish NCHDs.[53] In terms of recruitment and retention, Clarke *et al*. (2017)[45] reported that working in Ireland was unattractive in itself, because of: *"workplace understaffing"* (82%) and *"being expected to carry out too many non-core tasks"* (81%), as well as issues relating to progression and development.

The mean numbers of hours worked weekly in Ireland has been reported as 55.7 hours for consultants; 61.7 hours for higher specialist trainees (HSTs); and 59.8 hours for basic specialist trainees (BSTs).[54] These findings are reflected in the quantitative study conducted by Clarke *et al.* (2017)[45] on trainee doctor emigration, where more than 60% indicated that their working hours were too long. Other researchers have focused on schedule flexibility and Leineweber *et al.* (2016),[55] for example, report that a lack of flexibility in the work schedule was related to job dissatisfaction and turnover intention among nurses. Work schedule was also highlighted by Mrayyan (2005),[56] who found that nurses working evening or night shifts were more likely to leave the hospital.

The broader work environment has also been identified as having an impact on intention to leave. The *RN4Cast* study[27] reported that more than half of the nurses in 9 of the 12 countries (including Ireland) in their study indicated that their work environment was only poor or fair. Key areas highlighted included: not having enough registered nurses on staff to provide quality care; a lack of adequate support services; not having adequate time to spend with patients; and limited opportunities to take part in policy decisions. Clarke *et al.(*2017)[45] also highlighted the importance of the work environment and in their study, 80% of doctors indicated that their workplace was understaffed and more than 75% indicated that their work environment was stressful, although neither was statistically significantly associated with intention to leave.

Autonomy and job control (decision latitude), defined as a combination of skilled discretion (having the skill and creativity to do one's job) and decision autonomy (organisationally mediated opportunities for workers to make decisions about their work)[57] have been identified as important. A number of studies have shown that a lack of job control is associated with nurses' intention to leave work.[58-61] Nurses' perceptions of empowerment have also been shown to impact nursing turnover and this concept contains components of perceived control, perceived competence, and goal internalisation.[26] Role discrepancies, role ambiguity, role conflict and task delegation needs were identified by O'Brien Pallas *et al.* (2010)[36] as leading to frustration and stress, which in turn are associated with greater turnover.

Measurement of key organisational characteristics

Several system- and organisational-level characteristics have been linked with intention to stay or leave. These include pay and remuneration; involvement in decision-making; opportunities for development and progression; leadership; and interpersonal relationships. These areas are now considered.

Pay has been highlighted as a core issue in respect of nurses working in Ireland and it has been suggested by the INMO that the issue of pay must be addressed if the recruitment and retention difficulties arising are to be tackled.[62] The impacts of pay and benefits on nurses' intention to leave have been considered by Chan *et al.*[58] in a systematic review of nurses' shortages and intention to leave,[58] and the findings from a number of studies show that where nurses were dissatisfied with pay and benefits, they were more likely to intend to leave.[58] Takase *et al.* (2009)[47] reported that good pay and job security were ranked more highly by nurses born between 1946 and 1959 than by Generation X and Generation Y nurses, although this is contrary to other findings such as those identified by Chan *et al*.,[58] who reported in 2013 that salary was more important at the time of the study than it had been in previous decades.

Shields *et al.* (2012)[63] have considered the issue of pay in three ways, viz. pay differences, fairness of pay, and understanding of the pay system. Their findings suggest that differences in pay are negatively associated with employee perceptions of pay fairness and this, in turn, can erode employee commitment, cooperation, and intention to stay. The issue of nurses' pay has also been considered by Halter *et al.* (2017),**[43]** who concluded from their review of literature that while pay was an important contributor to job satisfaction, it was not a statistically significant indicator of intent to leave or turnover cognition. The authors, however, also highlighted more qualitative studies, which show that fairness and equality of pay is more important to nurses in retaining their positions, and that perceptions of low pay have an impact. The issue of perception of pay fairness has also been considered in respect of physicians by Kao *et al.* (2018)[64] and their findings show that those who thought their pay was fair reported greater work satisfaction, lower likelihood of leaving their practice, and better overall health.

A lack of opportunities for advancement has been identified as predictive of intention to leave.[65, 66] A study of Portuguese nurses,[66] for example, identified lack of promotional opportunities as the strongest predictor of intention to leave. The authors concluded that having opportunities for advancement reduces the effect of individual characteristics on intention to leave. Brady (2010),[67] in a study of Irish graduate nurses, reported a stronger relationship between a higher possibility for development and reduced likelihood of leaving the profession. Clarke *et al.* (2017)[45] reported that Ireland is an unattractive place for doctors, because of *"uncertainty about securing consultant posts at the end of training"* (86%); and *"consultant posts not being attractive"* (81%).

Interpersonal relationships play a central role in the work life of healthcare professionals and, understandably, they are also considered in the research literature on retention and turnover of nurses and doctors.[68,69,70] Findings from one study[69] identified direct relationships between interaction involvement, willingness to confront conflict, and tenure intentions of nurses. Another report, based on an integrative review of literature, found that incivility in the workplace is a significant predictor of low job satisfaction in new graduate nurses transitioning into practice, although the methodological approach adopted by the authors is limited.[71] Clarke *et al.* (2017)[46] reported high levels of agreement with the statements "*Employer doesn't support me*" (55%) and "*Not respected by senior colleagues*" (22%), although neither was statistically significantly associated with intention to leave. A mixed methods study of the causes and impact of poor teamwork between junior doctors and nurses in Ireland[72] found that poor teamwork is common and places patients at considerable risk.

While the relationship between turnover and workplace relationships is not clear, it is nevertheless an important factor to consider in the workplace environment. High levels of bullying in the workplace have been recorded for both doctors and nurses in Ireland. The Medical Council report on training matters for doctors reported that in 2014, 34% of trainee doctors felt bullied or harassed in their training post and this increased to 36% in 2016.[20] This has also been subject to some attention by Crowe *et al.* (2017),[73] who found that respect for hierarchy, anger and fear, intimidation and disillusion were key themes in participants' narratives of relationships with senior staff who oversaw their postgraduate training. High levels of bullying in the workplace have also been identified by nurses in Ireland and in a study by McMahon *et al.*,[74] 41% of respondents agreed with the statement "*I feel bullying is a problem in my workplace."* The role of managers and good leadership is commonly taken into account in studies relating to turnover intent.[49] Halter *et al.* (2017),**[43]** for example, identified a range of management supports that have an interpersonal impact (e.g. praise and recognition, trust, social support, team work) and highlighted a number of

studies that show significant relationships between leadership and management factors and turnover intent.

Measurement of key individual characteristics

Demographic and personal characteristics of individuals are commonly taken into account in respect of intention to stay or leave and have been considered in several studies. Key demographic characteristics, such as age, have been found to be associated with intention to leave. Findings from the NEXT study, for example, show that older nurses considered leaving the profession more often than younger nurses.[75] The opposite was reported by Jamieson and Taua (2009),[76] who found that being younger was more commonly associated with higher turnover rates. Similar type differences were identified in respect of physicians. Degen, Li and Angerer (2015),[42] for example, reported on the findings from eight studies. Three of these studies did not find any association between intent to leave and early postgraduate physicians. One study found differences across age groups, with the highest intention to leave for those aged 33-35 and the lowest after 50 years. Two studies found it was associated with younger physicians' intention to leave and the remaining studies found that older physicians had a higher intention to leave than those under the age of 35 years.

Gender has also been considered in respect of intentions to leave or stay. Tarcan *et al.* (2017)[77] reported no differences in nurses' job satisfaction or intention to leave according to gender, but Leineweber *et al.* (2016),[55] reporting on the findings from the multi-country *RN4Cast* study (n = 23,076), reported that males were 1.4 times more likely to intend to leave the nursing profession than females. Family commitments and kinship responsibilities have also been identified as factors that may influence intention to leave.

Hayes *et al.* (2012),[26] for example, reported that nurses with no kinship responsibilities, such as dependent children or relatives, were more likely to report higher turnover intentions. Others reported that single nurses were more likely to leave.[78-80] A recently published Irish research study examining factors influencing trainee doctor emigration from Ireland reported no statistical difference in relationship status (married / other) or in having children in respect of intention to leave or stay.[45] Others have reported on distance from work as a key factor, with Hayajneh *et al*. (2009),[81] for example, reporting that nurses living far from the workplace led to higher turnover. Migration has also been highlighted as an issue and Humphries et al. (2009),[82] in a qualitative study with 21 migrant nurses in Ireland, found that more than half of the respondents were considering migration onwards. The reason for this was identified as a failure to provide them with sufficient stability, particularly in terms of citizenship and family reunification.

Measurement of attitudes and perceptions

The attitudes and perceptions of individuals are considered in respect of organisational commitment, burnout, job satisfaction and work-life balance.

Organisational commitment has been defined as "*a psychological state that binds the individual to the organisation"* (i.e. which makes turnover less likely).[83] The organisational commitment index developed by Allen and Meyer, which is commonly used to measure this construct, comprises three different components and these are:

1. The affective component (employees emotional attachment to, identification with, and involvement in the organisation)
2. The cognitive component (which refers to commitment based on the costs that employees associate with leaving the organisation)

3. The normative component (which refers to employees' feelings of obligation to remain with the organisation).

Employee attachment to his / her organisation is associated with intention to stay or leave[84] and low levels of commitment to the organisation have been found to be associated with nurses' and doctors' intention to leave their place of work.[85] Wagner (2007)[86] examined the predictability of organisational commitment as a variable in 46 nursing turnover studies. The findings showed that organisational commitment had statistical predictive ability in 23 nursing turnover studies and a direct relationship between organisational commitment and intent to leave / stay was substantiated in five studies. The Wagner 2007 study also reported that organisational commitment was a stronger predictor of nursing turnover than job satisfaction. High levels of organisational commitment have been shown to have direct positive benefits in the healthcare context, including workers providing extra help to both patients and co-workers; being considerate; volunteering for special activities; and being proactive when emergencies arise at the hospital.[87]

While there are various definitions of job satisfaction,[77] it is commonly defined as: *"the favourableness or unfavourableness with which employees view their work"*[58] (p610).

High levels of job satisfaction are associated with intention to remain in an employment, while low levels are associated with intention to leave. Many measures of job satisfaction have been developed and these range from single item measures which ask "*All things considered, how satisfied are you with your job?"* to multi-item approaches that take account of a range of different elements of the job and workplace (e.g. the Minnesota Satisfaction Questionnaire). Instruments relevant to key elements of the healthcare environment have been developed and Leineweber *et al.* (2016), for example, using the Practice Environment Scale (PES-NWI-R scale), found that higher levels of dissatisfaction with staffing and resources levels, nursing impact on hospital affairs, and nurse-physician relationship all significantly decreased the odds of leaving the nursing profession due to dissatisfaction. The findings from nurses in Ireland from the same study reported that 42% of nurses were dissatisfied with their job in general and this was the second highest across all 12 countries included in the study.[27] The Netherlands, Sweden, Switzerland, and Finland all reported levels lower than 30%.

Burnout is seen as a persistent dysfunctional state that results from prolonged exposure to chronic stress[58] and the commonly agreed explanation of burnout condition includes three components developed by Maslach and Jackson, viz.:

- Emotional exhaustion
- Depersonalisation
- A decreased feeling of personal accomplishment.[77]

Burnout has been widely studied in research related to health and retention of staff and, in an integrative review of the literature, Flinkman *et al.* (2010)[88] reported that if nurses had experienced burnout, they were more likely to report intending to leave their employment. High levels of burnout have been identified by the Irish College of Physicians, which reported that 34% of BSTs, 38% of HSTs and 24% of consultants met the criterion for burnout, as determined by high levels of emotional exhaustion, along with either high levels of depersonalisation of low levels of personal accomplishment. Several studies have highlighted a relationship between burnout and intention to leave [30, 52, 59, 77 88] and a strong relationship between burnout and a number of organisational factors, including position

held; annual income; employee shift type; and household economic wellbeing gave been identified among health professionals.

Perceptions of the balance between effort and reward have been considered in the context of intention to stay or leave and the effort reward imbalance scale, developed by Siegrist (1996), has been used in the Irish context with both nurses and doctors. The study undertaken by the Irish College of Physicians study found that overall, effort reward ratio was 1.4 (SD = 0.6), indicating that negative perceptions were found in 79% of doctors. The highest ratios were identified in doctors practising in ophthalmology at 1.7, emergency medicine (1.6), and medicine (1.5). Brady (2010),[67] reporting on the findings from her study of new graduate nurses, found that higher effort mean scores were related to increased frequency of thoughts of leaving nursing.[58]

Summary of scoping review of literature

This section has presented a scoping review of the literature and has highlighted a number of issues recurring in the literature and which are relevant to this study. The national and international context of having an adequate and effective health service workforce in place has been presented, together with the challenges arising in meeting this requirement. It is clear that migration plays an important role and it is noted that this is especially so in the Irish context, where a substantial proportion of nursing and medical personnel in Ireland is of non-Irish national origin. Emigration of nurses and doctors from Ireland has also been highlighted and the reasons for decisions made to leave noted.

The retention of nursing and medical staff in Ireland and internationally has been subject to considerable review. Shortages of key personnel have been shown to have significant negative impacts for patients and for staff, including the health, safety and wellbeing of each. While some benefits arise from turnover of personnel, in general, the consequences of high turnover levels are negative. These impacts include poorer patient satisfaction; lower levels of adherence to medication; higher use of health services; increased healthcare costs; and increased mortality. Direct and indirect costs associated with turnover of staff have been identified as significant and, in one study of nurses, were calculated to amount to AUS $49,255 (€31,368).

Issues relating to recruitment have also been highlighted and the evidence noted of unsuccessful attempts to fill vacancies in nursing and doctor posts in Ireland, as documented by the DPER. Key issues relating to mechanisms for recruitment in other jurisdictions, as well challenges arising for immigrant workers in Ireland, have been highlighted.

A key purpose of the scoping review of literature was to identify the ways in which issues relating to retention and recruitment are measured and a number of studies, including national and cross-national surveys and systematic reviews of key areas, including concept analyses, have been considered, particularly in the context of concepts measured. The review has highlighted key issues relating to the work undertaken by nursing and medical personnel (e.g. the type of work, the workload); the work environment (e.g. the availability of supports); organisational context and culture (e.g. opportunities for development, interpersonal relationships); and individual characteristics (e.g. age, gender). Outcomes and attitudes of personnel (e.g. burnout, level of autonomy, engagement) have also been identified and these issues were particularly considered in respect of reasons given for staying or leaving a job, an organisation or a profession. These issues are now considered in the context of a conceptual framework for the overall study.

Conceptual and Analytic Framework for the Study

The impetus for this study emerges from significant concerns and challenges arising with regard to retaining and recruiting health service personnel in Ireland. As set out in the terms of reference for the study, its focus is on carrying out a comprehensive examination and analysis of recruitment and retention issues in respect of nurses and doctors, both consultant and non-consultant. The terms of reference also identified a number of potential areas to be taken into account in the study; specifically, those that can influence or impact on key aspects of work (e.g. satisfaction with aspects of the job, features of job design such as perceived levels of autonomy and impact, features of work environment and culture such as co-worker and manager support, levels of fit with job group and organisation, levels of job demands) and outcomes themselves (e.g. organisational commitment, intentions to leave or job search intentions, global job satisfaction, prior expectations and reality of the role, levels of work engagement and/or burnout, perceptions of other employers and other relevant HR practices or organisational issues).

In agreement with the PSPC the three dependent variables, referred to as the outcome in this study, are intention to leave or stay in the job, the organisation and / or the profession.

The scoping review presented key factors arising in the literature that are of relevance to the study outcome, and Box 1 provides illustrative examples of the various measures taken into account in national and international studies on this topic. Based on the terms of reference and the scoping review of the literature, four broad areas have been used to structure the collection and analysis of data in this study. Some variation in the specific issues were identified between each particular professional group (nurses, consultants, non-consultant doctors), so the following list is illustrative rather than comprehensive:

Characteristics relating to the individual (e.g. age, gender, country of basic qualification, time taken to get to work, highest level of qualification);
Characteristics of the job (e.g. employment grade, area of work, type of contract and full- or part-time status);
Characteristics of the organisation (e.g. training and promotional opportunities, information sharing);
Perceptions of the job and organisation (e.g. autonomy, responsibility overload, impact, job satisfaction, burnout and effort / reward ratio).

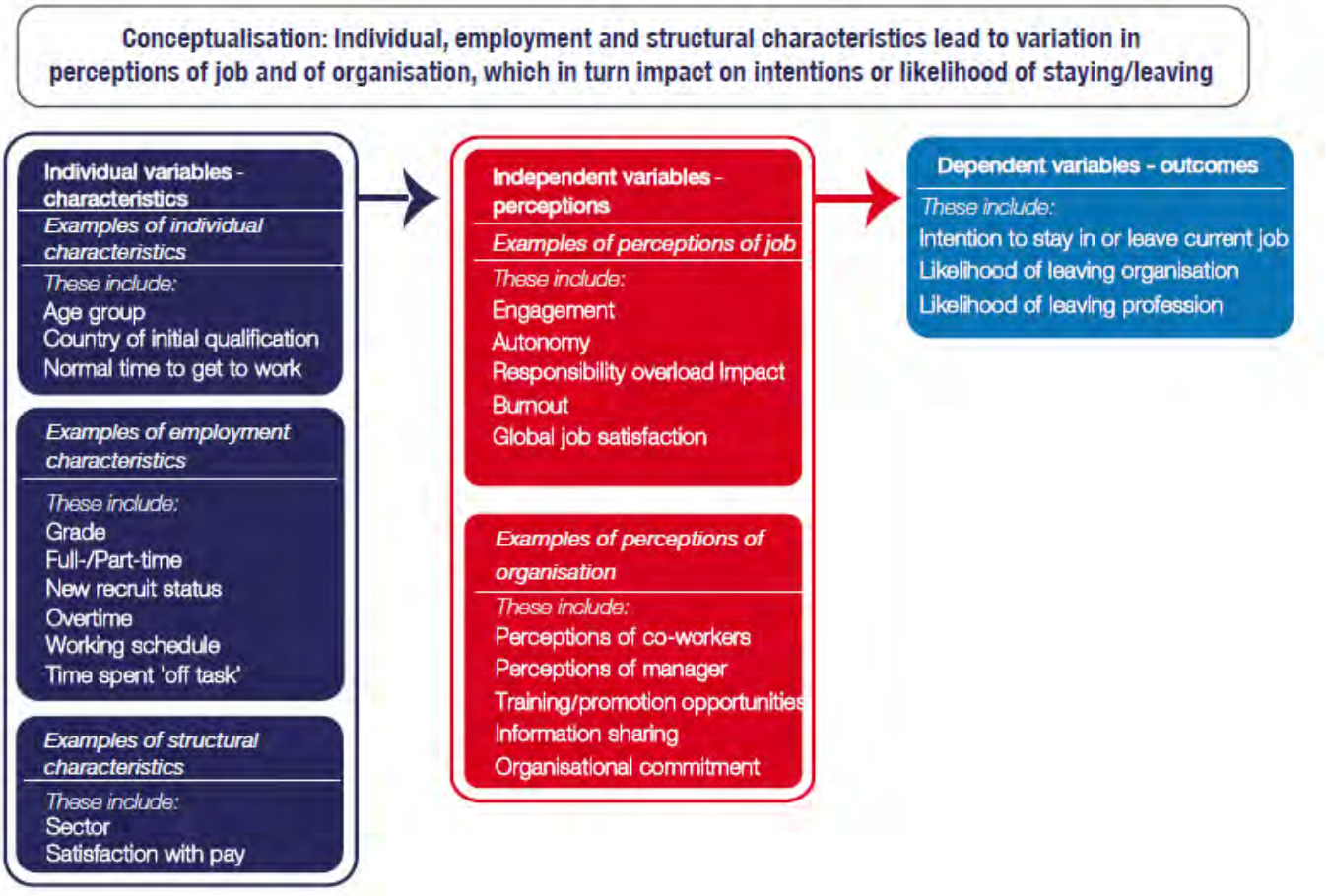
The theoretical framework underpinning the study is that:

> ***Individual, employment and structural characteristics lead to variation in perceptions of the job and of the organisation, which in turn impact on intentions to stay or leave.***

This framework guided the questionnaire design and the quantitative analyses. Since the precise measures included under each component of the framework vary somewhat between nurses/midwives, consultant doctors and non-consultant hospital doctors, the framework in Box 1 provides examples rather than an exhaustive list of measures. This figure differentiates between the independent variables (block 1 - individual, employment and structural characteristics and block 2 - perceptions of job and organisation) and the dependent variable of intention to stay / leave job, organisation and / or profession.

An advantage of this conceptualisation, particularly in the multiple regression analyses that consider the joint impacts of the dependent variables on the outcome measures, is that information on differences between important sub-groups of the population (e.g. age groups, sectors) is available. There are, of course, other ways to conceptualise this kind of study. For example, the perceptual characteristics may alternatively be divided into *drivers* and *impacts* in a manner similar to that of the CSEES 2017 study. This alternative way of framing perceptual or attitudinal characteristics as drivers and impacts is considered in the Appendix to this report.

It should be noted that satisfaction with pay is categorised as a structural characteristic. In the absence of direct measures of salary/income, the satisfaction with pay index was included here.



Box 1: Conceptual framework underpinning the study

Section 3: Methodology

This section provides an overview of the methodology used in the design, piloting, administration, sampling, weighting and analysis of this study in the context of its aims and objectives.

Aim and objectives of the study

The overall aim of the study is to carry out a:

> *nationally representative study on recruitment and retention of key professionals within health services, namely, nurses, consultants and non-consultant doctors.*

Objectives

The key objectives of this study are to:

1. Describe key issues arising in respect of recruitment and retention among nurses, non-consultant and consultant doctors
2. Take account of the wide range of potential drivers that influence retention and recruitment across a range of characteristics
3. Provide a report to the PSPC on key findings emerging from the study to assist in the identification of key policy options to address any identified recruitment and / or retention difficulties for these personnel.

Overall approach adopted

This study uses a mixed methods sequential explanatory design. Separate studies were conducted with nurses, and with consultant and non-consultant doctors. An online survey methodology was used to collect quantitative data from each stakeholder group. In addition, focus groups and individual interviews were conducted with nurses, consultant and non-consultant doctors from a range of grades, regions, and contract types.

An overview of the process is presented in Figure 8.

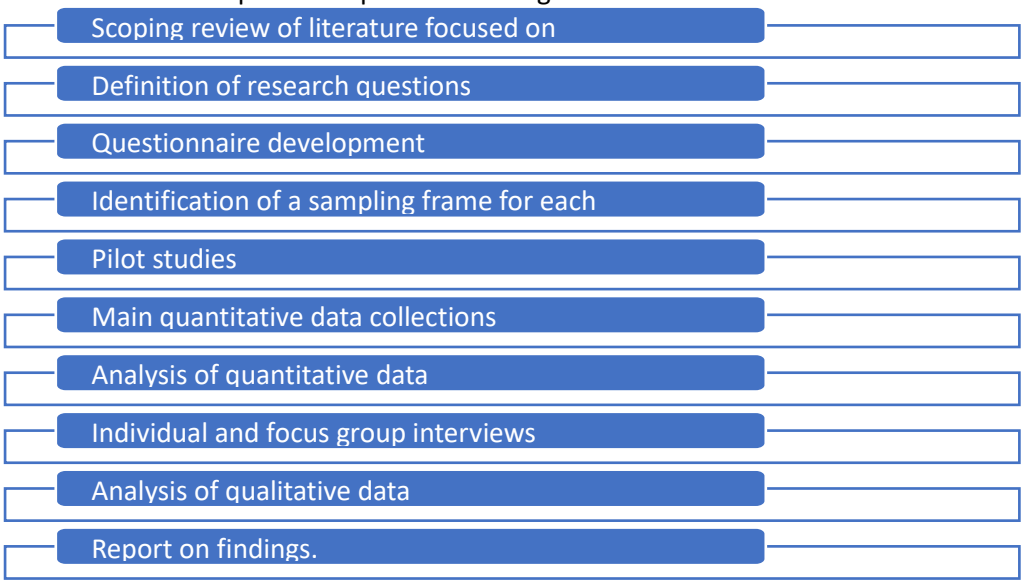


Figure 8: Key elements of study process

Scoping review of national and international literature

A scoping review of the national and international literature, focusing predominantly on the measurement of key areas identified by the PSPC, as relevant to its work, was conducted. These are as identified in the Request for Tender, including:

Potential drivers:

- Satisfaction with aspects of the job (including communication, remuneration, training, performance management, professional development and career opportunities (including mentoring), respect and dignity, working hours, staffing, requirements for flexibility, leave and other terms and conditions)
- Features of job design (e.g. levels of autonomy, skill utilisation, perceptions of impact on the lives of others)
- Features of the work environment / culture (e.g. organisational, management and co-worker support)
- Levels of fit (with job, group and organisation)
- Levels of job demands.

Potential outcomes

- Organisational commitment
- Intentions to leave / job search intentions
- Global job satisfaction
- Expectation and reality of role (e.g. breach of the psychological contract)
- Levels of work engagement and / or exhaustion / burnout.

The review, which includes both peer-reviewed and grey literature, focuses on:

- Understanding the context for recruitment and retention challenges across key personnel
- Nationally and internationally comparable studies of relevance to recruitment and retention in Ireland
- Identification of relevant areas relating to the individual, the work and the organisation in the context of intention to stay or leave
- Key areas for inclusion in the questionnaire.

The review of literature is used mainly to identify those areas in other similar studies and to identify robust approaches to their measurement.

Research question definition

The research question, questionnaire development and research approach were developed and agreed in consultation with, and with advice from, the PSPC and their advisors (Professor Edel Conway / Dr Yseult Freeney, Dublin City University Business School). Key elements included in the definition of the research question were:

- Key stakeholders to be included in the research
- Sampling strategy
- Topics to be addressed in the research
- Recruitment of key stakeholders.

Questionnaire development

While separate questionnaires were developed for nurses and consultant / non-consultant doctors, there was considerable overlap between them. Questionnaires were developed through:

- A scoping review of peer-reviewed and grey literature and instrumentation
- Contact with developers of previously validated scales/indexes
- Advice from researchers with expertise in the area (including PSPC's advisors on this study)
- Interviews already conducted with human resource personnel and nurse managers
- Pre-testing with nurses (n = 4) and doctors (n = 5) currently in practice.

Overview

Table 4 provides an overview of each individual question included in the questionnaire. The table provides an indication of the concept / area being measured, the ways in which it is being measured, and the source of the measurement instrument (including permissions received). Where available and relevant to the present study, pre-tested questions that had been included in studies by organisations such as the Central Statistics Office and HSE were adopted.

The questionnaires were divided into four sections:

- Section 1: About your job
- Section 2: About your workplace
- Section 3: Job intentions
- Section 4: About you.

In total, the questionnaire for nurses comprised 46 questions. The questionnaire for consultant and non-consultant doctors consisted of 44 questions. Key components of both questionnaires are presented in Table 5.

Table 5: Content of survey questionnaires for nurses and consultant / non-consultant doctors

Section 1: Your job	Section 2: Your organisation	Section 3: Your intent to stay / leave	Section 4: About you
Key characteristics, including employment grade; area of work; management responsibility; contact with clients / patients; type of contract; and full- or part-time status*	Key characteristics, including place of work; employer, sector; area of work; and geographical region*	Intent to stay in / leave job in next two years	Age group, gender, country in which basic qualification obtained, place of birth*
Engagement	Satisfaction with pay	Likelihood of leaving organisation	Time taken to get to work
Autonomy	Information sharing	Likelihood of leaving profession	Highest level of qualification (nurses only)
Responsibility overload	Organisational commitment	Reasons for staying / leaving*	

Section 1: Your job	Section 2: Your organisation	Section 3: Your intent to stay / leave	Section 4: About you
Impact	Training and promotional opportunities*		
Engagement	Perceptions of manager*		
Job satisfaction (specific)*	Perceptions of co-workers		
Job satisfaction (global)	Recruitment / job expectations		
Burnout	Perceived quality of workplace (doctors only)		
Effort-reward ratio			
Working hours			

*There are some differences in wording and items between nurses' and consultant / non-consultant doctors' questions.

Both questionnaires included a number of previously tested and validated scales/indexes and the indexes, focus, source, number of items and reliabilities in this study are presented in Table 6.

Table 6: Index reliabilities

Index	Description	Source	N Items	Cronbach's Alpha (nurses)	Croncbach's Alpha (all doctors)	Cronbach's Alpha (NCHDs)	Cronbach's Alpha (consultants)
Engagement	Feeling enthusiastic and inspired about job	Utrecht work engagement scale[89]	6	0.842	0.863	0.857	0.875
Autonomy	Perception of freedom and independence in day-to-day work	Multi-dimensional measure of psychological empowerment in the workplace[90]	3	0.912	0.922	0.890	0.927
Responsibility overload	Feeling of too much responsibility in job	New index	3	0.589	0.730	0.764	0.652
Impact	Belief that job has a significant impact in others' lives	Multi-dimensional measure of psychological empowerment in the workplace	3	0.899	0.925	0.916	0.936
Satisfaction with pay	Level of satisfaction with pay	Employee engagement study of the Irish Civil Service (CSEES study)[1]	4	0.831	0.845	0.804	0.885
Job satisfaction specific	Level of satisfaction with specific aspects of job (physical working conditions, flexibility of hours, physical demands, quality of care)	Copenhagen psycho-social scale[91] (3 new items added for doctors)	4 / 7	0.768	0.858	0.848	0.877
Job satisfaction global	General / global level of job satisfaction	Copenhagen psycho-social scale	3	0.914	0.930	0.925	0.939
Burnout	Feelings of work-related burnout	Oldenburg Burnout Inventory[92]	4	0.864	0.865	0.845	0.868
Information sharing	Perception of extent to which information is shared and decisions are communicated	CSEES study	5	0.854	0.867	0.863	0.875
Effort	Perceived level of effort put into work	The effort-reward (ERI) ratio[2]	3	0.836	0.830	0.828	0.840

[1] Based on Australian Civil Service Engagement Survey with one additional item.

[2] See: http://www.uniklinik-duesseldorf.de/unternehmen/institute/institut-fuer-medizinische-soziologie/forschung/the-eri-model-stress-and-health/eri-questionnaires/

Index	Description	Source	N Items	Cronbach's Alpha (nurses)	Croncbach's Alpha (all doctors)	Cronbach's Alpha (NCHDs)	Cronbach's Alpha (consultants)
Reward	Perceived level of reward from work	The effort-reward (ERI) ratio	7	0.673	0.699	0.672	0.736
Recruitment process (new recruits only)	Perceptions of the efficiency and fairness of the recruitment process	New scale based on recruitment lifecycle and work of Larson *et al.* (1998)[93]	7	0.874	0.853	0.833	0.898
Job expectations (new recruits only)	Extent to which job expectations matched job experiences	New index[3]	3	0.866	0.866	0.869	0.889
Organisational commitment	Level of commitment to current organisation	Meyer and Allen Organisational commitment scale[4]	6	0.783	0.869	0.842	0.894
Training and promotional opportunities	Perceived opportunities for training and promotion	CSEES Survey	6	0.798	N/A	N/A	N/A
Training opportunities	Perceived opportunities for training	CSEES Survey plus 7 new items	9	N/A	0.804	0.804	Consultants not asked these questions
Promotional opportunities	Perceived opportunities for promotion	CSEES Survey plus 3 new items	4	N/A	0.724	0.726	Consultants not asked these questions
Perceptions of co-workers	Perceptions of co-workers	Workplace Affective Commitment Multidimensional questionnaire – short form	3	0.899	0.897	0.879	0.912

[3] Based on the recruitment life-cycle and the work of Larson S.A., Lakin K.C. and Bruininks R.H. (1998) Staff recruitment and retention: study results and intervention strategies. Washington, AAMR.

[4] http://employeecommitment.com/academic-license.html

Index	Description	Source	N Items	Cronbach's Alpha (nurses)	Croncbach's Alpha (all doctors)	Cronbach's Alpha (NCHDs)	Cronbach's Alpha (consultants)
		subscale on affective commitment to co-workers[94]					
Perceptions of manager	Perceptions of effectiveness of immediate manager (nurses) / manager career support (doctors)	Copenhagen psycho-social scale for nurses; manager career support scale for doctors[95]	4	0.908	0.959	0.954	0.961
Quality of workplace	Perceptions of the extent to which patient / client needs are met / they achieve good outcomes / meets needs/ is safe and of high quality.	New scale	7	N / A	0.919	0.913	0.928
Intention to leave organisation	Level of intent to leave current organisation	Meyer *et al.* turnover intention scale[96]	3	0.817	0.788	0.738	0.818
Intention to leave profession	Level of intent to leave profession	Meyer *et al.* turnover intention scale	3	0.825	0.675	0.582	0.735

Note: Cronbach's Alpha is a measure of internal consistency. Values between 0.8 and 0.9 indicate good internal reliability while values below 0.7 indicate lower reliability.

Research design

The study adopted both quantitative (online surveys) and qualitative (structured interviews) approaches. This approach ensures nationally representative samples of nurses and doctors for the surveys, with interviews providing a deeper and richer understanding of the key issues arising.

Sampling frame for nurses

Based on HSE counts from November 2017, 42,041 nurses (WTE of 36,616) are working in the public sector. This is the target population. Of these, 59.6% work in acute services, 39.9% work in community services, and 0.5% work in other sectors (health and wellbeing, corporate and health businesses).

Using these data, population fractions on the basis of sector (acute, community, other), grade (director, manager, specialist, etc.) and full-time / part-time status were calculated to produce 16 strata or groups. Where the total number of cases in the original cells was <200, cells were collapsed. For example, in the acute sector, both full-time and part-time nurse managers were combined, as there is a very low number of part-time nurse managers in this sector.

The population and sample fractions are shown in Table 7. The weight is computed as the population proportion divided by the proportion in the sample. This corrects for differences in response rates on the basis of sector, grade and full- / part-time status and results in analyses that may be generalised to the population on the basis of these characteristics. Of the 3,769 respondents in the final datafile, 18 (0.48%) were missing sector / grade / full-time status. In these cases, a weight of 1 was computed.

Table 7: Population fractions, sampling fractions and survey subgroups for computation of sampling weights for nurses

Sector	Grade / full-time status*	Proportion (Population)	Proportion (Sample)
Acute and community	Nurse director (all)	0.0062	0.0928
Acute	Nurse manager (all)	0.1099	0.1890
Acute	Nurse specialist (full-time)	0.0182	0.0621
Acute	Nurse specialist (part-time)	0.0118	0.0221
Acute	Staff nurse (full-time)	0.2601	0.2253
Acute	Staff nurse (part-time)	0.1786	0.0888
Acute and community	Student nurse (all)	0.0167	0.0077
Community	Nurse manager (all)	0.0774	0.0773
Community	Nurse specialist (all)	0.0162	0.0336
Community	Staff nurse (full-time)	0.1657	0.0901
Community	Staff nurse (part-time)	0.0855	0.0323
Community	Public health nurse (all)	0.0419	0.0355
Acute and community	Other (all)	0.0068	0.0301
Other	All	0.0051	0.0133

*Grade is not split by FT / PT status, where the population number in grade <200.

Prior to computation of the sampling weights, records were deleted from the nurses' datafile if questionnaire completion rates were below 50% (19.4% or 925 of the original

4752 records). Following this, 58 duplicate records (1.5%) were deleted, leaving 3,769 records.

Sampling frame for consultant and non-consultant doctors

The sampling frame for consultant and non-consultant doctors was based on the Irish Medical Organisation database and covered doctors who were active on the register; planned to work >30 days in Ireland in 2018; were not GPs; and had given their consent to the Medical Council to allow their email to be used. These were invited to take part (N = 10,093).

Using Medical Council figures, population fractions on the grade and gender of doctors were calculated and these were used as the basis for weighting the sample to provide nationally representative estimates. Where the total number of cases in the original cells was <200, cells were collapsed. For example, there are, in total, 104 community health doctors and 108 public health doctors, and these two groups are combined.

The computation of sampling weights for doctors was complicated by the fact that 13.5% of survey respondents were missing the response to the question on gender. To compute weights for these respondents (i.e. those missing gender but with information on job category), the population proportions were calculated out of a base of .865 (i.e. 1-0.135) and then recalculated out of a base of .135, as shown in Table 8. This assumes that the rate of missing responses on gender is approximately equal across male and female respondents.

Eight respondents out of the sample of 1438 were missing the information on job category and gender and these were assigned a weight of 1.

Table 8: Population fractions and survey subgroups for computation of sampling weights for doctors

Job category	Gender	Proportion (Population)	Proportion (Sample)
NCHD in training	Female	0.1035	0.1510
NCHD in training	Male	0.1000	0.1091
NCHD not in training	Female	0.0943	0.0497
NCHD not in training	Male	0.2025	0.1203
Hospital consultant	Female	0.0900	0.1336
Hospital consultant	Male	0.2234	0.2245
Other consultant or specialist	Female	0.0132	0.0287
Other consultant or specialist	Male	0.0380	0.0294
Community Health or Public Health	All	0.0210	0.0392
Other OR Healthcare-related management / admin	All	0.0301	0.0259
NCHD in training	Missing	0.0179	0.0084
NCHD not in training	Missing	0.0149	0.0070
Hospital consultant	Missing	0.0151	0.0615
Other consultant or specialist	Missing	0.0361	0.0119

The weight is computed as the population proportion divided by the proportion in the sample. This corrects for differences in response rates on the basis of job category and gender, and results in analyses that may be generalised to the population on the basis of these characteristics.

Prior to computation of the sampling weights, records were deleted from the doctors' datafile if questionnaire completion rates were below 50% (21.6% or 399 of the original 1851 records). Following this, 14 duplicate records (0.9%) were deleted, leaving 1,438 records.

Recruitment

Two separate recruitment strategies were put in place for nurses and doctors.

Recruitment of nurses

While the original approach proposed had been to contact nurses through the NMBI database, this was not possible at the time of the study. An alternative approach, which focused on a clustered random sample of health service organisations drawn from the hospital and community health organisation structure, was pilot tested. Due to low response rates, however, this approach was not considered feasible. Instead, a two-stage cascading sample design was used. The Office of the Nursing and Midwifery Service Director (ONMSD) was central to the recruitment process. Every director of nursing on the ONMSD database of directors was contacted by the ONMSD to:

a) Inform them about the study
b) Request their assistance in circulating a separate invitation email to all the nurses working in their organisation (including part-time and student intern employees)
c) Send a text message to nurses that included a link to the survey, which could be completed on a smart phone, as well as on a computer or laptop if an email address was not available
d) Publicise the link to the survey within the organisation including, if available, placing the link on the intranet to which only staff had access.

In addition, three reminder emails were sent to all directors of nursing over the three-week data-collection period.

Recruitment of consultant and non-consultant doctors

The Medical Council was central to the recruitment of doctors to take part in this study. This organisation drew the sample of doctors to be contacted, based on the agreed criteria (as described above), and circulated an invitation to take part in the study, as well as two reminders.

Recruitment to take part in an interview

At the end of the survey questionnaire, respondents were asked if they would be willing to take part in a telephone interview. In total, 1,215 nurses, 252 NCHDs and 248 consultants indicated their willingness to take part in an interview. A sample of nurses and doctors who volunteered to take part was selected on the basis of a variety of individual, job and organisational characteristics, and an invitation was issued to each, with further information about the study and interview, along with a consent form.

Pilot testing

Pilot testing of the survey information, data-collection method and questionnaires was conducted prior to the main surveys. The questionnaire analysis focused on descriptive statistics (missingness and distributions), index reliabilities, and, for newly-developed items, bivariate inferential analysis.

Nurses' pilot study

The pilot study for the online survey took place in one community and one acute hospital. In total, 107 responses were received and 92% (n = 98) had responded to 15% or more of the questionnaire. Two interviews were conducted with individuals who provided their contact details to identify any particular challenges arising, and to assist in the development of the interview protocol.

Changes were made to both the survey information and questionnaires, to ensure high levels of completion. The main changes to the nurses' information and questionnaire following piloting were:

- Slight changes to the introductory page to clarify and tighten the text
- Clarification of the question on grade through inclusion of additional examples
- Questions on the number of hours worked overtime with and without compensation – response changed from open numeric response to categorical response
- Additional response categories on question relating to likelihood of applying for promotion, created on the basis of text responses
- *"Not applicable"* response option removed from questions about reasons for staying in or leaving current job
- Deletion of six items measuring over-commitment (a third component to the effort-reward measures, which were retained)
- Deletion of a question on ease or difficulty of filling nursing vacancies in place of work
- Deletion of a question asking for comments on the questionnaire
- Inclusion of items that form the information sharing index.

Doctors' pilot study
The Medical Council selected a random sample of 200 eligible doctors from its register and issued invitations to them. As only 22 responses had been received after seven days, a further sample of 100 doctors was drawn at random. A reminder was also sent. In total, 25 responses were received and of these, 96%, or 24 respondents, had responded to 15% or more of the questionnaire. Two interviews took place with respondents, who provided their contact details to identify any potential challenges in the completion of the questionnaire and to ensure the questionnaire covered all the relevant areas.

Fewer changes were made to the pilot version of the doctors' survey, as a number of the changes made following the nurses' survey were also reflected in the pilot version of the survey for doctors.

The main changes to the doctors' information sheet and questionnaire, following piloting, were:

- Slight changes to the introductory page to clarify and tighten the text
- Question on place of work, which distinguished between Model 1, 2, 3, 4 hospitals, simplified to distinguish acute / community hospitals
- Question on job category had category *"retired"* added
- New item added to job satisfaction (specific) index, *"the distribution of your working hours across the working day / week"*
- Deletion of a question asking for comments on the questionnaire.

Main survey data collection

The main data-collection period for the nurses' study took place from 28 March to 12 April 2018 and for doctors from 9 to 23 April 2018. Two respondents completed the questionnaire using a hard copy that had been requested by them and this was subsequently manually inputted into SurveyMonkey™. All other data were collected electronically using SurveyMonkey™.

Responses received

In total, 4,752 questionnaires were received from nurses and 1,851 from doctors. Following deletion of records where less than 50% of the questionnaire had been completed, and deletion of duplicates, the final datasets consisted of 3,769 nurse records and 1,438 doctor records (Table 9). Of these 1,438 doctor records, 700 were consultants, 637 were non-consultant hospital doctors (NCHDs), and 101 were "other" doctors (e.g. community or public health doctors).

Table 9: Total responses, incomplete responses, duplicate records, and responses included in the analyses for nurses and doctors

Group	Total responses		Incomplete responses		Duplicates removed		Records included in the analysis	
	N	%	N	%	N	%	N	%
Nurses	4,752	100.0	925	19.5	58	1.2	3,769	79.3
Consultant and non-consultant doctors	1,851	100.0	399	21.6	14	0.8	1,438	77.6

Response rates and characteristics of the sample: Nurses

As noted above, HSE counts from November 2017 show that 42,017 nurses were working in the public sector. 3,769 nurses responded to the survey and completed at least 50% of the questionnaire. This gives a minimum response rate of 9.7% and an *estimated* rate *of* 12.3% taking into account an adjustment for those on leave[5]. The actual response rate may be higher since the two-stage sampling means that it is possible that not all nurses in the population of 42,041 nurses received an invitation to participate.

Table 10 compares the characteristics of the population with the (weighted) characteristics of the sample. These comparisons indicate that the sample closely aligns with the population in the distribution of individuals across the categories of sector, grade, full-/part-time status and gender.

[5] 9.7% is the minimum response rate on the basis that all employed nurses were available to take part and that they were contacted and asked to participate. It is estimated that, normally, 23% of the nursing population is on leave (annual leave, sick leave, maternity leave and study leave – see HSE: Midwifery Workforce Planning Report, 2016), so a second response rate that takes this into account is also provided (i.e. using a denominator of 42,041 and correcting by a factor of .73)

Table 10: Comparisons of population and (weighted) sample characteristics of nurses: sector, grade, full-/part-time status and gender

Sector	**Population**	**Sample**
Acute	59.9	59.9
Community	39.6	39.6
Other	0.5	0.5
Total	100.0	100.0
Grade	**Population**	**Sample**
Director/Assistant Director	0.6	0.9
Nurse Manager	18.8	18.8
Nurse Specialist	4.7	4.6
Staff Nurse	69.5	69.0
Public Health Nurse	4.2	4.2
Student Nurse	1.7	1.7
Other	0.5	0.8
Total	100.0	100.0
Full-/Part-time	**Population**	**Sample**
Full-time	64.9	68.2
Part-time	35.1	31.8
Total	100.0	100.00
Gender*	**Population**	**Sample**
Males	8.3	7.7
Females	91.7	92.3
Total	100.0	100.00

*13.0% of survey respondents were missing data on gender.

Table 11 provides additional information on the characteristics of the (weighted) nurses' sample, i.e. the percentages of respondents by place of work, sector, area of work, new recruit status, geographical region, age group, level of educational qualification, country of initial qualification, and country of birth. (These are not readily comparable with the population; their purpose is to provide some additional information on the characteristics of respondents.)

Table 11: Demographic and employment characteristics of the (weighted) nurses' sample

Place of work	%	**Geographical region of work**	%
Model 1 hospital	9.6	Dublin	38.5
Model 2 Hospital	9.3	Rest of Leinster, Cavan and Monaghan	17.3
Model 3 Hospital	36.8	Munster	31.5
Model 4 Hospital	12.5	Connaught and Donegal	12.6
Community/Primary care	26.7	Total	100.0
Other	5.1	**Age group***	%
Total	100.0	30 years or younger	13.4
Area of work	%	31-40 years	28.7
Mental health	9.9	41-50 years	34.9
Children	6.5	51 years or older	23.1
Maternity	7.1	Total	100.0
Intellectual disability	12.0	**Highest level of qualification attained****	%
Acute	42.9	Advanced Cert (below degree level)	10.4
Community	11.3	Advanced Diploma (below degree level	10.8
Older persons	8.8	Primary Degree	32.4
Corporate/Other	0.6	Postgraduate Diploma	33.8
Other	0.8	Masters or Doctoral Degree	12.7
Total	100.0	Total	100.0
Management responsibility	%	**Country in which basic nursing / midwifery qualification was obtained****	%
No	65.4	In the Republic of Ireland	72.6
Yes, 1-5 staff	17.3	In another EU country	18.3
Yes, 6-10 staff	5.4	In another non-EU country	9.1
Yes, 11-20 staff	4.2	Total	100.0
Yes, 21-30 staff	3.6	**Place of birth****	%
Yes, 31 or more staff	4.0	In the Republic of Ireland	80.7
Total	100.0	In another European country	8.8
In current job for two years or less	%	In another non-European country	10.4
Yes	33.0	Total	100.0
No	67.0		
Total	100.0		

*12.8% of survey respondents were missing data on this question.
**13.0% of survey respondents were missing data on this question.

Response rates and characteristics of the sample: Doctors

As noted above, the Medical Council register as at March 2018 includes 10,236 eligible doctors (41% Consultants, 53% NCHDs and 6% Others, such as Community or Public Health doctors)[6]. Following deletion of records where less than 50% of the questionnaire had been completed, and deletion of duplicates 1,438 doctors responded to the survey.

This gives an overall response rate of 14.0% for doctors and response rates of 12.9% for Consultants, 13.0% for NCHDs, and 20.0% for Others.

Table 12 compares the characteristics of the population with the (weighted) characteristics of the sample. These comparisons indicate that the sample closely aligns with the population in the distribution of individuals across categories of gender, job category, practice area and sector.

Table 12: Comparisons of population and (weighted) sample characteristics of doctors: sector, grade, full-/part-time status and gender

Gender	**Population**	**Sample**
Female	37.5	35.1
Male	62.5	64.9
Total	100.0	100.0
Job Category	**Population**	**Sample**
NCHD	52.6	53.3
Hospital consultant	32.4	32.8
Other consultant	8.6	8.7
Other	6.4	5.1
Total	100.0	100.0
Practice Area	**Population**	**Sample**
Anaesthesia	9.7	10.1
Emergency medicine	6.6	6.1
Medicine	27.9	24.8
Obstetrics and gynaecology	5.6	4.7
Ophthalmology	1.3	2.2
Paediatrics	7.7	7.2
Pathology	4.2	4.2
Psychiatry	11.0	14.6
Community or Public Health medicine	1.6	2.9
Radiology	4.7	5.3
Surgery	18.6	15.6
Other inc education, research, sports	1.1	2.4
Total	100.0	100.0
Sector*	**Population**	**Sample**
Public services	63.3	67.3
Private services	8.6	5.7
Both public and private services	28.1	27.0
Total	100.0	100.0

* 14.5% of records on the Medical Council sampling frame were missing data on sector.

[6] 'Eligible' here refers to doctors who are active on the register, plan to work >30 days in Ireland in 2018, are not in General Practice, and have given consent to Medical Council for their email to be used for research purposes.

Table 13 provides additional information on the characteristics of the (weighted) doctors' sample, i.e. the percentages of respondents by sector, public service contract type, area of work, new recruit status, geographic region of work, age group, gender, place of birth, and country of initial medical qualification. These are shown for the sample overall, and separately for Consultants and NCHDs. Other than gender, practice area and sector, sample characteristics are not readily compared with the population: the purpose of Table 12 is to provide additional information on the characteristics of the (weighted) sample.

Table 13: Demographic and employment characteristics of the (weighted) doctors' sample

Public or private services	% (all)	% (NCHDs only)	% (Consultants only)
Public services	67.3	80.9	49.8
Private services	5.7	1.4	10.6
Both public and private services	27.0	17.6	39.7
Total	100.0	100.0	100.0
Public service contract type (N/A for 5.7% working in private services only)	% (all)	% (NCHDs only)	% (Consultants only)
Permanent full-time	43.3	21.0	74.9
Permanent part-time	2.2	0.5	3.2
Fixed term full-time	41.6	68.9	6.0
Fixed-term part-time	3.8	2.5	5.7
Agency/variable/other	9.1	7.0	10.2
Total	100.0	100.0	100.0
Area of work	% (all)	% (NCHDs only)	% (Consultants only)
Anaesthesia	10.1	9.7	11.6
Emergency medicine	6.1	6.9	5.4
Medicine	24.8	31.3	17.9
Obstetrics and gynaecology	4.7	5.5	3.9
Ophthalmology	2.2	1.1	3.5
Paediatrics	7.2	9.4	4.0
Pathology	4.2	2.1	7.2
Psychiatry	14.6	8.8	22.0
Community or Public Health medicine	2.9	0.5	2.1
Radiology	5.3	2.5	9.4
Surgery	15.6	19.6	11.7
Other inc education, research, sports and exercise	2.4	2.6	1.3
Total	100.0	100.0	100.0
In current job two years or less	% (all)	% (NCHDs only)	% (Consultants only)
Yes	46.1	65.0	21.8
No	53.9	35.0	78.2
Total	100.0	100.0	100.0

Table 13: Demographic and employment characteristics of the (weighted) doctors' sample (continued)

Geographical region of work	% (all)	% (NCHDs only)	% (Consultants only)
Dublin	45.8	43.2	48.6
Rest of Leinster, Cavan and Monaghan	17.1	19.1	14.3
Munster	22.1	22.8	21.8
Connaught and Donegal	15.0	14.8	15.4
Total	100.0	100.0	100.0
Age group*	% (all)	% (NCHDs only)	% (Consultants only)
21 to 30	14.4	26.8	0.0
31 to 40	32.6	51.5	11.0
41 to 50	26.5	16.5	40.4
51 or older	26.6	5.2	48.6
Total	100.0	100.0	100.0
Gender**	% (all)	% (NCHDs only)	% (Consultants only)
Male	64.9	61.6	71.7
Female	35.1	38.4	28.3
Total	100.0	100.0	100.0
Place of birth***	% (all)	% (NCHDs only)	% (Consultants only)
Republic of Ireland	49.8	36.5	62.8
In another EU country	11.9	8.6	16.1
In another non-EU country	38.4	54.8	19.0
Total	100.0	100.0	100.0
Country of initial medical qualification***	% (all)	% (NCHDs only)	% (Consultants only)
Republic of Ireland	58.4	43.4	76.0
Other EU country	9.8	11.6	7.5
Other non-EU country	31.8	45.0	16.4
Total	100.0	100.0	100.0

*12.5% of survey respondents did not answer this question.
**13.7% of survey respondents did not answer this question.
***13.2% of survey respondents did not answer this question.

Interview data collection

Participants who volunteered to take part in a telephone interview were provided with supplementary information and were requested to complete a consent form agreeing that they had read the information provided and had an opportunity to ask questions, were freely and voluntarily taking part in the study, could withdraw at any time, could be contacted again if necessary, and knew that interviews were being audiotaped.

Numbers taking part

Numbers of participants who took part in interviews are presented in Table 14.

Table 14: Number of participants and source of data

	N	Commentary
Nurses' interviews	44 interviewed	1 focus group (1 with directors of nursing) 38 individual interviews
Doctors' interviews	50 interviewed	Focus groups (n = 3; 30 NCHD participants) 20 individual interviews (12 with consultant doctors)
HR personnel	6 interviewed	1 focus group

Preparation and analysis of data

The data were exported from the internet survey provider (SurveyMonkey™) into IBM SPSS (Statistical Package for the Social Sciences v24.0). Open-ended and unstructured question responses were coded separately and re-merged into the original datafiles.
Following usual / best practice in data processing, all items were checked for missingness. Rates of missingness that exceeded 5% have been noted in the relevant tables and graphs. All analyses are weighted using the relevant sampling weight.

Questionnaire indexes were constructed using the same methodology as in the 2017 Civil Service Employee Engagement Survey report (2017;73-4).[97] For each respondent, an index score for each of the areas included in the survey was calculated. For example, the global satisfaction index has three items, or statements. Each respondent receives an initial score as the average score across the five response options where Strongly disagree is equivalent to 0, Disagree is equivalent to 1, Neither agree / disagree is equivalent to 2, Agree is equivalent to 3, and Strongly agree is equivalent to 4. This initial score was then converted to a percentage, where a respondent who selects Strongly agree to all three items gets a score of 100%, while one who selects Strongly disagree to each gets a score of 0%. An overall mean index score of 50% means that the same proportion of respondents answered positively to the questions as answered negatively; an overall index mean of 100% means that all respondents selected 'Strongly agree' to all three questions; while 0% indicates that all respondents chose 'Strongly disagree' in response to all three statements.

In some cases, items on the index had to be reverse coded. For example, the items on the index measuring burnout and their coding to produce the burnout index are shown in Table 15. In this example, higher scores on the burnout index indicate a more negative outcome. For a majority of the indexes used in this study, higher scores indicate a more positive outcome. Throughout the report and in the data compendia, the meaning of the index scores (i.e. higher scores being positive or negative) is noted.

Table 15: Example of coding (including reverse coding) for the burnout index

Burnout: coding of items	Always	Often	Sometimes	Seldom	Never
Feel worn out at the end of the working day (RC)	4	3	2	1	0
Exhausted in the morning at the thought of another day at work (RC)	4	3	2	1	0
Feel that every working hour is tiring (RC)	4	3	2	1	0
Have enough energy for family and friends during leisure time	0	1	2	3	4

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

The results for items on each index are presented in graphs in this report. For ease of reporting and describing the results in graphs, responses are grouped into three categories. For example, the original response options on the items that form the index measuring organisational commitment are Strongly disagree / Disagree / Neither agree nor disagree / Agree / Strongly agree. For the purposes of displaying graphs of responses, these five response options were collapsed to three: Agree / Neutral /Disagree.

Data compendia were produced in Excel format separately for nurses and for doctors (for the combined sample, and separately for NCHDs, and consultants). The data compendia, which include an index of tables, contain four tabs as follows:

- Organisation and demographics: frequency tables of organisational and demographic characteristics of respondents.
- Questionnaire indexes: frequency tables of the Likert items organised according to the questionnaire indexes to which the items belong.
- Scale means: tables showing the overall means for each of the questionnaire indexes (expressed as percentages), overall and compared by subgroups. For nurses, the subgroups are: age group; country of initial qualification; geographic region); grade; full- / part-time status; sector; and job intention (stay / leave). For doctors, separate comparisons are made for NCHDs and consultants, according to the following groups: age group; country of qualification; gender; geographical region; full- / part-time status; sector; job category; and job intention (stay / leave). Comparisons of scale means for these subgroups were made on the basis of t-tests (if two groups) or one-way ANOVAs (if more than two groups). Post-hoc comparisons of means for >2 groups were made on the basis of Bonferroni-adjusted significance levels.
- Single items: frequency tables of single work-related characteristics of respondents (e.g. frequency of working overtime) are presented.
- Scale reliabilities: scale reliabilities (Cronbach's Alpha) are provided for overall, and for all doctors, and separately for NCHDs and consultants.
- Scale intercorrelations: Pearson correlations between scale measures, including significance levels, for nurses overall, and for all doctors, and separately for NCHDs and consultants.

Box 2 provides a glossary of terms related to the quantitative analysis of data.

Term	Description/Explanation
Index	This refers to a summary score, expressed as a percentage, based on a set of individual questionnaire items covering a single theme. An index can also be referred to as a scale, but due to the manner in which the items are combined in this study, the term index is used[7].
Item	This refers to a single statement or question, a group of which are combined to form an index. Typically, in the present study, an item consists of a single statement where the respondent is asked to indicate their level of agreement or disagreement, their level of satisfaction or dissatisfaction, or the frequency with which the statement applies to them.
Reverse coding	In this study, a majority of the indexes are 'positive' in that a higher score indicates a more positive outcome. For example, higher global job satisfaction scores reflect higher levels of satisfaction. Some of the indexes are 'negative' in that higher scores reflect a more negative outcome. For example, higher burnout scores indicate higher levels of burnout. In some cases, the individual items have been reverse-coded so that the 'meaning' of the score for each item is consistent within an index. This is because some of the individual items are 'negatively' worded. For example, a respondent could indicate their level of agreement to two items worded as *I feel fully supported by my manager* and *My manager does not provide me with sufficient feedback.* Because the second item in this example is negatively worded, the response options are 'reverse coded' (i.e. disagreement with the statement would receive a higher score than agreement) in order that the two items belong to an index where the direction of the item scores is consistent.
Outcome	As per the terms of reference of this study, the two outcomes of the study are recruitment and retention. An outcome may also be referred to as a dependent variable, since the outcome depends on one or more explanatory variables (some of which are referred to as drivers in the Terms of Reference). *Recruitment* is measured on two indexes in the present study: *recruitment process*, which measures perceptions of the efficiency and fairness of the recruitment process; and *job expectations*, which measures perceptions of the extent to which job expectations matched job experiences. These two measures are available only for those respondents who were 'new recruits' (in their current job for two years or less). The *retention* outcome is examined through three measures: the first is a categorical measure (yes/no) where respondents are asked if they intend to leave their current job in the next two years; the second and third are two indexes which measure likelihood of leaving the current organisation, and likelihood of leaving the nursing (or medical) profession.
Explanatory variable	In the present study, a distinction is made between two categories of explanatory variables: individual, employment and structural characteristics; and perceptions of job and of organisation. Explanatory variables are those that are hypothesised to explain variation in an outcome (in this study, recruitment or retention). It is also useful to distinguish between explanatory variables that may be considered as 'givens' such as a person's age and as such may be referred to as 'controls', and those which may be open to change, such as a person's level of satisfaction with their working environment. In the regression analyses presented in this report, the explanatory variables are grouped according to whether they are largely fixed (e.g. gender, age group) as individual organisational and structural characteristics or whether they are perceptual and hence open to change (i.e. perceptions of job and of organisation).

Box 2 Key terms used in the present study: quantitative analysis

[7] See Chapter 6 of Babbie, 2011. http://www.mouyi.me/mouyi/wp-content/uploads/2017/02/The-Basics-of-Social-Research_5th-Ed_Earl-Babbie.pdf

Qualitative data analysis

All interviews carried out were audiotaped and transcribed. The anonymisation of the interview data involved removing all personal information (e.g. names and locations) and the assignment of pseudonyms. Where necessary, the qualitative data have been edited to safeguard participants' anonymity and it has been ensured that this has not distorted their data or changed the key messages that emerged

Process of data analysis

1. Following all interviews, notes were written up within 24 hours, which provided an opportunity for us to reflect on the process of the interview.
2. Each audiotape was listened to at least three times, which provided an opportunity for us to familiarise ourselves with the nuances and content of each tape.
3. All tapes were transcribed, and stage memos made as a means of capturing ideas, views and intuitions at all stages of the data process.
4. Following transcription, each transcript was read through several times to get an overall sense of the data.
5. The data were then imported into NVivo, where data coding took place. Open coding, where a provisional name is given to each category, was used and compare and contrast were adopted as the two main tools to form categories, establish the boundaries of the categories, and assign data segments.
6. Following this, data related to each category were retrieved and a narrative around each segment created.

The analysis of focus group interviews took account of the interaction between participants, as well as the content expressed.

Ethical approval

Ethical approval for this study was sought from, and granted by, the School of Nursing and Midwifery Research Ethics Committee, University of Dublin, Trinity College. Key areas considered in the ethics application related to confidentiality, anonymity and the protection of data.

Building the regression models

Three outcomes were examined using multiple regression:

- Intent to stay in or leave current job in the next two years
- Likelihood of leaving current organisation
- Likelihood of leaving profession.

These regression models were constructed using backwards elimination (i.e. starting with all candidate variables, testing the removal of each variable by comparing the change in model fit with $p \leq .05$ as the inclusion criterion, and removing all variables which did not significantly improve model fit).

This was done with variables in two blocks which corresponded to individual, employment and structural characteristics, and perceptions of job and of organisation. For the first set of models (intention to stay or leave current job), logistic regression was used. This is because the outcome is binary (stay-leave). This outcome was recoded to stay-leave from a four-

category response (definitely stay / probably stay / probably leave / definitely leave). While other analysis methods, such as an ordered logit model, were possible, logistic regression was selected for two main reasons: first, the output provides the odds of staying in as well as leaving current job, which was felt to be of policy relevance, and second, since the number of consultants indicating "definitely leave" was rather small (50), collapsing categories was preferred. For the other two outcomes (leave organisation, leave profession), linear regression was used, as these two outcomes are continuous measures.

Table 16 lists the explanatory variables used in the models of nurses, and Table 17 lists the explanatory variables used in the modelling of Consultants' and NCHDs' responses. In the Appendix, we present alternative models of intention to leave the organisation for nurses, Consultants and NCHDs using a subset of the variables shown in these tables. While the models presented in the main body of the report provide detailed information about how intention to leave varies by individual, organisational and structural characteristics, the alternative models shown in the Appendix add further insights into how perceptions of the job and organisation impact on intention to leave. Specifically, the alternative analysis groups the perceptual characteristics into two groups or blocks in a manner analogous to that in the CSEES 2017 report. In that report, those characteristics were referred to as drivers and outcomes. The alternative models frame these as perceptions and impacts, respectively (since the term outcome here is reserved for intention to leave). In this alternative configuration, the perceptions include:

- Satisfaction with pay
- Autonomy
- Responsibility overload
- Impact
- Effort-reward ratio
- Information sharing
- Perceptions of co-workers
- Perceptions of manager.

The impacts, meanwhile, include:

- Job satisfaction global
- Burnout
- Organisational commitment.

(See Table A4 in the Appendix for further details of this alternative configuration.)

Variables with more than 5% of missing responses also included a missing indicator. This preserves a maximum number of records in the modelling without affecting the model estimates. Where missing indicators were used, they were tested alongside the variable that they represented in assessing model fit, but are not reported in the output, for ease of interpretation.

In some cases, some of the variables in the individual, employment and structural characteristics variables lost statistical significance with the addition of the perceptions of job and of organisation variables. When this occurred, the model was re-evaluated systematically through the construction of sub-models that allowed the detection of which of the variables relating to perceptions of job and organisation explained the relationship between the individual, employment and structural characteristics variables and the outcome. These variables may be considered *mediating variables* (Baron & Kenny, 1986):[98] that is, an explanatory variable that explains or accounts for the relationship between another explanatory variable and the outcome (as illustrated in Figure 9). In the Appendix (Tables A10-A12), an alternative way of exploring this issue is presented, and we refer to this in describing the results of the regression analyses.

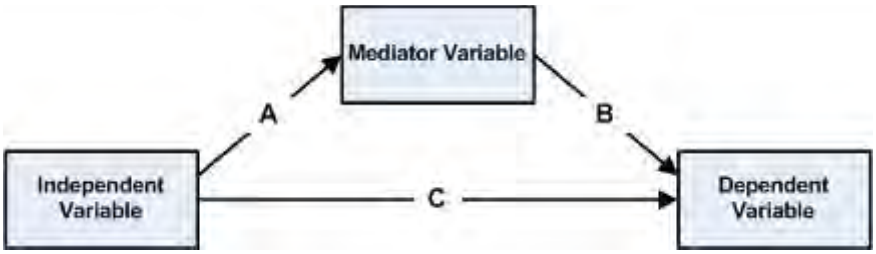


Figure 9: Graphic illustration of mediating variable

Table 16: Explanatory variables used in regression models of nurses

Variable	Treatment for regression models
Individual, employment and structural controls	
Sector	Dummy indicator (acute) with community / other as reference group
Grade	Dummy indicators (director / assistant director, manager, specialist, public health nurse, student, other grade), with staff nurse as reference group
Full- or part-time status	Dummy indicator (part-time) with full-time as reference group
Country of initial qualification	Dummy indicators (other EU country, other non-EU country), with RoI as reference group
Age group	Dummy indicators (30 or less, 31 to 40, 41 to 50), with 51 or older as reference group
Region	Dummy indicators (rest of Leinster, Connaught, Munster), with Dublin as reference group
Acting up	Dummy indicator (not in acting up position), with in acting-up position as reference group
Supervisory responsibility	Dummy indicators (managing 1-10 people, managing 11 or more people), with not managing others as reference group
New-recruit status	Dummy indicator (recruited in past 2 years), with not recruited in past 2 years as reference group
Highest educational qualification	Dummy indicators (certificate or diploma below degree level, postgraduate degree), with primary degree as reference group
Normal time taken to get to work	Multi-category variable (16-30 minutes, 31-45 minutes, 46-60 minutes, more than 60 minutes), with 15 minutes or less as reference group
Overtime without compensation	Dummy indicator (works overtime without compensation frequently or very frequently), with works overtime without compensation rarely or never as reference group
Overtime with compensation	Dummy indicator (works overtime with pay or time in lieu frequently or very frequently), with works overtime with pay or time in lieu rarely or never as reference group

Variable	Treatment for regression models
Unsociable hours	Dummy indicator (worked unsociable hours more often than not in the past 4 weeks), with worked regular hours more often than not in the past 4 weeks as reference group
Satisfaction with pay	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Perceptions of job and of organisation	
Time spent performing tasks not appropriate to nursing profession	Multi-category variable (Up to 20% of working time, 21-40% of working time, more than 40% of working time) with No, almost never as reference group
Engagement	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Autonomy	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Responsibility overload	Continuous scale (mean = 0, sd = 1), lower scores indicate more positive outcome
Impact	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Job satisfaction specific	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Job satisfaction global	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Burnout	Continuous scale (mean = 0, sd = 1), lower scores indicate more positive outcome
Effort-reward ratio	Ratio (mean = 1.71, sd = 0.81), lower scores indicate more positive outcome
Information sharing	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Organisational commitment	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Training and promotional opportunities	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Perceptions of co-workers	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Perceptions of manager	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome

Table 17: Explanatory variables used in regression models of NCHDs and consultants

Variable	Treatment for regression models
Individual, employment and structural characteristics	
Sector	Dummy indicator (private or both public and private) with public as reference group
Setting	Dummy indicator (acute hospital) with other or mixed settings as reference group
Job category	Dummy indicator (in training), with not in training as reference group (NHCDs) / dummy indicator (hospital consultant) with other consultant as reference group
Full- or part-time status	Dummy indicator (part-time) with full-time as reference group
Country of initial qualification	Dummy indicator (other country), with RoI as reference group
Gender	Dummy indicator (female), with male as reference group
Age group	Dummy indicators (30 or less, 31 to 40, 41 to 50), with 51 or older as reference group (consultants – no respondents in 30 or less age group)
Region	Dummy indicators (rest of Leinster, Connaught, Munster), with Dublin as reference group
New-recruit status	Dummy indicator (recruited in past 2 years), with not recruited in past 2 years as reference group
Normal time taken to get to work	Multi-category variable (16-30 minutes, 31-45 minutes, 46-60 minutes, more than 60 minutes), with 15 minutes or less as reference group
Overtime without compensation	Dummy indicator (works overtime without compensation frequently or very frequently), with works overtime without compensation rarely or never as reference group
Overtime with compensation	Dummy indicator (works overtime with pay or time in lieu frequently or very frequently), with works overtime with pay or time in lieu rarely or never as reference group

Variable	Treatment for regression models
Unsociable hours	Dummy indicator (worked unsociable hours more often than not in the past 4 weeks), with worked regular hours more often than not in the past 4 weeks as reference group
Satisfaction with pay	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Perceptions of job and of organisation	
Time spent performing tasks not appropriate to medical profession	Multi-category variable (Up to 20% of working time, 21-40% of working time, more than 40% of working time) with No, almost never as reference group
Engagement*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Autonomy*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Responsibility overload*	Continuous scale (mean = 0, sd = 1), lower scores indicate more positive outcome
Impact*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Job satisfaction specific*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Job satisfaction global*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Burnout*	Continuous scale (mean = 0, sd = 1), lower scores indicate more positive outcome
Effort-reward ratio	Ratio (mean = 1.76, sd = 0.96 [NCHDs]; mean = 1.56, sd = 0.93 [Consultants]), lower scores indicate more positive outcome
Information sharing*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Organisational commitment*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Training opportunities*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome; scale not included in model of Consultants
Promotional opportunities*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome; scale not included in model of Consultants
Perceptions of co-workers*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Perceptions of manager*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome
Perceived quality of workplace*	Continuous scale (mean = 0, sd = 1), higher scores indicate more positive outcome

*Indexes were standardised separately for NCHDs and consultants.

Limitations

All research has some limitations. An online survey can be efficient for researchers and convenient for respondents. It allows a shorter time frame for data collection than more traditional methods and it allows for a substantial amount of information to be collected and easily prepared for analysis. However, the complex contexts in which recruitment and retention issues arise cannot be fully captured by survey data. This limitation was offset by conducting in-depth qualitative interviews with nurses and doctors working in a variety of settings.

The respondents to the survey were not proportionately distributed across the overall population of nurses and doctors in Ireland and overall response rates were lower than desired. However, as noted earlier, the data have been weighted to provide nationally representative estimates, on the basis of the characteristics used to compute the sampling weights and a comparison of the sample with the population along key characteristics such as gender, employment grade and sector indicate that the sample provides a good match to the population in terms of these characteristics. However, there is no way of empirically assessing the extent to which particularly enthusiastic or particularly disenfranchised individuals may have responded, and this potential bias should be borne in mind when interpreting the results

Another limitation of this study is that the analysis captures the stated intention to leave but it is not known from these data what proportion of people are likely to act on these intentions.

The key limitation of the present study is that the number of doctors in the analysis (1,438, of whom 53.3% are NCHDs, 41.6% are consultants, and 5.1% are others, such as public or community health doctors) is rather small. While every effort was made to maximise the engagement of doctors with the survey, and the weights allow for nationally representative estimates, these lower numbers mean that the statistical analyses of NCHDs and consultants are less robust than they might have been, had a higher number of doctors responded to the survey.

Finally, causality cannot be inferred from the survey results (as with any cross-sectional design). The results demonstrate associations and relationships but should not be used to conclude that characteristic X causes outcome Y.

Section 4: Findings from the study with nurses

Overview of findings from nurses' section

This section presents the findings from the study with nurses in three sections.

Quantitative results are presented in two main sections

- **The first section** includes both descriptive and bivariate analysis. It presents the results for each of the questionnaire indexes, grouped according to whether they are primarily related to the perceptions of the job, or perceptions of the wider organisation, as per the conceptual framework. This first section also includes a consideration of respondents' perceptions of recruitment and job expectations for those who were recruited in the past two years. For each index, the overall score is presented, how each index is related to other indexes is described, and significant differences across important demographic, employment and structural groups are highlighted. Where possible, comparisons with other recent studies (mainly the CSEES 2017 study) are presented. However, it should be borne in mind that the aims, design and samples of studies are rarely exactly comparable. As well as the questionnaire indexes, questionnaire items that assess level of job demands (such as amount of overtime normally worked) are presented.

- **The second section** is based on the regression analysis which focuses on what we regard as the key outcomes in this study: intention to leave current job, likelihood of leaving current organisation, and likelihood of leaving the profession. In these analyses, a wide range of independent variables have been incorporated, grouped into two major 'blocks': the first block incorporates individual, employment and structural characteristics and as such may be considered as comprising 'fixed' elements of the issues under investigation. The second block incorporates respondents' perceptions of the job and the organisation and includes both 'drivers' and 'outcomes' as listed in the Terms of Reference. The regression analyses therefore allow an examination of how the outcomes vary across perceptual elements of respondents' work, after adjusting for important individual, demographic and structural characteristics. Note that the Appendix provides an alternative analysis of intention to leave the organisation which provides additional insights into how the indexes are related both to one another and to the outcome. This is referenced in the discussion of the regressions.

- **The third section** presents the results of the qualitative findings based on the analysis of interviews with stakeholders. In keeping with an interpretive paradigm, these are presented according to the broad themes that emerged. These findings, however are aligned with the conceptual framework in so far as the broad structure adheres to the structure of variables related to the job and organisation and those related to intention to stay / leave.

Part 1: Descriptive quantitative findings

This section presents the findings from the nurses' study and includes quantitative findings relating to the work and work context, the organisational context, and intention to stay in or leave their current job, organisation or nursing profession.

For each of the questionnaire indexes in the survey:

- A brief description of the index is provided. Indexes are expressed as percentages: See Section 2 (Methodology) for more information on how the indexes were computed.
- A graph showing responses to individual items on the index is presented. (If more than 5% of respondents did not answer the question, this is noted below the graph.)
- A summary of subgroup differences is presented, highlighting statistically significant differences in index means between groups.
- All data underlying these descriptions, along with index reliabilities, are in the data compendium.
- The Appendix (Table A1) presents the intercorrelations between the indexes for readers who are interested in how these indexes are related to one another.

All analyses are weighted to provide nationally representative estimates, on the basis of grade, sector and full- / part-time status.

The end of the chapter presents key themes emerging from the interview data of nurses.

Issues relating to the work

This section presents the findings from the survey regarding the following:

- Engagement
- Autonomy
- Responsibility overload
- Impact
- Employment engagement
- Job satisfaction (specific)
- Job satisfaction (global)
- Burnout
- Effort-reward ratio
- Working hours, including number of hours / overtime / paid /unpaid. Engagement

Engagement

This index measures the extent to which nurses feel enthusiastic and inspired by their work.

Overall findings

The overall mean score on the engagement index for nurses is 73%, indicating high overall engagement. For example, 79% of nurses agreed that they are proud of the work that they do.

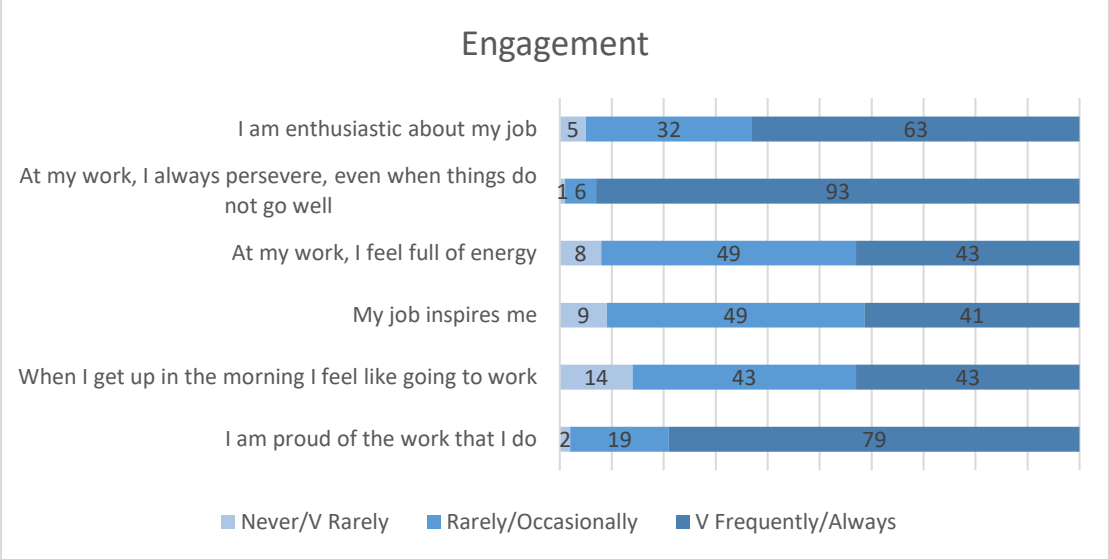


Figure 10: Engagement

Significant findings relating to engagement

- Nurses aged 30 or under had the lowest engagement score (68%) and this was significantly lower than nurses aged 41-50 (73%) or 51 or over (77%). The engagement score of nurses aged 31-40 (71%) did not differ significantly from that of the youngest age group.
- Nurses who obtained their initial qualification from another non-EU country reported significantly higher levels of engagement (78%) than nurses who obtained their initial qualification in Ireland (72%) or another EU country (73%).
- Staff nurses reported the lowest level of engagement (71%). This was significantly lower than the engagement score of all other grades. Directors / assistant directors reported the highest level of engagement (82%).
- Nurses working in the Dublin region (74%) reported significantly higher levels of employee engagement than those working in the rest of Leinster, Cavan and Monaghan (71%), or Connaught and Donegal (70%). Nurses working in the Munster region (73%) did not report significantly different levels from those working in Dublin.
- Nurses working in the acute sector reported significantly lower levels of engagement (71.5%) than nurses working in community (74%) or other (e.g. corporate, education) sectors (83.5%).
- Respondents expressing an intent to stay in their current job in the next two years reported significantly higher levels of engagement (76%) than respondents intending to leave their job in the next two years (68%).
- Levels of engagement did not vary significantly by full- or part-time status.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for Employee Engagement of 72%.

Autonomy

This index measures nurses' perceptions of freedom and independence in their day-to-day work.

Overall findings

The overall mean on the autonomy index for nurses is 52%, indicating moderate overall autonomy. For example, 50% of nurses agreed that they can decide on their own how to go about doing their work.

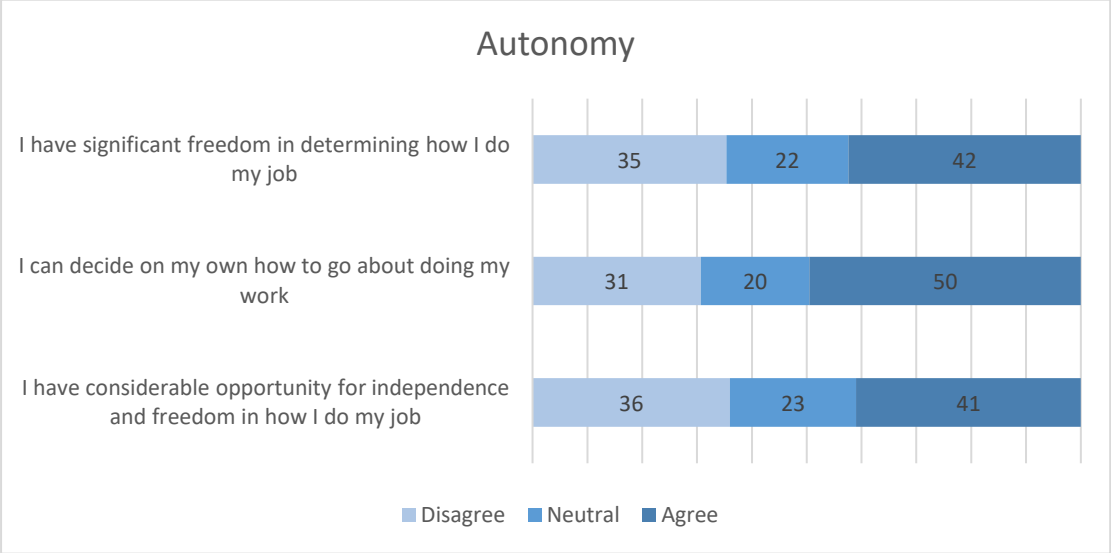


Figure 11: Autonomy

Significant findings relating to autonomy

- Older nurses (aged 41 or older) reported significantly higher levels of autonomy (52-58%) than younger nurses (aged 40 or younger) (48-51%).
- Nurses who obtained their initial qualification from a non-EU country reported significantly higher levels of autonomy (59.5%) than nurses who obtained their initial qualification in Ireland (52%) or another EU country (51%).
- Nurses working in the Dublin region (56%) reported significantly higher levels of autonomy than those working in the rest of Leinster, Cavan and Monaghan (52%), or Connaught and Donegal (51%). Nurses working in the Munster region reported the lowest levels of autonomy, at 49%.
- Student nurses and staff nurses reported the lowest levels of engagement (47-48%) and directors / assistant directors reported the highest level of engagement (70%). Respondents working in other grades reported levels of autonomy ranging from 58% (managers) to 70% (specialist nurses). The autonomy score of staff nurses was significantly lower than that of all other grades except student interns.
- Respondents working full-time reported significantly higher levels of autonomy (54%) than part-time workers (50%).
- Nurses working in the acute sector had significantly lower autonomy scores (49.5%) than nurses working in community (56.5%) or other (e.g. corporate, education) settings (73%).
- Respondents expressing an intent to stay in their current job in the next two years reported higher levels of autonomy (57%) than respondents intending to leave their job in the next two years (46%).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for autonomy among civil servants of 61%.

Responsibility overload

This index measures the extent to which nurses feel a sense of responsibility overload in their job.

Overall findings

The nurses' mean responsibility overload score is 47%, indicating moderate overall responsibility overload. For example, 64% of nurses agreed that too much is expected of them in their job. Note that higher scores on this measure indicate a greater sense of overload.

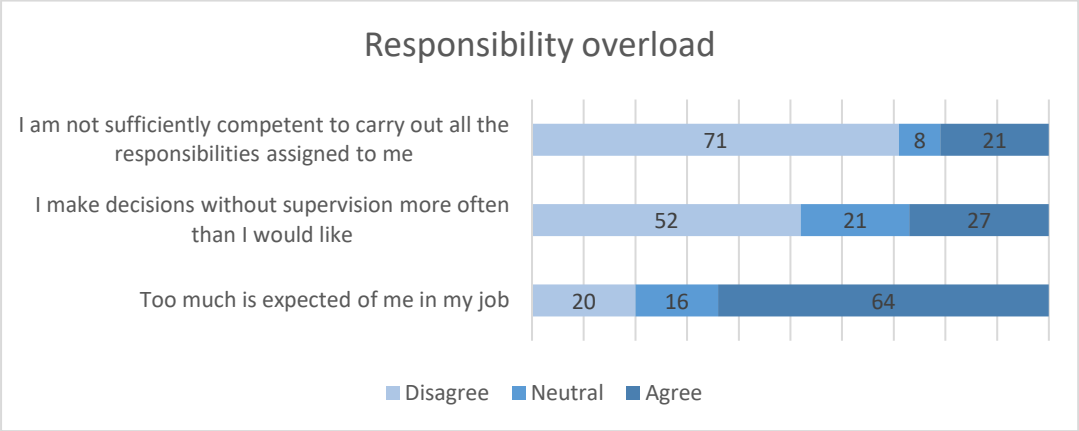


Figure 12: Responsibility overload

Significant findings relating to responsibility overload

- The responsibility overload score of nurses aged 30 or under (50%) was significantly higher than that of respondents aged 41-50 (45%) and 51 or older (44%). The score of nurses aged 31-40 (48%) was not significantly different from that of respondents aged 30 or under.
- Nurses who obtained their initial qualification from Ireland had a responsibility overload score (47%) that was significantly higher than that of respondents qualifying in another EU country (43%) and significantly lower than the score of nurses qualifying in a non-EU country (51%).
- The responsibility overload score of staff nurses (48%) was significantly higher than that of all other grades except student interns (51%). Directors / assistant directors (35%) and other grades (e.g. corporate, education) (33%) reported the lowest responsibility overload.
- Nurses working in Dublin had a mean score on this index (45%) that was statistically the same as that for nurses based in the rest of Leinster, Cavan or Monaghan (47%), but significantly lower than that of respondents working in Munster (48%) or Connaught and Donegal (49%).
- Nurses working in other (e.g. corporate, education) sectors (29%) reported significantly lower levels of responsibility overload than nurses working in the community (45%) or in acute (47.5%) sectors.
- Respondents expressing an intent to stay in their current job in the next two years reported significantly lower levels of responsibility overload (43%) than respondents intending to leave their job in the next two years (51%).

- There was no statistical difference in the level of responsibility overload according to whether the respondent worked full-time (47%) or part-time (46%).

Impact

This index measures the extent to which nurses believe that their work has a significant impact on the lives of others.

Overall findings

The mean on the impact index for nurses is 82%, indicating high overall perception of impact. For example, 92% of nurses agreed that their work makes a positive difference in patients' or clients' lives.

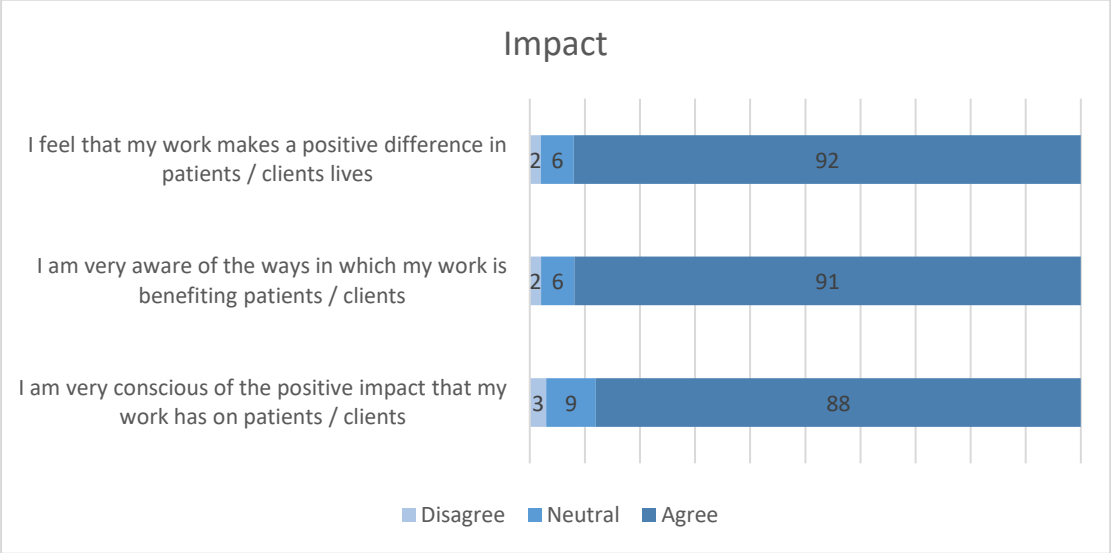


Figure 13: Impact

Significant findings relating to impact

- Older nurses (aged 41 or older) reported significantly higher levels of impact (83-84%) than younger nurses (aged 40 or younger) (79-81%).
- Nurses who obtained their initial qualification from a non-EU country reported significantly higher impact levels (87%) than nurses who obtained their initial qualification in Ireland (81%) or another EU country (81.5%).
- Levels of impact did not vary appreciably across grades. However, specialist nurses reported significantly higher levels of impact (87%) than staff nurses.
- Significantly lower levels of impact were reported by respondents expressing an intent to leave their job in the next two years (80%) than those respondents expressing an intention to stay (83%).
- There was no statistical difference in impact across geographic region, full- / part-time status, or sector (acute, community or other).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for Employee Impact of 70%.

Job satisfaction (specific)

This index measures nurses' level of satisfaction with specific aspects of their job (physical working conditions, flexibility of hours, physical demands, quality of care).

Overall findings

The index for on the job satisfaction among nurses was 47%, indicating moderate levels of satisfaction with specific aspects of the job. There is some variation in responses to individual items. For example, 52% of nurses reported that they were satisfied with the quality of care given to patients / service users, while 24% were satisfied with the physical demands of their work.

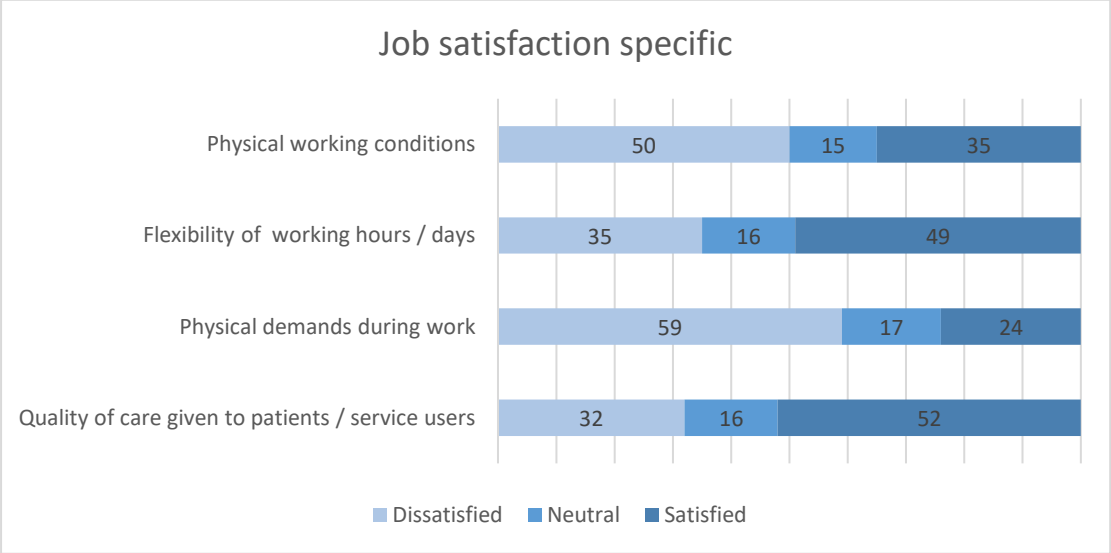


Figure 14: Job satisfaction specific

Significant findings relating to job satisfaction (specific)

- Specific job satisfaction increased with age, from 41.5% among respondents aged 30 or under to 51% among those aged 51 or more. The specific job satisfaction score of nurses aged 30 or under was significantly lower than that of the two oldest age groups (41-50, 51 or more).
- Staff nurses reported the lowest levels of specific job satisfaction (43%). This score was significantly lower than that of nurses working at all other grades, except student interns (47%). Specific job satisfaction scores ranged from 54-63% and were highest among directors / assistant directors (63%) and those working in other (e.g. corporate, education) grades (62%).
- Nurses working in the acute sector report significantly lower levels of job satisfaction (specific) (42%) than those working in community (53.5%) and other (66%) settings.
- Nurses working in the Dublin area had a significantly higher mean specific job satisfaction score (51%) than respondents based in the other three regions (43-46%).
- Respondents expressing an intent to stay in their current job in the next two years reported higher levels of job satisfaction (specific) (52%) than those intending to leave (39%).
- Specific job satisfaction did not vary significantly by country of initial qualification or full- / part-time status.

Job satisfaction (global)

This index measures nurses' general job satisfaction.

Overall findings

The global job satisfaction index mean for nurses is 56%, indicating moderate to high levels of overall job satisfaction. For example, 54% of nurses agreed that, all things considered, they were satisfied with their current job.

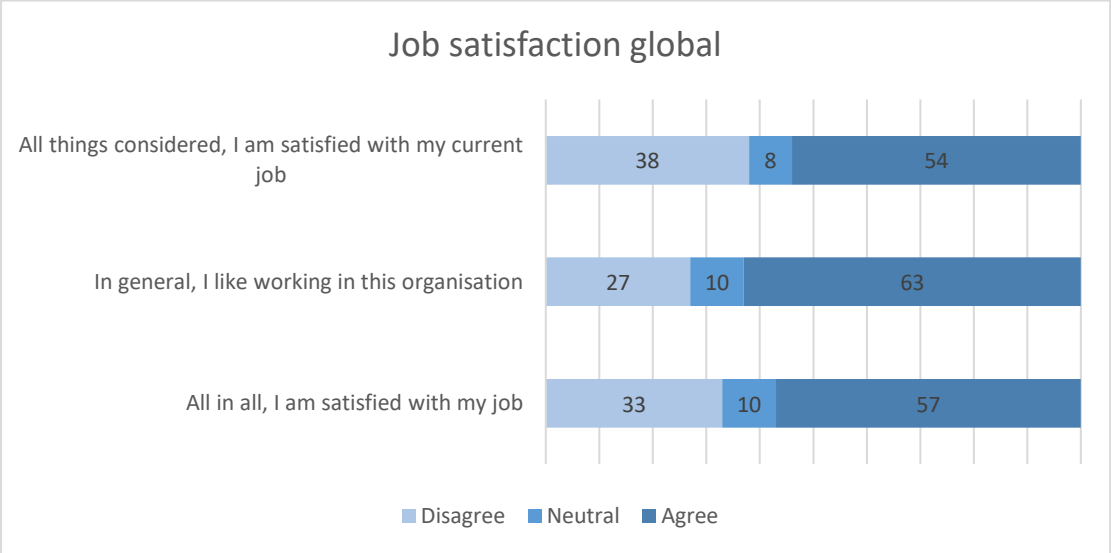


Figure 15: Job satisfaction global

Significant findings relating to job satisfaction (global)

- Nurses overall had a global satisfaction score (61%) that was significantly higher than that of those respondents aged 30 or under (54%). Global satisfaction scores of respondents aged 31-40 (54%) and 51-50 (57%) were not significantly different from those of the youngest age group.
- Staff nurses had a global satisfaction score (53%) that was significantly lower than that of all other grades. The highest score on this index was reported by directors / assistant directors (74%).
- Nurses working in the acute sector had significantly lower levels of global job satisfaction (54%) than those working in community (60%) or other (75%) settings.
- Nurses working in the Dublin area had a global satisfaction score that was significantly higher than that of respondents working in the other three regions (51-55%).
- Respondents expressing an intent to stay in their current job in the next two years reported significantly higher levels of job satisfaction (specific) (65%) than those intending to leave (44%).
- Global job satisfaction did not vary by country of initial qualification or full- / part-time status.

Benchmark: The RN4Cast study reported between 22% (Belgium) and 56% (Greece) of nurses were dissatisfied with their job.

Burnout

This index measures nurses' feelings of work-related burnout. Higher scores indicate higher levels of burnout.

Overall findings

Nurses had a mean of 61% on the burnout index, indicating moderate to high levels of overall burnout. For example, 50% of nurses always of often felt exhausted in the morning at the thought of another day at work.

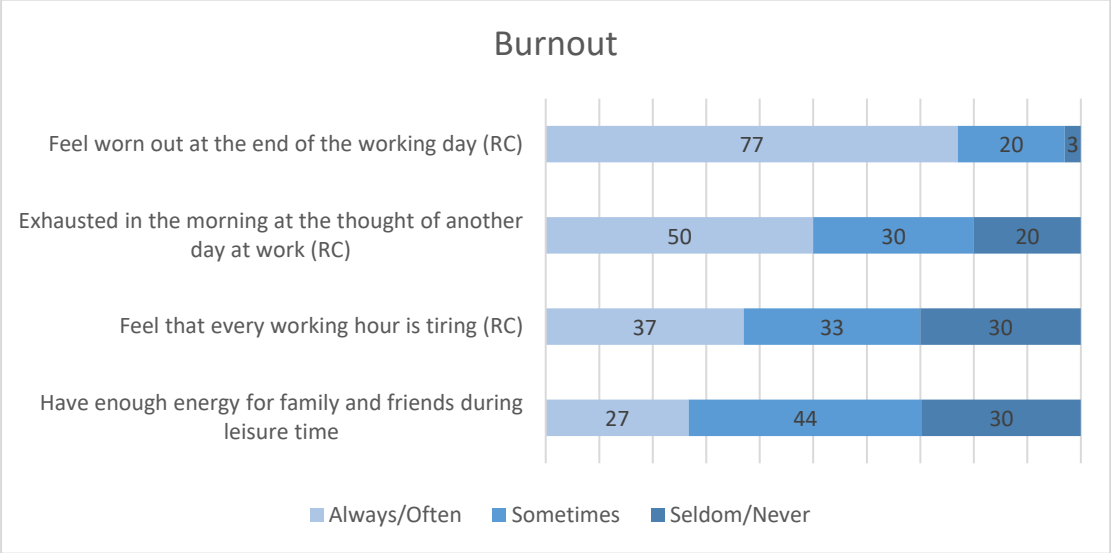


Figure 16: Burnout

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings relating to burnout

- Nurses aged 30 or under had significantly higher burnout scores (67%) than respondents aged 41-50 (60%) or 51 or older (55%), while the burnout score of respondents aged 31-40 (64%) was not significantly different from that of the youngest age group.
- Nurses who received their basic nurse qualification in another EU country reported significantly lower levels of burnout (58%) than those who received theirs in Ireland (62%). The burnout score of respondents qualifying in a non-EU country (61%) was not significantly different from that of nurses qualifying in Ireland.
- Nurses working in the Dublin area (59%) and the rest of Leinster, Cavan and Monaghan (60.5%) had significantly lower burnout scores than those working in Munster (63%) and Connaught and Donegal (64%).
- Staff nurses had significantly higher levels of burnout (64%) than all other grades except student interns (67%). Burnout scores were lowest among directors / assistant directors (45%) and Other (e.g. corporate, education) grades (44%).
- Significantly higher levels of burnout were reported by respondents working in the acute sector (65%), compared with those working in the community (56%) and other settings (37%).
- Those intending to leave their job in the next two years reported significantly higher levels of burnout (69%) than those intending to stay (56%).
- Burnout scores did not differ significantly by full- / part-time status.

Benchmark: The RN4Cast study reported on the emotional exhaustion subscale of the Maslach Burnout Inventory (MBI) and its findings show that between 10% (the Netherlands) and 78% (Greece) of nurses regarded themselves to be burnt out. More detailed findings regarding the Irish situation were reported by Scott *et al*. (2013) and these showed that 29 out of 30 Irish acute hospitals reported moderate to high levels of emotional exhaustion.
http://doras.dcu.ie/19344/1/RN4CAST_FINAL_report_18_April_2013_DORAS.pdf

Effort and reward

These indexes measure the extent to which nurses find reward in their work, and the amount of effort they put in to their work. In this report, the two indexes are combined to form the effort-reward ratio. Higher scores on this ratio mean that more effort is put in, relative to reward received, and vice versa.

An effort-reward ratio of 1 means that respondents reported putting the same amount of effort in as rewards experienced. A ratio greater than 1 indicates that respondents reported expending more effort than reward experienced, and a ratio of less than 1 indicates that respondents reported receiving more reward than effort expended. Therefore, higher ratios indicate more negative outcomes[8].

Overall finding

The first three items on the graph below measure effort, while the remaining seven measure reward. Nurses reported moderate levels of effort. For example, 40% agreed that they have constant time pressure and a heavy workload. Their responses to the reward items varied. For example, 28% agreed that their job promotion prospects are poor, while only 5% agreed that their job security is poor. The mean effort-reward ratio for nurses is 1.71.

[8] There are seven effort items and three reward items. Therefore, effort-reward ratio = Effort/[2.333*Reward] (See http://www.uniklinik-duesseldorf.de/fileadmin/Datenpool/einrichtungen/institut_fuer_medizinische_soziologie_id54/ERI/PsychometricProperties.pdf)

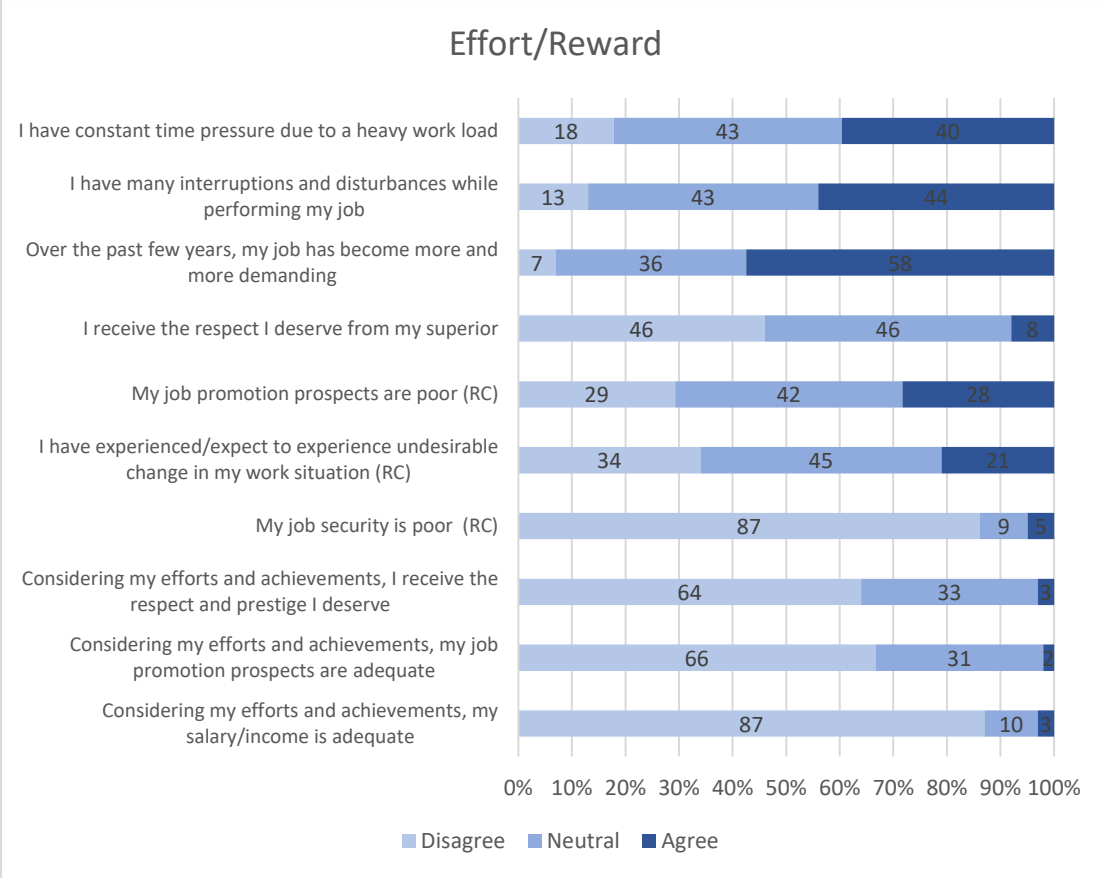


Figure 17: Effort reward

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- Staff nurses (1.81), public health nurses (1.63) and managers (1.51) reported the highest effort-reward ratios. Directors / assistant directors (1.31), student interns (1.34) and those working in other grades reported the lowest ratios (1.34). The effort-reward ratio of staff nurses is significantly higher than that of all other grades, except public health nurses.
- Nurses working in a part-time capacity (1.76) reported a significantly higher effort-reward ratio than those working full-time (1.69).
- Nurses working in the acute sector reported a significantly higher effort-reward ratio than those in community (1.62) or other settings (1.09).
- Nurses working in the Dublin area (1.57) reported a significantly lower effort-reward ratio than respondents working in the other three regions (1.76-1.86).
- Respondents expressing an intent to stay in their current job for the next two years (1.55) reported significantly lower ratios of effort-reward than those intending to leave (1.96).
- No significant differences were identified in the effort-reward ratio, on the basis of respondents' age or country of initial qualification.

Benchmark: The Royal College of Physicians' national study on the wellbeing of hospital doctors in Ireland reported that the effort reward-ratio was 1.4.

Issues relating to the organisation

This section presents the findings from the survey about:

- Satisfaction with pay
- Paid and unpaid overtime / time in lieu and working hours
- Information sharing
- Organisational commitment
- Training and promotional opportunities
- Perceptions of co-workers
- Perceptions of manager
- Recruitment process (new recruits only)
- Job expectations (new recruits only)
- Intention to leave organisation
- Intention to leave profession.

Satisfaction with pay

This index measures the extent to which nurses are satisfied with their level of pay.

Overall findings

The index score for nurses on the satisfaction with pay index is 23%, indicating low overall satisfaction. For example, 86% of nurses disagreed that their pay adequately reflects their performance.

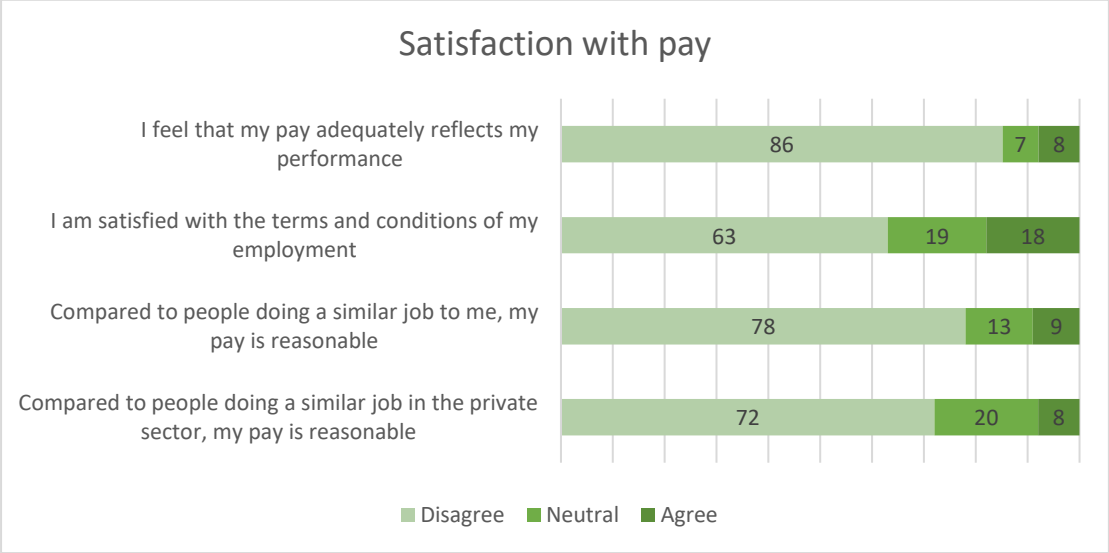


Figure 18: Satisfaction with pay

Significant findings

- Nurses aged 30 or under reported significantly lower levels of satisfaction with pay (18%) than respondents aged 31-40 (21%), 41-50 (24%) or 51 or more (27%).
- Nurses who gained their initial qualification in a non-EU country reported significantly higher levels of satisfaction with pay (30%) than those qualifying in Ireland (22%) or another EU country (23%).

- Satisfaction with pay was significantly lower among staff nurses (21%) than among all other grades except student interns (20%) and was highest (though still low) among directors / assistant directors (36%).
- Satisfaction with pay was significantly lower among respondents working in the acute sector (21%) than those working in the community (27%) or other (42%) sectors.
- Nurses expressing an intent to stay in their current job in the next two years reported significantly higher levels of satisfaction with pay (27%) than those intending to leave their current job (18%).
- Satisfaction with pay did not vary by geographic region or full- / part-time status.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index score for satisfaction with pay among civil servants of 46%.

Paid and unpaid overtime and working hours

In addition to satisfaction with pay, respondents were asked to indicate whether they worked overtime with or without pay (Table 18).

- While 11% of respondents reported working overtime with pay at least once a week, almost two-fifths of respondents (37%) do so without pay.
- About 22% of respondents report working overtime with time in lieu at least once a week.

Table 18: Frequency of overtime with pay, without pay and with time in lieu

Frequency of overtime	Very frequently (about twice a week or more often)	Frequently (about once a week)	Occasionally (about once a fortnight)	Rarely (about once a month)	Very rarely (about once every 3 months)	Never	Total
Frequency of overtime with pay	3.8	7.0	10.0	12.4	17.1	49.7	100.0
Frequency of overtime without pay	22.0	14.6	8.6	6.4	6.7	41.7	100.0
Frequency of overtime with time in lieu	10.4	11.5	13.7	14.6	17.4	32.5	100.0

- Nurses also provided information on their working hours over the past four weeks (Table 19). Daytime work (8am-8pm) was most frequent, with 84% of respondents indicating that this was their usual work schedule.
- About 45% of nurses had worked shifts in the past four weeks.
- Between a quarter (24%) and three-tenths (28%) of respondents had worked evenings or nights in the past four weeks, and 31% had worked weekends.
- Under 4% had been on call over the past four weeks.

Table 19: Working schedule over the past four weeks (daytime, evenings, nights, weekends, shifts, on call)

Nurses	Usually (at least half of the days worked over the previous 4 weeks)	Sometimes (fewer than half of the days over the previous 4 weeks but at least one hour)	Never (on no occasion over the previous 4 weeks)	Total
Daytime past 4 weeks (8am-8pm)	83.7	8.3	8.0	100.0
Evening time past 4 weeks (finish 8pm-midnight)	27.9	15.9	56.2	100.0
Night time past 4 weeks (finish midnight-8am)	24.2	18.6	57.3	100.0
Saturday / Sunday past 4 weeks	31.4	34.3	34.3	100.0
Shifts past 4 weeks (usually changes in working schedule and unsociable hours)	44.8	15.3	39.9	100.0
On call past 4 weeks	3.7	8.1	88.2	100.0

Information sharing

This index measures nurses' perceptions of the extent to which information is shared and decisions are communicated.

Overall findings

Nurses had an overall mean of 29% on the information sharing index, indicating low levels of information sharing. For example, 72% of nurses agreed that people do not have any say in decisions which affect their work.

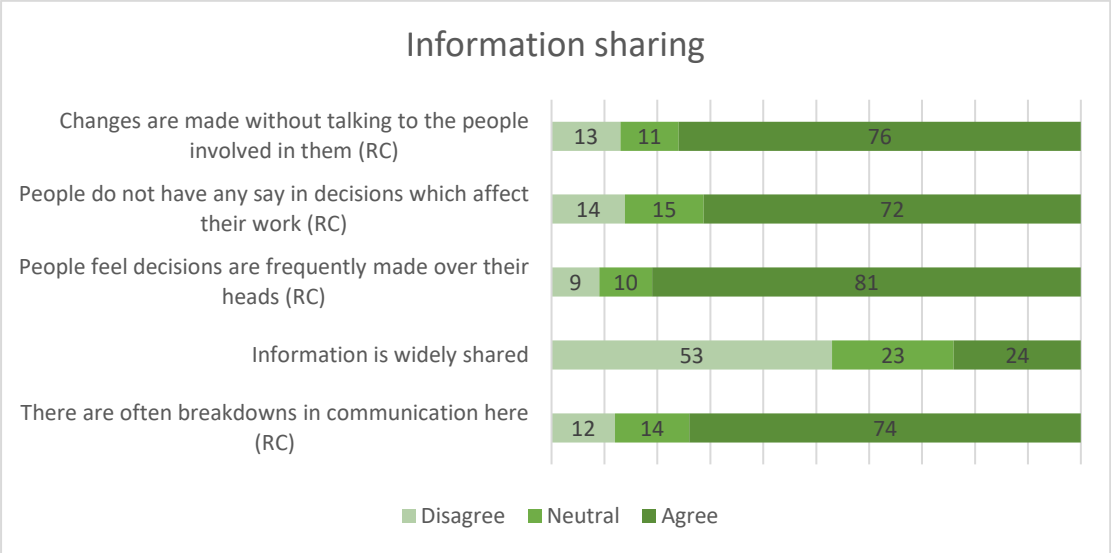


Figure 19: Information sharing

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- Nurses who obtained their initial qualification in a country outside the EU (40%) reported significantly higher levels of information sharing than respondents who obtained theirs in Ireland (27%) or another EU country (29%).
- Information sharing scores of staff nurses (27%) and public health nurses (28%) were lowest among the various grades, and the score on this index for staff nurses was

significantly lower than that of all other grades except public health nurses. Directors / assistant directors (45%) and student interns (42%) had the highest information sharing scores.

- Part-time nurses (27%) reported significantly lower levels of information sharing than full-time staff (30%).
- Nurses working in the acute sector (28%) reported a significantly lower level of information sharing than those working in community (30%) or other (50%) settings.
- Information sharing scores of nurses working in the Dublin area (33%) were significantly higher than those of nurses working in the other three regions (25-27%).
- Nurses expressing an intent to stay in their current job for the next two years (31%) reported a significantly lower level of information sharing than those intending to leave (24%).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for involvement climate among civil servants of 38%.

Organisational commitment

This index measures nurses' level of commitment and sense of belonging to their current organisation.

Overall findings

The overall mean for nurses on the organisational commitment index is 47%, indicating a moderate degree of commitment. For example, 37% of respondents disagreed that they do not feel a strong sense of belonging to their organisation.

Figure 20: Organisational commitment

Note. 6.6% of respondents did not answer these questions. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- Older nurses (aged 51 or above) (50%) reported significantly higher levels of organisational commitment than those in the younger age groups (45%-47%).

- Respondents who gained their initial qualification in a country outside the EU reported a significantly higher level of organisational commitment (54%) than those qualifying in Ireland (47%) or another EU country (46%).
- Organisational commitment scores ranged from 43% (student interns) to 63% (directors / assistant directors). The organisational commitment score of staff nurses (45%) was significantly lower than that of directors / assistant directors, managers and specialists (52-63%) and did not differ significantly from that of public health nurses, student interns, or other grades.
- Nurses working part-time reported significantly lower levels of organisational commitment (46%) than those working full-time (48%).
- Organisational commitment reported by respondents working in Dublin (51%) was significantly higher than levels reported in the other three regions (44-46%).
- Nurses working in the acute sector (46%) had significantly lower levels of organisational commitment than respondents working in the community (49%) or other (59%) sectors.
- Nurses who indicated they intended to stay in the organisation for the next two years (52%) reported significantly higher levels of organisational commitment than those who indicated they intended to leave (40%).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for commitment to the organisation among civil servants of 54%.

Perceptions of manager

This index measures nurses' perceptions of their immediate managers.

Overall findings

The overall mean on the perceptions of manager index is 44%, indicating moderately positive perceptions. For example, 46% of nurses agreed that their manager gave a high priority to job satisfaction.

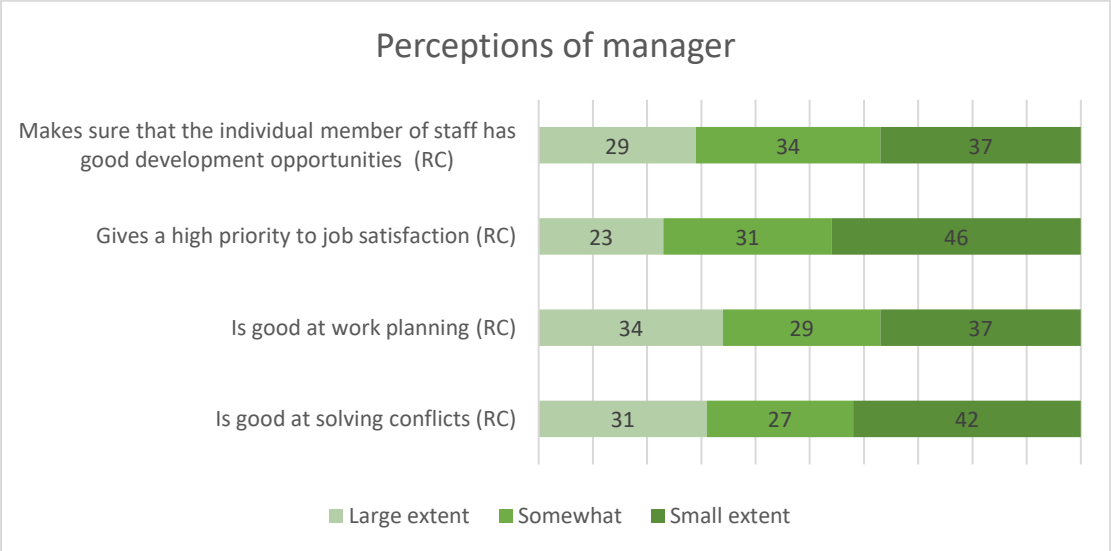


Figure 21: Satisfaction with manager

Note. 6.5% of respondents did not answer these questions. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- Nurses who gained their basic qualification in another EU country reported a significantly lower perceptions of manager score (41%) than those qualifying in Ireland (44%) or a non-EU country (50%).
- Staff nurses (42%), specialists (44%), public health nurses (46%) and managers (47%) had lower perceptions of manager scores than directors / assistant directors (58%), other grades (50%), and student interns (50%).
- Nurses working part-time (42%) reported lower levels of managerial support than full-time workers (44%).
- Nurses based in Dublin (48%) had significantly higher scores on this index than respondents based in the other three regions (38-43%).
- Nurses working in other (58.5%) sectors had a significantly higher perceptions of manager score than those in acute (43%) or community (44%) settings.
- Nurses expressing an intent to stay in their current job in the next two years had higher scores on this index (48%) than respondents intending to leave their job in the next two years (37%).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for manager support among civil servants of 61%.

Perceptions of co-workers

This index measures the perceptions of nurses of their colleagues.

Overall findings

The overall mean on the perceptions of co-workers index is 77%, indicating moderate to high satisfaction. For example, 82% of nurses agreed that they are happy to work with their co-workers.

Figure 22: Satisfaction with co-workers
Note. 7.0% of respondents did not answer these questions.

Significant findings

- Nurses who gained their basic nursing qualification in a non-EU country reported significantly index scores for co-worker satisfaction (72%) than those who gained theirs in Ireland (77%) or another EU country (77%).
- Perceptions of co-workers did not vary markedly across nursing grades, although scores on this index were significantly higher among public health nurses (84%) and significantly lower among student interns (64%), relative to staff nurses (76%).
- Respondents' perceptions of their co-workers were similar across Dublin (78%), the rest of Leinster, Cavan and Monaghan (78%) and Munster (76%) and were slightly but significantly lower in Connaught (74%), relative to Dublin.
- Respondents intending to leave in the next two years reported significantly lower scores on this index (74%) than those intending to stay (79%).
- Perceptions of co-workers scores did not vary significantly by full- / part-time status, age, or sector (acute, community or other).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported a similar index mean (72%), using a different scale for social support among civil servants.

Training and career development opportunities

This index measures the extent to which nurses feel there are sufficient opportunities for career development, learning, mobility and promotion in the service.

Overall findings

Nurses had an index score of 45% for training and career development opportunities, indicating moderate training and career development opportunities. Views on training were somewhat more positive than views on promotion. For example, 54% agreed that they have received the training they needed to do their job well, while 21% agreed that they have the opportunities that they need for promotion.

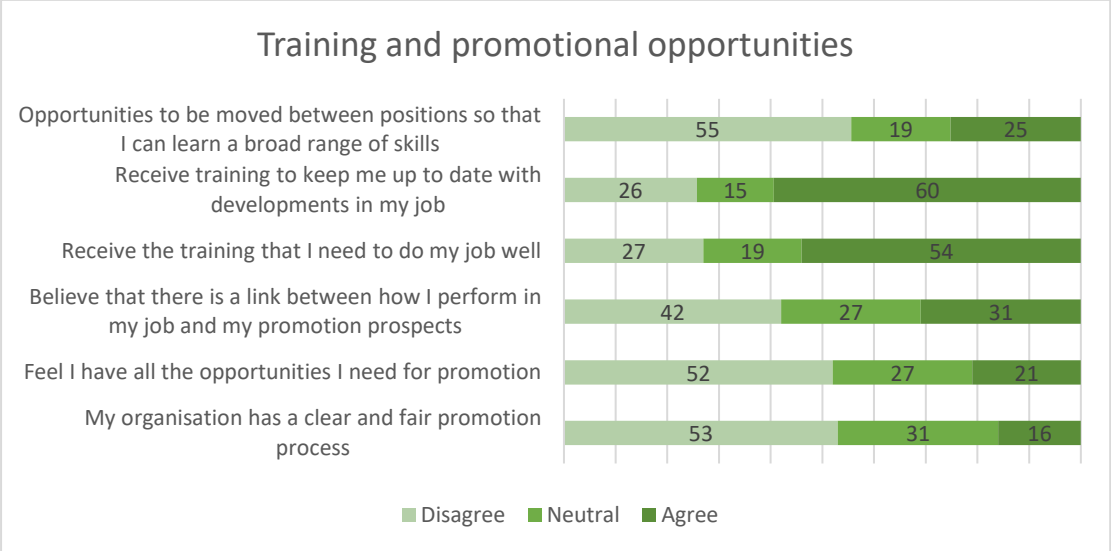


Figure 23: Satisfaction with training and promotional opportunities
Note. 6.6% of respondents did not answer these questions.

Significant findings

- Nurses who gained their basic nursing qualification in a country outside the EU (52.5%) reported significantly higher levels of training and career development opportunities than those in Ireland (45%) and other EU countries (43%).
- There was no significant difference in the scores of staff nurses (43%), public health nurses (46.5%), specialists (47%) and others (49%). Relative to staff nurses, directors / assistant directors (58%), student interns (53%) and managers (50%) reported significantly higher scores on this index.
- Part-time workers (44%) reported significantly lower levels of training and career development opportunities than full-time workers (46%).
- Nurses working in the Dublin area (50%) reported significantly higher training and promotional opportunities than those in the rest of Leinster, Cavan and Monaghan (44%), Munster (43%) and Connaught and Donegal (39%).
- Nurses working in the acute sector reported significantly lower scores on this index (44%) than respondents working in the community (46.5%) or other (56%) sectors.
- Nurses indicating that they intended to leave their job in the next two years reported significantly lower levels of training and promotional opportunities (40%) than those intending to stay (49%).
- Perceptions of training and promotional opportunities did not vary significantly by age.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an index score of 58% for items measuring learning and 50% for items measuring promotional opportunities.

Nurses' likely response to opportunities for promotion

Nurses were asked what their likely response would be if a suitable promotion arose in their organisation (Table 20).

Table 20: Nurses' likely response if suitable promotional opportunity were to arise in organisation

Likely response if suitable promotional opportunity were to arise in organisation	Percent
Would apply	30.5
Would not apply – satisfied in current job	12.0
Would not apply – concerns about workload / responsibility	25.2
Would not apply – not worth it financially	26.2
Would not apply – other reason	6.1
Total	100.0

Note. 8.7% of respondents did not answer this question.

Other reasons (accounting for 6.1% of the responses) given for not applying were coded and categorised, as shown in Table 21.

Table 21: Nurses' likely response if suitable promotional opportunity were to arise in organisation – categorisation of "other" responses

"Other" reasons for not applying for promotion	Percent
Process is seen as unfair	55.1
No opportunity for promotion at current grade	16.8
Management too difficult / would not release me	13.0
Application process is too difficult	9.2
Approaching retirement	5.9
Total	100.0

Note. Percentages are out of the 6.1% of respondents who indicated "other" in Table 16; 8.7% of respondents did not answer this question.

Recruitment process

This index measures nurses' perceptions of the efficiency and fairness of the recruitment process. It was answered only by nurses who had been recruited in the previous two years (33%).

Overall findings

The overall index score for nurses on the recruitment process index is 55%, indicating a moderate level of satisfaction. For example, 64% of respondents were satisfied with the interview process.

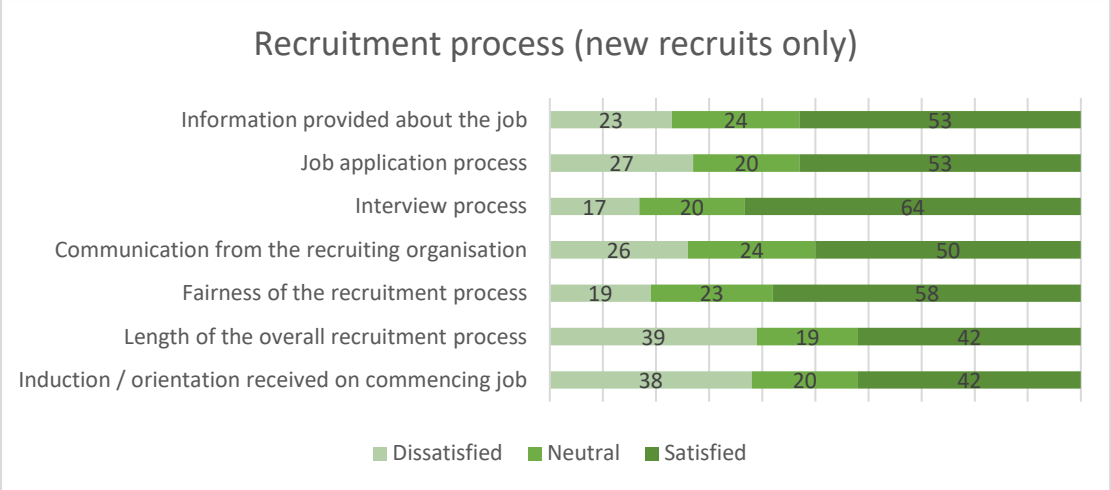


Figure 24: Satisfaction with recruitment process

Note. Percentages are based on respondents who were in their current job for two years or less (33.0% of all respondents).

Significant findings

- Nurses who obtained their initial qualification in a non-EU country had a significantly higher score on this index (61%) than respondents qualifying in Ireland (55%) or in another EU country (54%).
- Respondents based in Dublin had a significantly higher recruitment process score (61%) than those based in the other three regions (50-52%).
- Nurses working part-time reported a significantly lower recruitment process score (53%) than full-time workers (56%).

- Nurses who intended to leave their current job in the next two years reported significantly lower levels of satisfaction with the recruitment process (59%), compared with those who intended to stay (51%).
- Views on the recruitment process did not vary significantly by age group, grade or sector.

Job expectations

This index measures nurses' perceptions of the extent to which job expectations matched job experiences. It was answered only by nurses who had been recruited in the previous two years (33%).

Overall findings relating to job expectations

Nurses had a mean of 64% on the job expectations index, indicating a moderate to high-level match between job expectations and experiences. For example, 50% of respondents felt that the job met their original expectations.

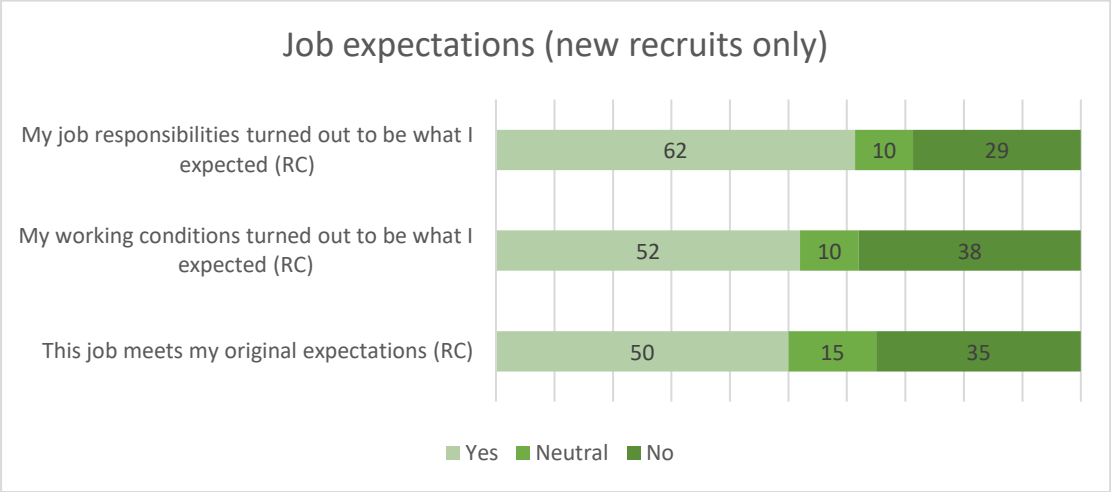


Figure 25: Job expectations and reality

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa. Percentages are based on respondents who were in their current job for two years or less (33% of all respondents).

Significant findings

- Public health nurses had a significantly higher job expectations score (73.5%) than staff nurses (63%). The scores of the other grades ranged from 65% (managers) to 77% (directors / assistant directors).
- Nurses working in a part-time capacity (61%) had a significantly lower score on this index than full-time employees (65%).
- The job expectations score of respondents in the acute sector (62%) was significantly lower than that of respondents in the community sector (67%).
- Nurses who reported they intended to leave their job in the next two years reported significantly higher scores on this index (69.5%) than those who intended to stay (58%).
- There were no significant differences on this index based on age group, country of qualification, or geographic region.

Intentions of leaving the organisation and the nursing profession

These two indexes measure nurses' intent to leave their current organisation and the nursing profession. They are constructed from two related questions, which are described together in this section.

Overall findings

The overall mean for nurses for the intent to leave the organisation index is 49%. This index comprises the first item in the first graph below and the first and second items in the second graph below. The mean for the likelihood of leaving the profession index is 40%. This index comprises the second item in the first graph below and the third and fourth items in the second graph. Higher scores on these indexes indicate a higher intention of leaving. Across all respondents, 41% indicated that they thought about leaving the organisation often or all of the time, and 36% thought about leaving the nursing profession often or all of the time (first graph). A quarter of nurses (27%) indicated that it was likely that they would leave their organisation within the next year, and 14% indicated that it was likely that they would leave the nursing profession within the next year (second graph).

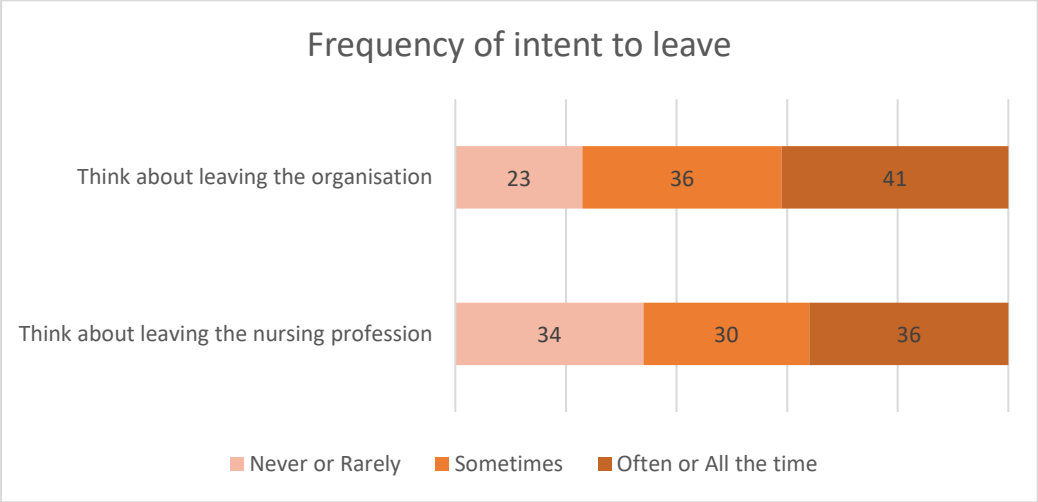


Figure 26: Intention to leave - frequency of thinking about leaving
Note. 8.3% of respondents did not answer these questions.

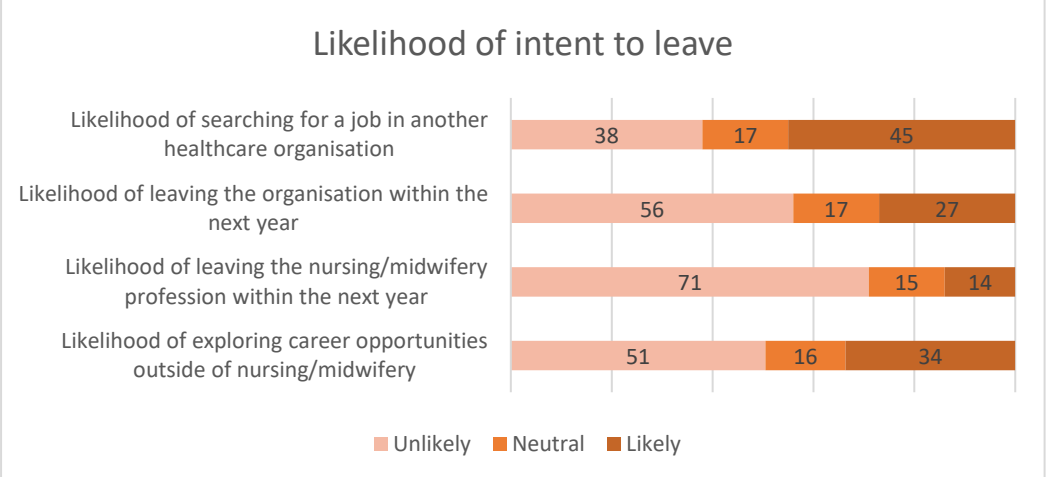


Figure 27: Intention to leave – likelihood
Note. 8.4% of respondents did not answer these questions.

Significant findings – leaving the organisation

- Likelihood of leaving the organisation decreases with age. Respondents aged 30 or younger had a score on this index (62%) that was significantly lower than that of those aged 31-40 (52%), 41-50 (47%), and 51 or older (42%).
- Intent to leave the organisation was significantly lower among directors / assistant directors (37%), managers (43%), specialists (40%) and public health nurses (39%), relative to staff nurses (52%), while intention to leave the organisation scores of student interns and others did not differ from those of staff nurses.
- Respondents working part-time (46%) were significantly less likely to intend to leave their current organisation than those working full-time (50%).
- Nurses working in other sectors had an intention to leave the organisation score (39%) that was significantly lower than that of respondents working in acute (52%) or community (44%) settings.
- As would be expected, nurses who intended to leave their current job in the next two years had a score on this index (70%) that was significantly higher than that of those intending to stay (35%).
- Intention to leave the organisation scores did not differ significantly across country of initial qualification or geographic region.

Significant findings – leaving the profession

- Likelihood of leaving the profession decreases with age. Respondents aged 30 or younger had a score on this index (45%) that was significantly higher than that of those aged 31-40 (41%), 41-50 (39%) and 51 or older (37%).
- Respondents obtaining their initial qualification in a non-EU country had significantly lower intent to leave profession scores than those who qualified in Ireland (41%) or in another EU country (33%).
- Intention to leave the profession was significantly higher in Connaught and Donegal (44%) than in Dublin (38%), while intention to leave profession scores in the rest of Leinster, Cavan and Monaghan (41%) and Munster (39%) were statistically the same as those of respondents working in Dublin.
- Directors / assistant directors, managers and specialists had the lowest intention to leave profession scores (33-35%), while staff nurses had the highest score (42%).
- Intention to leave the profession was higher among respondents in the acute sector (41%) than among those in the community (38%) or other (30%) sectors.
- As one might expect, nurses who intended to leave their current job in the next two years had a score on this index (44%) that was significantly higher than that of those intending to stay (39%).
- Intention to leave the profession scores did not differ significantly across full- / part-time status.

Part 2: Regression models for nurses' job intentions

Key points

A total of 25 individual, employment, structural and perceptual / attitudinal characteristics were examined simultaneously, to establish which were the most important predictors of three outcomes.

The three outcomes have predictors in common, as well as predictors that are unique to each. For example, burnout, global job satisfaction, organisational commitment and time taken to travel to work significantly predict all three outcomes (intention to stay in or leave current job in the next two years, likelihood of leaving current organisation, and likelihood of leaving current profession). In contrast, respondents' age predicted intention to leave current job and likelihood of leaving the current organisation (with younger respondents more likely to leave), yet age was unrelated to likelihood of leaving the nursing profession.

The results confirm the presence of mediating influences, i.e. some characteristics explain the relationships between other characteristics and the outcomes. For example, the relationship between satisfaction with pay and intent to stay in or leave current job is mediated by global job satisfaction and burnout. In other words, (low) satisfaction with pay is symptomatic of (high) burnout and (low) global job satisfaction.

Main findings

The results of these three sets of models indicate that the following are of key importance in understanding nurses' job and career intentions:

- Age (with less favourable intentions among younger respondents)
- Time taken to get to work
- New recruits (less favourable outcomes)
- Global job satisfaction
- Levels of burnout
- Levels of organisational commitment
- Training and promotional opportunities.

The models also show that the relationship between satisfaction with pay is mediated by aspects of the work relating to satisfaction, burnout and commitment. In other words, low satisfaction with pay is symptomatic of lower general satisfaction and less favourable working conditions.

The alternative regression model of nurses' intention to leave the organisation provides further insight into the manner in which perceptions of the job and of the organisation are related to one another and, in turn, to intent to leave. This alternative model confirms the importance of global job satisfaction, organisational commitment and burnout (Tables A5, A6). For new recruits, in addition, job expectations emerge as an important predictor of intention to leave the organisation (Table A7). Additional analysis (Table A10) confirms that:

- Satisfaction with pay, autonomy, impact, effort-reward ratio and responsibility overload 'drive' global job satisfaction (with absolute values of partial correlations[9] ranging from .17 to .25)

- Training and promotion opportunities, autonomy, impact, perceptions of co-workers and information sharing 'drive' organisational commitment (with absolute values of partial correlations ranging from .13 to .28), and

- Responsibility overload, effort-reward ratio, satisfaction with pay and autonomy 'drive' burnout (with absolute values of partial correlations ranging from .16 to .28).

As a set, the regression models of these three outcomes may provide initial indications to assist policy formulation at both organisational and structural levels. In particular, they provide information on (i) groups in the population that are more likely to intend to leave and (ii) specific aspects of the work that could be the targets of policy (i.e. positive (negative) scales with low (high) overall means and significant relationships with intent to leave, or with significant relationships with the impact measures of global job satisfaction, organisational commitment, and/or burnout).

Intention to leave or stay in current job over the next two years

Nurses who were most likely to express an intent to leave their job in the next two years (36.3%) were younger (aged 30 or under), needed more time to travel to work, and had been in their current job for two years or less. They also reported lower global job satisfaction, higher burnout and lower organisational commitment. They were more likely to be student nurses or nurses working in *"other"* grades.

Nurses most likely to express an intent to stay in their job in the next two years (55.4%) were older (aged 51 or over), needed less time to get to work, and had been in their current job for more than two years. They reported higher global job satisfaction, lower burnout, and higher organisational commitment. They were more likely to be specialist or public health nurses. (The job intent of just over 8% of nurses was not known, due to missing responses.)

Satisfaction with pay, frequency or working overtime with and without compensation, and frequency of working unsociable hours were mediated by global job satisfaction and burnout. In other words, these *"working conditions"* characteristics were related to job satisfaction and burnout, which in turn predicted intent to leave or stay in current job.

Respondents who indicated an intention to stay in their current job over the next two years (55% of all nurses) were asked to rate the relevance of a range of factors to this intention. Three of these factors – suitable working hours / days (58%), personal or family reasons (52%), and convenient location (45%) – were rated as highly relevant by over two-fifths of respondents.

Nurses who indicated an intention to leave their current job over the next two years (36%) were asked to rate the relevance of a range of factors to this intention. The three factors with the most frequent rating of highly relevant were staffing levels being a problem (66%),

[9] This is the correlation between an independent variable and the dependent variable after the linear effects of the other variables have been removed from both the independent variable and the dependent variable.

work environment is too demanding (53.5%) and there were better job opportunities elsewhere (42%).

Likelihood of leaving the current organisation

Likelihood of leaving the current organisation was significantly associated with a range of individual, organisational and structural factors, namely: younger age; higher level of educational qualification; longer time taken to get to work; higher frequency of working overtime with and without compensation; more supervisory responsibility; and being in the current job for two years or less.

Likelihood of leaving the current organisation was higher among respondents with lower levels of global job satisfaction, lower organisational commitment, fewer training and promotional opportunities, and less positive perceptions of their immediate managers. It was also higher among respondents reporting higher levels of responsibility overload, higher impact, and higher levels of burnout.

Satisfaction with pay and frequency of working unsociable hours were mediated by burnout, global job satisfaction and organisational commitment. In other words, satisfaction with pay and unsociable work hours are both related to burnout, job satisfaction and organisational commitment, which in turn predict likelihood of leaving the organisation.

Likelihood of leaving the nursing profession

Likelihood of leaving the nursing profession was significantly associated with time taken to get to work, frequency of working overtime with and without compensation, satisfaction with pay, and six of the questionnaire index measures (engagement, autonomy, global job satisfaction, burnout, organisational commitment, and training and promotional opportunities).

The relationship between grade and frequency of working unsociable hours and likelihood of leaving the profession are accounted for by engagement, global job satisfaction and burnout. In other words, differences between grades and between individuals working sociable / unsociable hours in terms of the likelihood of leaving the nursing profession are due to differences among these groups in their levels of engagement, global job satisfaction and burnout.

Likelihood of leaving the profession did not vary by respondents' age groups.

Characteristics that are unrelated to nurses' job intentions

Several of the characteristics examined were unrelated to any of the three outcomes. These were: country of initial qualification; full- / part-time status; acting-up status; geographic region; sector (acute / community / other); satisfaction with specific aspects of the job; time spent on tasks that are not appropriate to the nursing profession; effort-reward ratio; and perceptions of co-workers.

Overview of multiple regression models

This section presents the results of three sets of multiple regression models. These show the influence of a range of characteristics on three outcomes:

1. Intention to leave or stay in current job over the next two years
2. Likelihood of leaving current organisation
3. Likelihood of leaving nursing profession.

The advantage of multiple regression is that it allows the examination of multiple respondent characteristics simultaneously, thereby providing an indication of which are the most important in predicting the outcome. In this way, the results of regression models can be used to guide initial policy formulation. For example, differences in the factors influencing respondents' intentions to leave their current job and leave the nursing profession may have different policy implications (e.g. at organisation level vs system level).

All analyses are weighted with a sampling weight which provides nationally representative estimates on the basis of sector, grade and full- / part-time status.

Explanatory variables

For the models, the same set of explanatory variables was used (Table 11, Methodology). In line with the theoretical framework guiding the study, variables are categorised into two blocks: *individual, employment and structural characteristics* and *perceptions of job and of organisation*.

Interpreting the regression models

To facilitate interpretation, a summary of findings is presented alongside the more detailed regression results. The Methodology section provides a technical description of how the models were built.

For *logistic regression* (intent to stay vs intent to leave), each variable in the model is associated with an **odds ratio** ("OR" for short).

The example below shows ORs for age and global job satisfaction. Since age is split into categories (30 or less, 31-40, 41-50 and 51 or older), the model requires that one of these is selected as the *reference group.* Age 51 or older is the reference group, meaning that all other age groups are compared to it. The same logic applies to all characteristics that are measured as categories.

The first row shows that respondents aged 30 or less are about 1.65 times more likely to express an intent to leave their current job than respondents aged 51 or older; and, conversely, that respondents aged 30 or less are about three-fifths (OR = 0.608) more likely to express an intent to stay in their current job than respondents aged 51 or older. The odds are *adjusted* in the sense that these age-related differences hold after the other variables in the model have been accounted for.

In the lower part of the extract below, the ORs for global job satisfaction show that respondents with a mean job satisfaction score of +1 are about three-fifths (OR = 0.589) as likely to express an intent to leave their current job; or conversely, are about 1.7 times more likely to express an intent to stay in their current job, compared to respondents with an average global job satisfaction score (score of 0), again, after the other variables in the model have been accounted for.

Table 22: Examples of odds ratios: extract from regression model of leaving / staying in current job over the next two years

Variable	Comparisons	Odds of leaving	Odds of staying
Age	Age 30 or less vs Age 51+	1.645	0.608
	Age 31 to 40 vs Age 51+	0.894	1.118
	Age 41 to 50 vs Age 51+	0.807	1.239
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)		0.589	1.698

For *linear regression* (i.e. intent to leave organisation, intent to leave profession), the model results correspond to **the change in outcome associated with a one-unit change in each explanatory variable**. In the second example below, the first row shows that respondents aged 30 or younger have an expected score on the likelihood of leaving organisation index that is 0.14 points, or just over one-eighth of a standard deviation, higher than that of respondents aged 51 or older. The other age-group differences can be interpreted in a similar way.

The bottom part of the table below shows that for every one-unit increase in global job satisfaction, likelihood of leaving the organisation decreases by about a quarter of a standard deviation (-.26 points).

Table 23: Examples of linear regression results: extract from regression model of intent to leave nursing profession

Variable	Comparisons	Expected change in outcome
Age	Age 30 or less vs Age 51+	0.143
	Age 31 to 40 vs Age 51+	0.085
	Age 41 to 50 vs Age 51+	0.061
Global job satisfaction (mean=0, SD=1 higher scores indicate higher satisfaction)		-0.262

Results: intention to stay in or leave current job in the next two years

About two-fifths of respondents (36.3%) intended to leave their job in the next two years, while 55.4% intended to stay (8.3% did not respond to this question). Table 19 summarises the results from the logistic regression models of intent to stay in or leave current job in the next two years. Table 24 shows the detailed model output.

The results indicate that the respondents most likely to intend to stay in their current job are older, have educational qualifications below degree level, need less time to travel to work, are specialist or public health nurses, and are not new recruits. Those intending to stay also reported higher levels of global job satisfaction, lower levels of burnout, and a higher level of organisational commitment.

Conversely, nurses most likely to intend to leave their current job are younger, need more time to travel to work, are student interns or other grades, and in their current job for two years or less. Also, this group reported lower global job satisfaction, higher levels of burnout, and lower levels of organisational commitment.

Four characteristics related to working conditions were statistically significant when examined in the absence of perceptions of job and of organisation (satisfaction with pay,

frequency of working overtime with and without compensation, and working unsociable hours more often than not over the past four weeks) but were no longer statistically significant when perceptions of job and of organisation measures were included.

In the initial model, nurses with a high pay satisfaction score (+1) were about 1.5 times more likely to intend to stay than nurses with an average pay satisfaction score (0). Also, in the initial model, respondents who worked overtime without compensation frequently or very frequently were 1.48 times more likely to express an intent to leave their current job than respondents who worked overtime without compensation rarely or never; and respondents who worked overtime with compensation frequently or very frequently were 1.13 times more likely to express an intent to leave their current job than respondents who worked overtime with compensation rarely or never. Nurses who reported that they worked unsociable hours were 1.16 times more likely to intend to leave their current job in the initial model (Table 25).

Further analysis (not shown here) showed that the relationships between satisfaction with pay, working overtime, and working unsociable hours and intent to stay in or leave current job are mediated by global job satisfaction and burnout. That is, these *"working conditions"* measures are all related to higher burnout and lower job satisfaction, which in turn influence intent to stay in or leave current job.

Several characteristics were *unrelated* to respondents' intention to stay in or leave their current job in the next two years. These were: country of qualification; acting-up status; number of supervisees; sector; and geographic region. Along with this were several of the questionnaires indexes examined (engagement, autonomy, responsibility overload, impact, job satisfaction (specific), perceptions of co-workers and of manager), as well as time spent performing tasks not appropriate to their profession.

The pseudo r-square statistic gives an indication in the amount of variation in the outcomes (intent to stay or leave) that is accounted for by the explanatory variables. It is not intended as an absolute measure of explanatory power, but rather as a means to compare one model with another. In this case, the pseudo r-square for the final model (.256) is about twice the magnitude of that for the initial model (.126), meaning that the three perceptions of job / organisation characteristics double the amount of variance explained.

Table 24: Summary of multiple logistic regression models of nurses' intention to stay in or leave their current job in the next two years

Characteristics **unrelated** to intention to stay in or leave current job	Characteristics **mediated** by other variables	Characteristics related to **intention to stay** in current job	Characteristics related to **intention to leave** current job
Individual, employment and structural characteristics			
• Country of qualification • Whether in an acting up position or not • Number of supervisees (none, 1-10, 11 or more) • Sector of employment (acute / community) • Geographic region	• Satisfaction with pay (mediated by global job satisfaction and burnout) • Frequency of working overtime without compensation (mediated by global job satisfaction and burnout) • Frequency of working overtime with compensation (mediated by global job satisfaction and burnout) • Working unsociable hours more often than not in the past 4 weeks (mediated by global job satisfaction and burnout)	• Aged 51 or older • Highest educational qualification is a diploma or certificate below degree level • Less time required to travel to work • Grade: specialist or public health nurse • Not a new recruit (past 2 years)	• Aged 30 or younger • More time required to travel to work • Grade: student or other grade • New recruit (past 2 years)
Perceptions of job and of organisation			
• Engagement • Autonomy • Responsibility overload • Impact • Job satisfaction (specific) • Information sharing • Perceptions of co-workers • Perceptions of manager • Effort-reward ratio • Time spent performing tasks not appropriate to nursing profession		• Higher level of global job satisfaction • Lower level of burnout • Higher level of organisational commitment	• Lower level of global job satisfaction • Higher level of burnout • Lower level of organisational commitment

Table 25: Odds ratios and significance tests for multiple logistic regression models of nurses' intention to stay in or leave their current job in the next two years

		Model 1: individual, employment and structural characteristics only (pseudo r square = .126)				Model 2: Model 1 with perceptions of job and of organisation (pseudo r square = .256)			
		Odds of leaving	Odds of staying	chi-square	p	Odds of leaving	Odds of staying	chi-square	p
Individual, employment and structural characteristics									
Age	Age 30 or less vs Age 51+	1.645	0.608	33.300	<.001	1.874	0.534	56.916	<.001
	Age 31 to 40 vs Age 51+	0.894	1.118			0.823	1.215		
	Age 41 to 50 vs Age 51+	0.807	1.239			0.710	1.409		
Highest educational qualification	Certificate or diploma below degree vs primary degree	0.664	1.507	16.072	.001	0.706	1.416	14.78	.002
	Post graduate degree vs primary degree	0.993	1.007			1.081	0.925		
Time taken to get to work (in 15-minute increments)		1.151	0.869	18.571	<.001	1.153	0.868	17.386	<.001
Grade	Director / assistant director vs staff nurse	1.001	0.999	18.875	0.004	1.932	0.518	15.747	.015
	Manager vs staff nurse	0.745	1.343			1.041	0.961		
	Specialist vs staff nurse	0.600	1.667			0.776	1.289		
	Public health nurse vs staff nurse	0.623	1.604			0.679	1.472		
	Student vs staff nurse	0.952	1.050			1.230	0.813		
	Other grade vs staff nurse	1.255	0.797			1.903	0.525		
Overtime	Overtime without compensation frequently or v frequently vs Overtime without compensation rarely / never	1.475	0.678	29.298	<.001				
	Overtime with pay or time in lieu frequently or v frequently vs Overtime with pay or time in lieu rarely / never	1.126	0.888						
Unsociable hours more often than not in past 4 weeks vs regular hours more often than not in past 4 weeks		1.157	0.864	8.715	.003				
New recruit (past 2 years) vs not new recruit		1.196	0.836	4.885	.027	1.291	0.775	8.862	.003
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		0.671	1.490	91.819	<.001				
Perceptions of job and of organisation									
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)						0.589	1.698	95.29	<.001
Burnout (mean=0, SD=1, higher scores indicate higher burnout)						1.278	0.782	23.082	<.001
Org. commitment (mean=0, SD=1, higher scores indicate higher commitment)						1.278	0.782	59.377	<.001

Relevance of factors for staying in or leaving current job

Respondents who indicated an intention to stay in their current job over the next two years (55.4% of all respondents) were asked to rate the relevance of a range of factors to this intention. These are shown in Table 26. Two of these factors – suitable working hours / days and personal or family reasons – were rated as highly relevant by over 50% of respondents, while 45% of the respondents indicated that convenient location was highly relevant. The remaining three factors (patients / service users are easy to work with, lack of available alternatives, and too disruptive to leave) were rated as highly relevant by between 20% and 27% of respondents. The three most highly rated factors tie in with the results of the regression model (suitable working hours / days, convenient location), while personal or family reasons is an additional factor not previously captured in the model.

Table 26: Relevance of factors (those who intend to stay only)

Relevance of Factors (those who intend to stay only)	Not at all relevant	Not very relevant	Neither relevant nor irrelevant	Somewhat relevant	Highly relevant	Total
Suitable working hours / days	2.6	4.7	7.4	27.5	57.9	100.0
Patients / service users are easy to work with	5.6	10.1	21.1	38.2	25.1	100.0
Lack of available alternatives	7.6	10.3	19.0	36.5	26.6	100.0
Too disruptive to leave	10.1	12.7	22.6	35.0	19.6	100.0
Convenient location	5.8	6.9	9.4	32.9	44.9	100.0
Personal or family reasons	4.8	5.1	12.1	26.1	51.9	100.0

Note. Percentages are based on respondents who indicated intent to stay in their current job over the next two years (55.4% of all respondents). Not all columns add to 100% due to rounding.

Respondents who indicated an intention to leave their current job over the next two years (36.3% of all respondents) were asked to rate the relevance of a range of factors to this intention. These are shown in Table 27. The two factors with the most frequent rating of *"Highly relevant"* were: staffing levels are a problem (66%) and work environment is too demanding (53.5%). In addition, 42% felt that the existence of better opportunities elsewhere was a highly relevant factor. Other factors were rated as highly relevant by between 2% and 19.5% of respondents (working hours / days not suitable, patients / service users difficult to work with, location inconvenient, personal reasons, taking a career break, and coming to the end of a contract / training programme / retiring). Respondents' ratings of staffing levels being a problem and work environment being too demanding tie in with the regression results (e.g. burnout was in the final regression model). The existence of better opportunities elsewhere was an additional factor that was not captured in the regression model.

Table 27: Relevance of factors (those who intend to leave only)

Relevance of Factors (those who intend to leave only)	Not at all relevant	Not very relevant	Neither relevant nor irrelevant	Somewhat relevant	Highly relevant	Total
Working hours / days not suitable	22.2	15.9	14.8	27.5	19.5	100.0
Work environment is too demanding	6.3	7.2	7.3	25.7	53.5	100.0
Staffing levels are a problem	4.5	4.8	4.4	20.3	66.0	100.0
Patients / service users are difficult to work with	24.8	25.3	16.5	21.6	11.7	100.0

Table 27: Relevance of factors (those who intend to leave only)

Relevance of Factors (those who intend to leave only)	Not at all relevant	Not very relevant	Neither relevant nor irrelevant	Somewhat relevant	Highly relevant	Total
Better job opportunities for me elsewhere	8.3	8.7	14.3	26.4	42.3	100.0
Location of my workplace is inconvenient	41.8	20.6	12.5	12.3	12.9	100.0
Personal reasons	31.3	13.7	20.0	21.0	14.1	100.0
Taking a career break but intend to return within five years	73.9	8.8	11.0	4.2	2.1	100.0
Coming to the end of a contract / training programme / retiring	73.9	4.1	6.3	6.5	9.3	100.0

Note. Percentages are based on respondents who indicated intent to leave their current job over the next two years (39.6% of all respondents).

Results: likelihood of leaving current organisation

Table 28 summarises the results from the linear regression models of nurses' likelihood of leaving the organisation in which they are currently working. The outcome measure is an index based on responses to three items: frequency of thinking about leaving the current organisation (never / rarely / sometimes / often / all of the time); likelihood of leaving the current organisation within the next year; and likelihood of searching for a job in another healthcare organisation (very unlikely / unlikely / neither likely nor unlikely / likely / very likely). For this analysis, the index has a mean of 0 and a standard deviation of 1, which facilitates the interpretation of results. Table 24 shows the more detailed model output.

The results show that likelihood of leaving the current organisation is significantly associated with a range of individual, organisational and structural factors, namely: likelihood is higher among those of a younger age; with a higher level of educational qualification; who take longer to get to work; who report more frequent overtime with and without compensation; who have more supervisory responsibility; and who are new recruits (i.e. having joined the organisation in the past two years or less).

Respondents' perceptions of the job and of the organisation were also predictive of likelihood of leaving their current organisation. Likelihood of leaving was higher among respondents with lower levels of global job satisfaction, organisational commitment, training and promotional opportunities, and less positive perceptions of their immediate managers. It was also higher among respondents reporting higher levels of responsibility overload, higher impact, and higher levels of burnout.

Two of the measures in the initial model were no longer statistically significant, with the addition of the perceptions of job and of organisation measures. These were satisfaction with pay and frequency of working unsociable hours. Follow-up analyses (not shown here) showed that burnout, global job satisfaction and organisational commitment mediated the relationship between both satisfaction with pay and working unsociable hours, and likelihood of leaving the organisation. In other words, satisfaction with pay and unsociable work hours are related to burnout, job satisfaction and commitment which in turn predict likelihood of leaving the organisation.

Several characteristics are unrelated to respondents' likelihood of leaving their current organisation (Table 28): country of initial nursing qualification; full- / part-time status and

acting-up status; engagement; autonomy; job satisfaction (specific); effort-reward ratio; information sharing; perceptions of co-workers; and percent of time spent on tasks not appropriate to the nursing profession.

The initial model, which includes individual, employment and structural characteristics only, explains 19.8% of the variation in likelihood of leaving current organisation. The final model explains 46.0% of the variation in respondents' expressed likelihood of leaving their current organisation.

Table 28: Summary of multiple linear regression models of nurses' likelihood of leaving the organisation

Characteristics **unrelated** to likelihood of leaving current organisation	Characteristics **mediated** by other variables	Characteristics **related** to likelihood of leaving current organisation
Individual, employment and structural characteristics		
• Country of initial qualification • Full- / part-time status • Acting-up status • Geographic region	• Satisfaction with pay (mediated by global job satisfaction, organisational commitment and burnout) • Working unsociable hours more often than not in the past 4 weeks (mediated by global job satisfaction, organisational commitment and burnout)	• More time taken to get to work • Age group (younger more likely) • Educational qualification (higher qualified more likely) • Grade (managers and public health nurses least likely) • Higher frequency of working overtime without compensation • Higher frequency of working overtime with compensation • More supervisory responsibility • New recruits
Perceptions of job and of organisation		
• Engagement • Autonomy • Job satisfaction (specific) • Effort-reward ratio • Information sharing • Perceptions of co-workers • Time spent performing tasks not appropriate to nursing profession		• Higher responsibility overload • Higher impact • Lower global job satisfaction • Higher burnout • Lower organisational commitment • Lower training and promotional opportunities • Lower perceptions of manager

Table 29: Parameter estimates and significance tests for multiple linear regression models of nurses' likelihood of leaving the organisation

		Model 1: individual, employment and structural characteristics only (r square = .198)			Model 2: Model 1 with perceptions of job and of organisation (r square = .460)		
		Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Individual, employment and structural characteristics							
Age	Age 30 or less vs Age 51+	0.143	23.515	<.001	0.158	33.541	<.001
	Age 31 to 40 vs Age 51+	0.085			0.062		
	Age 41 to 50 vs Age 51+	0.061			0.027		
Highest educational qualification	Certificate or diploma below degree vs primary degree	-0.073	8.835	<.001	-0.050	10.167	<.001
	Postgraduate degree vs primary degree	0.019			0.040		
Time taken to get to work (in 15-minute increments)		0.087	17.154	<.001	0.070	13.258	<.001
Grade	Director / assistant director vs staff nurse	-0.029	10.031	<.001	0.003	4.89	<.001
	Manager vs staff nurse	-0.074			-0.021		
	Specialist vs staff nurse	-0.058			-0.031		
	Public health nurse vs staff nurse	-0.071			-0.061		
	Student vs staff nurse	-0.005			0.008		
	Other grade vs staff nurse	0.000			0.023		
Overtime	Overtime without compensation frequently or v frequently vs overtime without compensation rarely / never	0.129	69.783	<.001	0.044	7.254	.001
	Overtime with pay or time in lieu frequently or v frequently vs overtime with pay or time in lieu rarely / never	0.039			0.022		
Unsociable hours more often than not in past 4 weeks vs regular hours more often than not in past 4 weeks		0.096	5.664	<.001			
Supervisory responsibility	Managing 1-10 people vs not managing	0.043	3.379	.034	0.039	5.240	.005
	Managing 11 or more people vs not managing	-0.006			0.039		
New recruit (past 2 years) vs not new recruit		0.038	2.379	.017	0.062	4.698	<.001
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		-0.262	-16.188	<.001			

Table 29: Parameter estimates and significance tests for multiple linear regression models of nurses' likelihood of leaving the organisation (continued)

	Model 1: individual, employment and structural characteristics only (r square = .198)			Model 2: Model 1 with perceptions of job and of organisation (r square = .460)		
	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Perceptions of job and of organisation						
Responsibility overload (mean=0, SD=1, higher scores indicate higher sense of overload)				0.034	2.376	.018
Impact (mean=0, SD=1, higher scores indicate higher impact)				0.061	4.551	<.001
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)				-0.320	-16.645	<.001
Burnout (mean=0, SD=1, higher scores indicate higher burnout)				0.127	7.274	<.001
Organisational commitment (mean=0, SD=1, higher scores indicate higher commitment)				-0.235	-14.524	<.001
Training and promotional opportunities (mean=0, SD=1, higher scores indicate more opportunities)				-0.061	-3.736	<.001
Perceptions of manager (mean=0, SD=1, higher scores indicate more positive perceptions)				-0.031	-2.037	.042

Results: likelihood of leaving nursing profession

Table 30 summarises the results from the linear regression models of likelihood of leaving the nursing profession. The outcome measure is an index based on responses to three items: frequency of thinking about leaving the nursing profession (never / rarely / sometimes / often / all of the time); likelihood of leaving the nursing profession within the next year; and likelihood of exploring career opportunities outside of nursing (very unlikely / unlikely / neither likely nor unlikely / likely / very likely). For this analysis, the index has a mean of 0 and a standard deviation of 1, which facilitates the interpretation of results. Table 31 shows the more detailed model output.

The results indicate that likelihood of leaving the nursing profession is significantly associated with time taken to get to work, frequency of working overtime with and without compensation, satisfaction with pay, and six of the questionnaire index measures (engagement, autonomy, global job satisfaction, burnout, organisational commitment and training and promotional opportunities).

Two variables – grade and frequency of working unsociable hours – were significant when the initial model was examined but lost statistical significance in the presence of the six variables relating to perceptions of job and of organisation. Follow-up analyses (not shown here) indicated that the initially significant differences between the different grades are accounted for by engagement, global job satisfaction and burnout. In other words, the differences between grades in terms of the likelihood of leaving the nursing profession are due to differences among these groups in their levels of engagement, global job satisfaction and burnout. Working unsociable hours is mediated by global job satisfaction and burnout. This means that working unsociable hours is related to higher burnout and lower job satisfaction, which in turn influences likelihood of leaving the nursing profession.

Several of the variables were not related to respondents' intention to leave their profession. These are listed in Table 30. Perhaps unexpectedly, age group was not related to intention to leave the profession. Other individual, employment and structural characteristics that were unrelated to intention to leave the profession were full- / part-time status, country of qualification, education level, geographical region, acting-up status, supervisory responsibility, new-recruit status, sector of employment, and geographic region. Several of the perceptions of job and of organisation variables were unrelated to intention to leave the nursing profession as well. These were: impact; job satisfaction (specific); information sharing; perceptions of co-workers and of managers; effort-reward ratio; and time spent on tasks not appropriate to the profession.

The initial model explains 11.5% of the variation in intent to leave profession, while the final model explains about one-third of the variation (r-square = .325).

Table 30: Summary of multiple linear regression models of nurses' likelihood of leaving the profession

Characteristics **unrelated** to intention to leave nursing profession	Characteristics **mediated** by other variables	Characteristics **related** to intention to leave nursing profession
Individual, employment and structural characteristics		
• Age group • Full- / part-time status • Country of qualification • Highest level of educational qualification • Region • Whether in an acting-up position or not • Number of supervisees (none, 1-10, 11 or more) • New-recruit status • Sector of employment (acute / community) • Geographic region	• Grade (mediated by engagement, global job satisfaction and burnout) • Working unsociable hours more often than not in the past 4 weeks (mediated by global job satisfaction and burnout)	• More time taken to get to work • Higher frequency of working overtime without compensation • Higher frequency of working overtime with compensation • Lower satisfaction with pay
Perceptions of job and of organisation		
• Impact • Job satisfaction (specific) • Information sharing • Perceptions of co-workers • Perceptions of manager • Effort-reward ratio • Time spent performing tasks not appropriate to nursing profession		• Lower engagement • Higher autonomy • Lower global job satisfaction • Higher burnout • Lower organisational commitment • Lower training and promotional opportunities

Table 31: Parameter estimates and significance tests for multiple linear regression models of nurses' likelihood of leaving the profession

		Model 1: individual, employment and structural characteristics only (r square = .115)			Model 2: Model 1 with perceptions of job and of organisation (r square = .325)		
		Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Individual, employment and structural characteristics							
Time taken to get to work (in 15-minute increments)		0.053	5.099	.006	0.040	5.184	.006
Grade	Director / assistant director vs staff nurse	-0.014	3.554	.002			
	Manager vs staff nurse	-0.072					
	Specialist vs staff nurse	-0.037					
	Public health nurse vs staff nurse	-0.018					
	Student vs staff nurse	-0.017					
	Other grade vs staff nurse	-0.009					
Overtime	Overtime without compensation frequently or v frequently vs overtime without compensation rarely / never	0.109	3.505	<.001	0.047	9.841	<.001
	Overtime with pay or time in lieu frequently or v frequently vs overtime with pay or time in lieu rarely / never	0.056			0.040		
Unsociable hours more often than not in past 4 weeks vs regular hours more often than not in past 4 weeks		0.062	3.585	<.001			
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		-0.251	-14.965	<.001	-0.035	-2.104	.035
Perceptions of job and of organisation							
Engagement (mean=0, SD=1, higher scores indicate higher engagement)					-0.186	-9.432	<.001
Autonomy (mean=0, SD=1, higher scores indicate higher autonomy)					0.043	2.540	.011
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)					-0.184	-8.084	<.001
Burnout (mean=0, SD=1, higher scores indicate higher burnout)					0.172	8.810	<.001
Organisational commitment (mean=0, SD=1, higher scores indicate higher commitment)					-0.125	-6.939	<.001
Training and promotional opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.034	-1.961	.050

Part 3: Qualitative findings emerging from an analysis of interviews with nurses

Overview of this section

This section considers key findings emerging from the interviews held with nurses and the section is divided into three parts.

- *Part 1* focuses on the findings in respect of the work nurses do and the environment in which they work. Positive aspects of nurses are considered, as well as the challenges arising. These challenges arise primarily from increasing demands, coupled with inadequate staffing levels. The impact of these on nurses and their patients are considered.
- *Part 2* presents the findings in respect of the organisational context within which nurses work, and issues relating to pay, organisational culture and supports, including the relational context, outcomes emerging and supports for training and development.
- *Part 3* deals with the direct implications of issues arising in the workplace and the organisation on the likelihood of staying or leaving a job, organisation or profession. While there is some overlap between reasons for staying and for leaving, there are also some important differences.

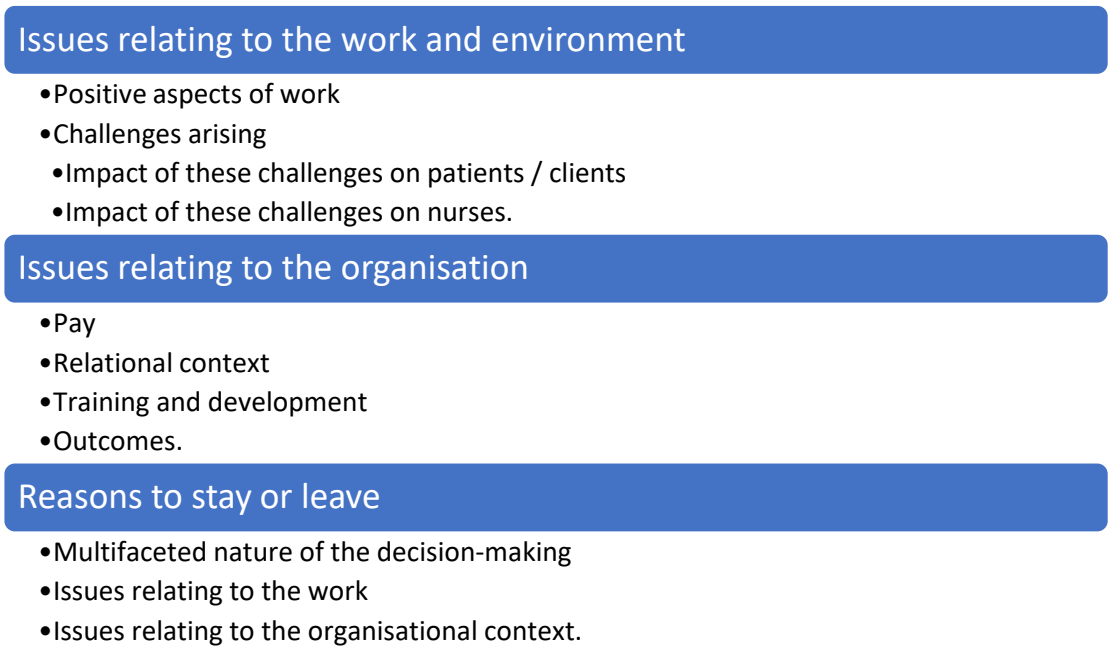


Figure 28: Key issues considered in the thematic analysis

Introduction and overview of thematic analysis

This section presents the findings arising from a thematic analysis carried out in respect of interviews with nurses. A number of positive aspects of the work are highlighted, including reasons why people are attracted to their job and their profession. It also examines the satisfaction respondents get from their work, which arise mainly from the importance of working in an area of interest to the individual; being able to make a positive impact; being valued by patients; and being able to fully utilise their skills, knowledge and expertise.

This is followed by a review of the key challenges reported as being experienced by nurses. These challenges predominantly arise from two broad areas – increases in demands and inadequate staffing levels. The main focus arising from the analysis is on the reported negative impact of these on patients / clients and nurses. In terms of the patient / client, nurses report that there are perceptions of lower levels of service quality and higher levels of risk. The impacts on nurses arise from their perceptions of having an unreasonable workload, leading to responsibility overload; fear of making mistakes and of the consequences of this; challenges in working hours; negative working relationships; and finally, burnout.

Positive aspects of nursing

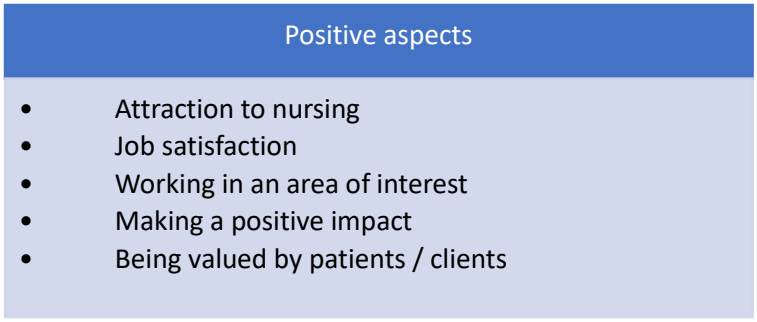


Figure 29: Graphic illustration of mediating variable

Attraction to nursing

In response to a question "*What attracted you to nursing*?", many participants spoke about nursing being a *"good job", "very versatile", "rewarding" and "giving great job satisfaction"*. Some noted that it gives you "*the ability to travel the world*" and it was suggested "*you would always be going to have a job*". The versatility associated with being a nurse was highlighted throughout the interviews and this is exemplified by the range of different grades (e.g. clinical, educational, management or leadership) and settings (e.g. paediatrics, community, intensive care, accident and emergency, specialist areas) in which nurses are working. One participant said:

> *It's a good job, there's nothing difficult about it. It's a passport to anywhere in the world. And working in [specific area] teaches you about life, it teaches you about everything.*

Job satisfaction

Being happy and satisfied in your job was identified as an important issue and a number of participants noted: *"I enjoy what I do … just really enjoy my work, and I enjoy my job and I give it my all".* In response to the question "*What is the most rewarding part of your job?",* one nurse said:

> *the most rewarding part of my job at the moment [is] really just going to work. I feel good every day going to work.*

Others highlighted the satisfaction they got from working directly with patients and one nurse noted: "*I love what I'm doing, I'm very good at it … 'cause I have patient contact".*

Specific issues related to job satisfaction related to:

- Being able to work in an area they were interested in
- Being able to make a positive impact
- Being valued by patients
- Being able to fully utilise skills, knowledge and expertise.

Working in an area of interest

Working in an area which people were interested in was highlighted as an important issue, and this interest was often piqued during nurse training or early on in their career and reflected in continuing and postgraduate education. One nurse, for example, spoke of how she always enjoyed and loved A&E as a student, and when she heard of a vacancy coming up in that area, she "*pushed to get in*". Things she enjoyed were "*the acuity of it", "feeling you are helping people", "the training you get from being involved in things like resuscitations*". Another nurse spoke of her attraction to, and "*love*" of, working in theatre, noting she continued working there for nearly 20 years. A public health nurse who was attracted to the job from her experience of a PHN visiting her home noted the:

> *first experiences watching public health nurses come in at the house, and thinking "Oh, God, you know, that is ... public health nurse is definitely what I would love to do." You get to see the clients in their own home, it's on their terms, they're a lot more comfortable with you.*

A nurse, working as a specialist in oncology, noted she was able to be with patients throughout their journey *"all the way through"* and this, together with her particular preparation and training for working in this area, is what attracted her to that specific job.

Many nurses, however, noted that while they had aspirations for the particular job they were in, sometimes the day-to-day reality made it difficult to do the job they wanted to do. One nurse noted: "*If you can go to work and if you're left alone just to get on with it, it is so rewarding.*" This issue is highlighted later in terms of workload and staffing levels.

Being able to make a positive impact

Participants from many different areas highlighted being able to make a positive impact in their work as giving them a lot of satisfaction. Several nurses spoke of the job satisfaction they obtained from doing *"a good job taking care of your patients",* the "*wellbeing of patients that are satisfied and happy with the service*", and "*the feeling that you have made a difference*". Another nurse said:

> *I enjoy nursing as a career, and I enjoy actually helping people and knowing that I'm doing, I suppose, bettering the world and helping sick people and that.*

One specialist nurse highlighted the impact she could make by "*being able to talk to clients every day and just keep[ing] them updated, bring[ing] them back to clinics"* and *"[improving] their overall wellbeing". A manager drew attention to being able to "instigate change, getting a good outcome for patient care … and getting the time to be able to properly manage and instigate a fair roster system".* Many nurses gave specific examples of good outcomes which gave them great satisfaction. For example, one nurse working in an intensive care unit commented:

> *To see people progressing and getting them off a ventilator, particularly if somebody's been on a ventilator for a period of time. A very difficult wean, and you've succeeded, and they get out on the ward and you hear that they're going home. They might drop up to you before they're going home. But then it's actually rewarding as well, if you've got someone who's dying and you've had*

the time to spend with them and their family. There's a lot of positives, in the good and the bad.

A nurse working in education spoke about the satisfaction of seeing students develop "*in terms of a job well done, in terms of the training*", while another nurse working in practice development highlighted the attraction of her job as learning how to do everything right, being involved, and understanding the reasons for changes taking place.

Being valued by patients

Nurses highlighted the feedback they received from patients and their families, which they noted was *"one of the best aspects of [their] job".* One nurse noted:

> *You will get a thank you from a very grateful patient that would make your day … "Thanks for looking after me and thanks very much."*

Another noted:

> *It's the emotional reward that we get when people come back and say, "Thank you so much", and you say, "It's all right", and all of that.*

It was also suggested, however, that there is a lower level of patient-nurse contact now, with one person noting: "*that's a part of the job that's been taken more and more from nurses*", and "*we're literally trying to get to a point where nursing becomes a different type of skill".*

Being able to fully utilise skills, knowledge and expertise

Being able to fully utilise skills and knowledge developed through experience, training and education, was highlighted as important. One nurse noted:

> *I trained in my profession and then I went on. I used higher level education. You know, this was the area that I had chosen, and I developed my role as best I could.*

In summary, many nurses highlighted positive aspects of nursing. Reasons why nurses were attracted to nursing included the desire to help others; the versatility of the job; and family links in the area. Positive features of the job were identified, including getting job satisfaction; working in an area of interest; making a positive impact; and being valued by patients / clients.

Overview of challenges arising

Understandably, many nurses focused on the challenges they face in their work and consequently, this section is considerably longer than that dealing with the positive aspects identified. Although a small number of those interviewed noted there had been improvements in the environment in which they worked (e.g. improvements in information technology, being able to work as part of a multidisciplinary team rather than in isolation, improvements in the infrastructure), in general participants highlighted difficulties they experienced, many of these arising from the extent of the workload which nurses now carry, and the impact on their patients and themselves. These issues are now discussed.

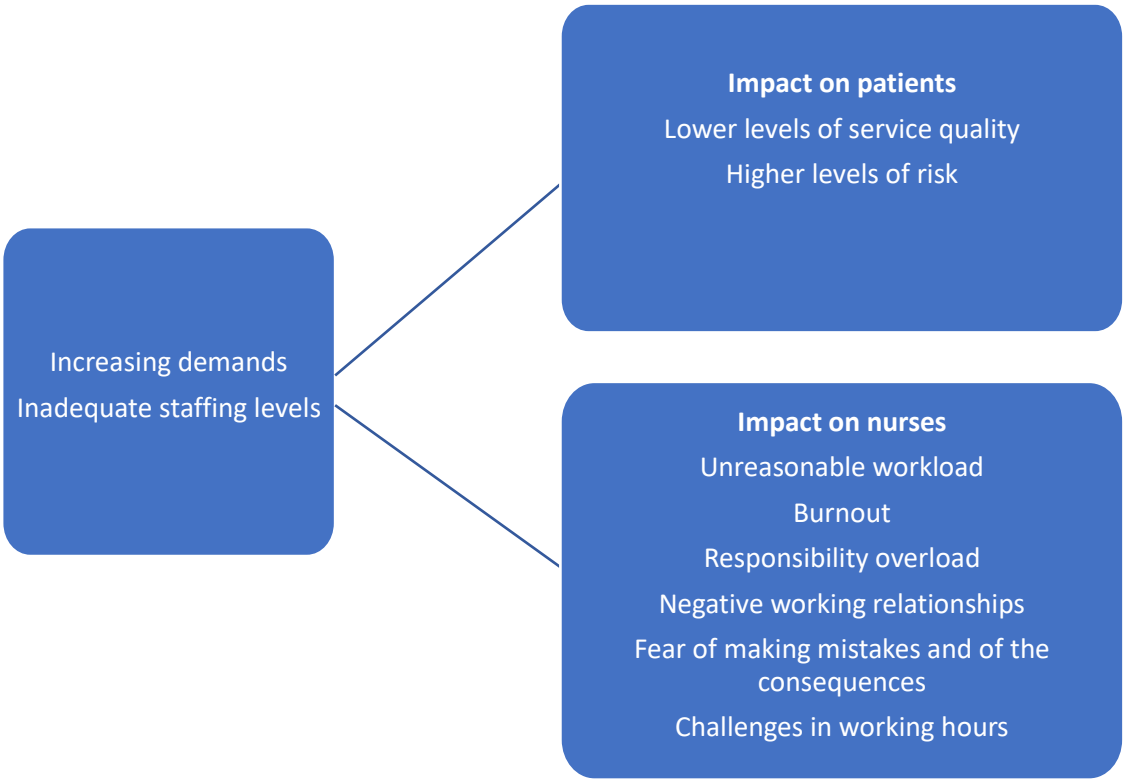


Figure 30: Overview of perceived impact of increasing demands

Increasing demands

Many interviewees noted that the "*whole environment has gotten so much busier ... no matter if you're in the acute services or if you are out in the primary care, everywhere is so busy*"; the "*demands of the job are increasing all the time*"; "*everyone has gotten much busier"* since 2010; and *"everybody seems to be rushing the whole time.* Specific changes identified include: "*a massive increase in the number of patients*"; "*need for greater documentation";* "*the whole complex processes around discharge planning*"; the *increase in infections";* and "*an increase in skill-mix without an agreed ratio of nurses".* One nurse summed up the main problem as follows:

> *There's an increase in the elderly population and we don't have the manpower.*

Another nurse highlighted that while the high numbers on trollies or the flu numbers are highlighted in the media, "*the whole system is backed up*", and this impacts on everybody. An example of this was highlighted by one nurse working in an intensive care area who noted that "*things move very slowly when you're trying to get anyone to rehab … because there are no rehab places",* while another nurse spoke about her experiences in respect of women who were experiencing miscarriage. She said:

> *If you are under [number of weeks] pregnant … you come straight up to our ward. We are supposed to allocate one bed for these gynae assessments. And God love them, they need it. They need the time. But first of all, the bed management will take that bed off you and use it for medical patients. So, you could have a "bleeder" coming up and when these poor women miscarry, they bleed and bleed and bleed. It's quite an emergency situation as such. And we don't have the beds for them.*

Increased documentation

Several nurses drew attention to the increase in documentation in recent years and the amount of time and effort it takes to complete. Nurses noted that the amount of documentation has "*tripled since I started nursing"* and went on to give an example of having to complete a 20-page admission booklet for patients who might only be admitted overnight. Another nurse working in community also highlighted this aspect of change, noting:

> *Yeah, you could spend two or three hours just hand-writing stuff between just trying to get referrals done, forms done for people ... You know, if you fill out a few forms for someone that needs a home care package, there's about 10 pages in it.*

Inadequate staffing levels

Many comments were made about challenges in staffing levels, for example: *"There always seems to be an issue around staff"; it's trying to cope with all of that and staffing"; "staffing levels are a challenge"; "try to keep adequate staff in place"; "it's staffing issues and shortages"; "the staffing issues are huge"; "staffing levels, they definitely need to be increased. We're far too short at the front line at the minute."* One nurse highlighted the "*huge increase in complexity of patients"* and *"much higher dependency levels",* while another nurse said:

> *I don't want to be running all day, and … under that amount of pressure all day long ... And it's not like everything has to be perfect, or anything like that. It's just literally*

doing what you think you ... sometimes it's just the bare minimum. But, and you don't feel like you're, sometimes you're even doing that.

Others gave examples of situations where they may already be short-staffed, but because another unit or ward would be in an even worse situation, staff would be sent there to work.

It was also noted that:

the staffing levels vary considerably across the country, in every department, including my own department. It's very considerable.

Much of this commentary also highlighted negative impacts on the patient / client and on the nurse. These issues are now presented.

Lower levels of service quality for patients

Several nurses drew attention to the lower level of care received by patients when "*you don't have the staff you should have"* and one nurse spoke about patients receiving only "*adequate care, I wouldn't say they receive good care, they receive adequate care. And some are very sick".* Another more recently qualified nurse commented: "*You're not delivering best care. You're giving bare minimum to get by. I don't think patients are getting the best."* Another nurse, speaking about lower staffing levels, highlighted that *"patients are suffering because the quality of nursing care is just going down all the time …. Quality is slipping all the time."*

One nurse gave an example of a patient who was dying and having to call the family in. She noted, however, that because of the busyness of the ward and the shortage of staff being experienced: *"I couldn't even stay with her until the family came 'cause I had all my other patients."* Another example was provided by a nurse working in a high-dependency surgical ward with more than five patients. Others noted that even the simple things could not get done properly because there simply was not time, and she strongly advised people she knew who had relatives going in to hospital to *"make sure that you go with them. You stay with them 24/7".*

One example given is presented in the quote below and highlights the complexity of care being provided, the technical nature of the care being provided, and the challenges in providing a good quality service, as well as the potential risks arising for the patient:

Now, out of my [more than 5] patients I had no care assistant with me. I had one lady who [had] a tracheotomy, requires a lot of suctioning, she has a peg feed. She's a lot of care. You could spend a vast majority of your nights with this lady, and she has plenty of respiratory arrest where the trachea plugs up …Then another lady who was acutely unwell, she became acidotic … It was just shocking, and I had three patients that night who were hugely competing. I had no one to sit with them.

Exposure of patients to risks

Other nurses focused on risks to the safety of patients and a number of nurses noted that staffing levels where they worked made some work environments "*unsafe*", "*borderline dangerous*", *"highly dangerous" and "very scary"*. One nurse said:

I just think it seems to be quite a "dangerous" ward that I'm on, as I feel it can be extremely dangerous at times, as in something's going to happen. And I just hope to God that I'm not the nurse that's on when it does happen.

Others raised significant concerns about the specific area they worked. One participant provided an insight into an area where there were very high-dependency patients (e.g. being ventilated, on dialysis), noting that due to staffing shortages:

> *They are at risk of extubation, pulling out lines, maybe falling out of bed, and if you're caught up with your own patient when you're trying to look after somebody else's patient, it just adds to the pressure.*

One participant, whose daughter had qualified as a nurse but left Ireland, highlighted the safety and quality concerns young nurses have, noting: "*It's this system. This is what their concerns are. It's not about money and all that, it's concerns about safety … Like every day you're doing things that are unsafe."*

Impact on nurses

Where staffing levels were identified as inadequate, participants reported that it created "*significant stress*" and "*huge pressure"* for nurses. Many issues arising from staffing levels were identified as having an impact on nurses and these issues include:

- Unreasonable workload
- Burnout
- Responsibility overload
- Negative working relationships
- Fear of making mistakes and of the consequences
- Challenges in working hours.

These issues are now presented.

Unreasonable workload

Many nurses spoke about the workload being "*mental busy", "inhumane", "crazy*", "*horrendous"* and "*pressurised*". It was suggested that in many areas, services are "*operating at full capacity constantly and that doesn't allow for things to go wrong*", and *"we're not physically able to do our work, as the workload [is too great]".* As a result, if a patient becomes very ill or a member of staff is unavailable to work, the pressure on the remaining staff increases and their workload expands. One nurse, who described an acute area which was constantly busy and where everyone had a very heavy workload, noted:

> *There would be tears, especially younger nurses who would be on night duty, and it's a scary place day or night.*

This was supported by another nurse, who noted being:

> *"short-staffed … and it's very difficult to manage that. It's pressure, constant pressure and that's from yourself because you want to get things done and also from managers because you're not free to move on to something else.*

Many examples were given of where inadequate levels of staff were available either on a short- or long-term basis. One example related to work in an intensive care unit, from which a member of staff is commonly rotated out to cover a shortage in another area, which results in a doubling up of the number of patients who may be ventilated or require extensive nursing care. This nurse noted: *"It's just the pressure that [it] puts on other staff is astronomical."*

It was commonly noted, in the course of interviews held with nurses, that where staff were sick or on maternity leave they were not generally replaced and this added to the burden of

those who remained. One nurse spoke of colleagues getting *"burnt out and getting sick"* as a consequence of this, noting: *"you just feel like you are always just treading water".* Another nurse gave an example of two of her four colleagues being out sick and this meant: *"We are really short, with two actively dying patients in the ward."* A public health nurse who had her own geographic area to cover told of being *"expected to carry the workload of two other public health nurses [who have been out on sick leave for more than two months]"* and she noted: *"It's kind of reached a crisis point."*

Burnout

Many nurses noted that the excessive workload resulted in them being burnt out and unable to switch off when they went home. This is highlighted by the following nurse, who said:

> *And you wake up at night or you ring back in the ward to say, listen, this or that or the other [has] to be done or I forgot to do – it is hard …*

Another nurse compared her current job in a more specialised managerial role with the time at which she worked on the ward. She said:

> *It's not the same where you're going home feeling like you've physically been hit by a bus running around for 14 hours, feeling emotionally drained, feel mentally drained.*

Others noted things getting worse all the time and one nurse highlighted: *"I've just been worn down, the last few years, that I just can't do it anymore"*, while another said, *"I've never heard more people I think, saying that they would do another job,"* and *"I don't know how anyone does [the amount of work] without stressing out."* Speaking of the changes that have taken place over the last few years, one nurse noted:

> *Can I just say, even like five years ago, I loved my job? I adored my job. I loved coming into work. I loved working, but now that's changed. And, I have to say, it's because of the job it's changed, it's not because of my personality or anything in my personal life. It's, certainly, the job has kind of worn me down.*

Finally, one nurse highlighted the lack of sustainability in the way in which the service is being run and noted that while *"Most nurses that I know can deal with a stressful day, or a stressful week … a stressful working life is not something that's sustainable … but it makes me a bit emotional just talking about it."*

Fear of making mistakes and of the consequences

Several nurses spoke about their fear of making mistakes and of the consequences not just for patients but also for the nurses themselves, in terms of their registration. One nurse gave an example of having to administer antibiotics intravenously and having so many to do that the potential to forget to give was huge. She spoke about "*just the fear, the culture of fear. … We fear for our An Bord Altranais [registration]."* This was also highlighted by another nurse, who noted they were at risk of losing their registration because of the busyness of their workloads. She said:

> *They're at a risk because they're all working under pressure … They're all working under pressure. They're all trying to do, and they're covering other people, and it's ...*

Responsibility overload

A number of nurses working with patients spoke about the excessive level of responsibility they have and of potentially working "*outside their scope of practice at times*". Particular concerns were identified in respect of new graduates and of situations where there is a high

turnover of staff, resulting in new nurses who are not familiar with the patients. One staff nurse with a number of years' experience noted that new nurses "*are overwhelmed*" by the level of responsibility they are required to take on, and this was supported by relatively new graduate, who spoke about her recent transition from student to staff nurse, noting:

> *Some wards, you're just treated as a healthcare assistant. They didn't have time to teach you, as a student. Then, when you graduated, you don't know everything, and you're just completely thrown into the deep end … it seems everyone's too busy. There's no support there, really, for you …You're given so much responsibility.*

Other nurses spoke about having to make *"decisions on [their] own"* and getting support. This was identified as *"challenging' and 'distressing"*, even where they were just "*little things here and there".*

Staff turnover

High staff turnover was also highlighted as a problem in terms of responsibility overload. The situation of "*new staff coming in all the time*", who did not have the experience or the knowledge of that particular area, was identified as problematic for others. One nurse said: "*that puts extra pressure back on the old staff to make to fill that gap and to pick up for them*". This was explained by another nurse, who said:

> *but any new person just coming in, which frankly you can get, lots of them go ... because of the pressure of trying to speed up, to get the work done because we have a big workload. And I suppose, yes, we're used to doing it, so we can do it pretty quickly. But anyone coming in has to be trained, it takes them a lot longer, and some of them are leaving, as well because they can't ... They're under pressure. They can't get as much done as if we did it, now they're pressured to try, and do it.*

It is also more difficult to introduce improvements. One manager highlighted that to have quality of care you needed to be able to have a regular staff in place and it was not possible to do that, when *"you have staff coming and going and you know, here today and gone tomorrow".*

Negative relationships with others

The impact of being short-staffed was also reported to result in poorer relationships with others, due to the pressure that everyone is under. One nurse spoke about *"everybody giving out because you're not there. Patients, doctors, managers, everybody".* Another nurse noted her frustration with the response of management to staffing levels and particularly being told to "*prioritise and get on with it".* This nurse said: *"and that is what drives me cuckoo"*. One manager explained, however, that despite *"knowing we're very understaffed"* and "*staff are extremely overworked",* there is *"only so much"* you can do about it.

Round-the-clock care

Many nurses spoke about the challenges they face in respect of their working hours and the impact of this on retention of nurses is highlighted later. Most of the issues arising in respect of working hours are related to the need to provide *"round-the-clock*" care. One person noted:

> *Our patients and service users, are, with the exception of community services, there 24/7 and someone has to look after them throughout that 24/7 period.*

Working unsocial hours was identified as a negative aspect of nursing and being able to work from 9-5 only from Monday to Friday was highlighted as positive. One person, who had changed jobs and now worked from 9am-5pm, spoke about it all being a lot more manageable: *"You feel like you're not constantly exhausted."*

One manager noted that in her experience more recently qualified nurses are more likely to want to do the work in "*the most condensed way*", so that they have a "*clear work-life balance*" and have "*time to be able to do activities outside of the work environment*". It was also suggested that many nurses have a preference for working condensed hours, i.e. that the hours are worked over the shortest possible period of time. Three main reasons for this were identified, and these were:

- Costs of childcare where a daily rate is generally charged
- Costs of travel to and from work
- Work-life balance.

A number of nurses highlighted the impact of inadequate staffing levels in their area of work on their working hours. Two main issues were identified, and these were:

- A requirement to work overtime
- An inability / lack of flexibility around taking time in lieu (TOIL).

One nurse highlighted a reliance on nurses to do overtime, where "*they kind of take that from days to nights*. *They really kind of rob Peter to pay Paul, because they cannot get anyone to cover the nights."* This nurse went on to explain that in her unit it was a weekly requirement and she said:

> *It's a weekly thing, like there's probably not a day that there's not someone out sick … It wouldn't be long term maybe a few days at a time. So, a lot of us are asked, "Oh can you stay on?" When there's normally an early and a long shift, so the early shift would be normally eight to half four, and the long is eight to half eight ... So, a lot of the time an early shift stays on as a long day.*

Another nurse spoke about not being able to take time in lieu because there was simply no day when the ward was not short-staffed. A lack of flexibility around taking time in lieu was also highlighted and it was suggested that previously, "*If you stayed late, you could go early another night",* but that "*a clock-in, clock-out system*" was then introduced, despite the fact that there was *"never, ever a chance anyway to get your time back*. A number of nurses reported working additional shifts, staying on for *"an hour, an hour and a half extra*", but *"never getting the time back"*.

Summary of issues relating to the work of nurses

This section has focused on the key findings relating to the work of nurses. While some positive findings are highlighted, challenges arising were much more likely to be identified by those taking part in interviews and consequently these account for much of the content. Positive findings emphasise the attraction of nursing, including its variety and the ability to work almost anywhere. Job satisfaction was highlighted as being high in situations where individuals are able to work in an area that interests them, use their skills and expertise, make a positive impact, and be valued by patients.

The source of the most challenges arising in respect of nurses' work is firstly, an increase in the level of demand (due to increases in the number of patients and in the complexity of problems arising) and secondly, inadequate staffing levels. Where staffing levels were

identified as being inadequate, negative impacts on patients and nurses were also identified. It is clear from the examples given, and the passion and emotion with which nurses spoke about these issues, that there are significant consequences arising from these shortages. These consequences were identified as nurses having an unreasonable workload; burnout; responsibility overload; negative working relationships; fear of making mistakes; and challenges in working hours, due to the need to provide round-the-clock care.

Part 2: Key themes arising in respect of the organisation

This section presents the findings arising from a thematic analysis carried out in respect of interviews with nurses, relating to the organisational context within which they work. As with the views of participants about their work, a small number of issues relating to the organisation emerged consistently. Key issues arising related to pay and remuneration, organisational culture and support, education and training and recruitment

Introduction and overview

As noted, a number of issues arose in respect of the organisational context for nurses and, within this, the commentary related to pay was significant. Consideration is now given to the area of pay and remuneration and to the issues arising.

Pay and remuneration

Figure 31: Issues relating to nurses pay

Overall issues relating to pay

Comments such as *"Just pay what you owe … So just pay us what we deserve", "I know the money is a factor"* were made by nurses interviewed. One nurse noted:

> *I definitely think that all nurses for what work and the level of responsibility they have is massive. Their pay wouldn't be anywhere near what it should be really.*

One participant, who had been working in the service for several years, and was on the top of her scale, explained:

> *I wouldn't be able to just decide I can go out and get that. I will have to make a plan where I could afford to get that next month, and I leave getting the something else until the following month, that sort of a way. Whereas I think before the crash, if you did need something for the house, whether it be a new saucepan or something, you could go and you could get it. Now, I find you're waiting for the sales.*

Several nurses commented on the difference between their level of pay and their take-home pay and it was noted that when they see what they are actually getting paid, compared with their salary scale, "*it's very disheartening*". The pension levy was identified by several interviewees, one of whom noted: "*on paper, my pay looks good. But it's the pension levy that kills us.*" This was highlighted in respect of overseas nurses, where it was suggested they are unaware of the high cost of living in Ireland. It was suggested that in earlier years, when

overseas nurses came, to Ireland, they often made a *"life choice to stay here",* but that is no longer the case. One person noted:

> *I reckon, they know what they're going to get paid. But they don't seem to have any idea of what sort of a lifestyle that's now going to give them in Ireland.*

It was also evident that while many nurses identified pay as important, it was often linked with other issue, such as working in challenging environments, the need to feel valued, and the importance of being supported. One nurse highlighted this by saying:

> *If you work in a challenging environment and you don't have a lot of the supports, then you need a higher financial reward. If you don't have a high financial reward, you need to have a working environment where you're fully supported, and you have things at hand. At the moment, we don't have either of those things. And that's the problem.*

Others highlighted the number of hours a full-time nurse was contracted for and this was a source of annoyance, particularly in the context of having gone on strike to achieve a 37.5-half hour week, but subsequently, under the Haddington Road Agreement, having to work for 39 hours, which it was suggested was higher than that expected of other healthcare professionals. In that context, it was also noted that the other members of the multidisciplinary team were not required to work shifts, but this was not acknowledged in any meaningful way in nurses' pay. One nurse, who had previously had cancer, highlighted changes in sick-leave entitlement that had resulted in her having to go to work, despite "*not being in the full of my health … because I can't afford again to be without pay".*

Inequity in remuneration for nurses

Many nurses drew attention to inequities in their pay and highlighted this in the context of longer working hours than others within the healthcare system, as well as highlighting disparities between nurses' pay and that of other healthcare workers, members of the multidisciplinary team and other professionals. These inequities were a source of deep unhappiness and this is highlighted below. Issues relating to the moratorium, as well as the requirement to work longer hours than others, were identified as unfair.

Inequity of lower nurses' pay, compared with healthcare assistants

A number of nurses interviewed drew attention to the pay disparity between nurses and other healthcare personnel. This was particularly the case in respect of those personnel who do not undergo a lengthy education or training preparation period for the job and who do not have the same professional requirements for registration, *"but who are paid quite well in comparison".* One nurse asked the following question:

> *Let's put it like this. I'm an unqualified healthcare assistant. You are a four-year degree nurse. You have to serve five years, before you reach my salary ... You tell me why and how this anomaly occurred?*

This was echoed by another nurse, who noted a new scheme taking place in the hospital where she worked, whereby "*people go around and just clean individual rooms".* She said:

> *There's no disrespect to these workers, I know they work hard, but I find it very disheartening that they've come in off the street, they have no qualifications, and they are already getting paid more than I am.*

Another example given related to the grade of household parent in the intellectual disability services, where there is no requirement for this person to have a qualification, but "*they have the same equivalent salary, of this clinical nurse manager 2*".

Inequity of nurses' pay relative to other healthcare professionals
A number of nurses also compared their pay unfavourably with other health and social care professionals and it was suggested that there was no reason why there should not be parity of pay with "*physios*", "*occupational therapists*" and "*dieticians*", who, it was suggested, were paid more than nurses and had "*much more attractive working hours*". It was suggested that an allied health professional, such as an occupational therapist, "*starts off with a salary of €10,000 greater than a qualified nurse*", despite nurses having a degree and having *"studied just as much"*. It was noted that *"this is hard to take"* and is "*just demoralising, so it is".*

An example of the expectations for nurses, compared with other colleagues, despite being on lower pay, was highlighted. It was noted, during a recent weather warning that the disability nursing services, public health nursing services and mental health nursing services had to be available, while others were off. This director of nursing said:

> *We ended up having to do teleconferences every couple of hours … And we came back on Monday. We're all exhausted, and a lot of colleagues came in from other disciplines. They had a lovely two days off … It was a level of responsibility around that. And I thought, they're probably on a par of salary ... We had to continue on working.*

One person noted that, until the *"basic salary is aligned and is recognised with the other health and social care professionals*", there will continue to be a problem with recruitment and retention.

Inequities between nurses' pay and non-healthcare workers
Another nurse spoke about inequities across professions outside of nursing, noting that nurses see their *"friends maybe from school or college going into teaching",* and noting that *"a nurse will never get at the max of the [teachers'] scale".* Others provided comparisons with people from the private sector, including nurses working for agencies, who were paid at a higher rate than if they were on a direct temporary contract, "*doing exactly the same work*" with the organisation. It was also noted, however, that a nurse who had years of experience working in the private sector would be "*expected to come in at say the start of the scale"*.

Nurse manager pay

Nurse manager pay was highlighted as a particular issue, in terms of promotion, and it was suggested that there are very limited financial incentives for management grades. This was highlighted by a number of participants, who reported that where clinical nurse managers (CNMs) become directors of nursing, they lose "*the qualification allowance, they lose their location allowance"* and, if they have been working as a specialist, *"the specialist allowance is discontinued after CNM 2 levels"*. In addition, it was noted that when a person is promoted to a particular level:

> *You lose the unsocial hours and … although their basic pay increases, it never compensates really for the added bit.*

In essence, it was suggested that a nurse promoted to a more senior manager level are sometimes *"on less money than what they were on in their CNM 2 post".* The following example was given by a nurse manager who had been promoted three times. She said:

> *Look at me going from a CNM 2 to CNM 3 to an ADON and coming out less than €200 extra a year. Look at that. There's no incentive to go for a promotional post for nurses because you actually end up losing money.*

One person from HR suggested it is *"very difficult for succession planning"*, because many senior staff nurses are coming out with more than their managers.

Pay and location

Inequities were also highlighted in respect of the cost of living, depending on the location, and Dublin was highlighted as particularly problematic in terms of these costs. The very high costs of buying property, or even renting a house in that area, were identified as almost impossible for nurses; and if they were unable to rent in Dublin, they then had to commute a long distance to work, incurring additional costs. One participant noted:

> *There have been a number of scenarios of nurses working in [a hospital in Dublin] and they're unable to afford the cost of accommodation, because they're competing with all of the other private and highly-paid workers working within the Dublin city remit …*

It was noted that everyone is paid the same, irrespective of location.

Unpaid working time

It was reported that there is a requirement for staff to stay on after their shift has finished, so that they can handover to the staff coming on duty, but this is not compensated either through payment or time back. One nurse said:

> *Because even this thing of when report is going on at night-time that somebody has to stay back after doing a 12 or 13-hour day and they get no pay or time off in lieu of that. That's really not acceptable at all.*

A number of nurses who spoke about working in very understaffed areas spoke about the difficulties they had in having to stay at work because of the sense of professional responsibility, but not being recompensed for that. It was strongly suggested that nurses are not properly recompensed for overtime. One nurse highlighted that the additional payment for working on a Saturday is €15 and there is no financial incentive to do that. Another nurse spoke about not getting any financial benefit from overtime because of the amount paid in taxes. She said:

> *But there is no financial incentive to work overtime, and if you do, then half of it or more than half of it is gone in taxes before you get it.*

Other nurses working in very busy areas spoke about having to stay late and not being able to either take time in lieu or get paid for it. One nurse, for example, noted:

> *If you work in a very busy area and you wouldn't be finished in time in the evening you can't walk away ... well, no, I'm sorry. It wouldn't be in me to do it … So, that's a very difficult aspect, is working for nothing.*

Other nurses gave detailed examples of where they had to remain at work well beyond on the time they were paid for, to "*catch up on paperwork*" or "*to deal with emergencies being admitted to theatre*". Several nurse managers highlighted extra hours they were working every week, with one noting:

> *We work at least 60 hours a week and we're paid for 39 and paid badly. So, I think that is an issue for us.*

It was also highlighted that there is a requirement for some senior nurse managers in the intellectual disability sector to be *"on call"*, but *"we do not get any additional payment for that, which means if I go out ... I let other managers know*".

Organisational culture and supports

Organisational culture and supports emerged as being very important throughout this study and some individuals spoke specifically of *"a culture of abnormality"* and a *"a poor culture and ethos"*. The main issues arising in this study relate to:

- The relational context
- Organisational outcomes for nurses
- Support for training and development.

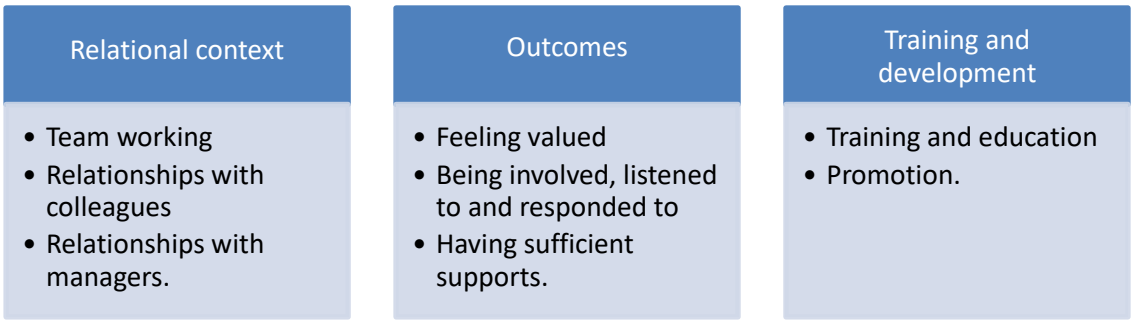


Figure 32: Issues arising in respect of the organisational context

Relational context

The relational context was identified by nurses as very important and both positive and negative experiences along with their impacts were highlighted. Interpersonal relationships with co-workers, managers and other team members emerged strongly throughout the interviews. Outcomes arising from these relationships, in terms of feeling valued, as well as being involved, listened and responded to, were identified as the critically important components. One quote highlighted the challenges arising as follows:

> *It's just the atmosphere its toxic, the disrespect, the undervalue, how undervalued you feel, the disregard shown, both; unfortunately, it's not just the public it's the people we work with.*

Interpersonal relationships

Teamwork within nursing itself, between frontline nurses and management, and with other professionals, was highlighted as an important issue and operating within the context of a multidisciplinary team was identified as both positive and challenging.

Working as part of a team

While the importance of teamwork was acknowledged, it was noted that many nurses are taking on a coordinating role within the multidisciplinary team. Some challenges were identified in respect of this, particularly when it takes nurses away from patient care in a busy environment. One nurse noted:

> *I feel like I'm not a nurse, that I'm a coordinator of all these others [disciplines] … to come together, and if there's ever a problem a family wants to tell the doctor, and if there's ever problem with the lab the blood ... I just feel like we're*

> *coordinators of every other multidisciplinary [team member]. We're the glue that kind of holds everything, we have to orchestrate everything, and make sure that everything runs fluid like. If there's any slip up in our communication between these, there's a breakdown, and then it comes back to us.*

A small number of nurses highlighted that when there is a shortage of support staff, nurses can end up taking on their role. This includes *"porters or janitors or healthcare assistants*"; and it was noted that despite not having responsibility for their roles, "*You end up doing their role as well as your own and you're not recompensed at what you should be getting."*

Another nurse spoke about *"washing rooms, we're washing beds, we're dressing beds, we're changing bin bags*", noting: "*I just feel I didn't do a four-year course, and so much studying to be going around dressing beds, washing beds, emptying bins, and stuff like that."*

Relationships with nursing colleagues

Colleagues were identified as very important and working in a collegiate and collaborative way was highlighted by a number of participants. Participants made comments such as: *"the people you work with are the best part"; "some of my colleagues are absolutely amazing".* One person noted that when you are working in a big organisation with lots of colleagues there is a good social side to it.

It was also highlighted that your colleagues "*keep you going, they will be the ones to believe in you, cover you on your days off",* and they know what it is like to "*be under pressure and you know how relieved you be to see them for extra help coming"*. One nurse noted:

> *I have a group of colleagues, to be honest I don't think I'd [have] got where I am now without them …*

This was also highlighted by managers, who appreciated *"knowing I'm working with a professional bunch of people where we all have the same aim, which is good quality patient care".*

Some nurses, however, reported working with colleagues who are difficult. One person spoke about working with another nurse:

> *who dictates the mood or the ward, the whole ward, her sheer presence. There's a wide number of staff on the ward, from senior staff who have meek and mild characters to newly-qualified fourth-year students who are petrified of this person.*

Another recently qualified nurse also highlighted the importance of having co-workers who were supportive of each other and worked collaboratively. She spoke about another colleague, who *"just works by herself, does her patients by herself. She won't get help from anyone, but then she won't help anyone else either."*

Relationships with managers

In general, when nurses in this study were referring to managers, they meant nurse managers and leaders, although a small number of references were made to others in a senior level in administrative roles in hospitals or community. The role of managers was identified as important for nurses and, as with the situation with co-workers, both positive and negative issues were highlighted. A number of issues relating to managers are also highlighted in the section on culture.

Some participants spoke very warmly of their local manager (e.g. "*we got a very good manager"*; *"she was fantastic*"; "*there are some good managers out there*"). Managers working collaboratively with staff was helpful to nurses in achieving a better environment and ensured that everyone put in the same effort. One nurse spoke about having a very heavy workload but then went on to speak about the night sister, who *"was fantastic*, *and she can pick you up [and] really help you"*.

Others, however, reported less positive experiences. One nurse noted:

> *I have just come out of working with a CNM 2, who was a bully … It wasn't just me … That was very difficult to go into work day after day, being short-staffed and working with that atmosphere. It just wasn't nice. It was very difficult. And I know that there was probably about seven or eight of us that were actually looking for other jobs at that time.*

The role of managers in rostering staff and in trying to ensure that enough resources are available on wards, particularly where they are very busy, was highlighted by one nurse, and it was suggested that sometimes nurses would feel "*the manager wouldn't be fighting hard enough for the ward".* A manager, however, highlighted the challenges, saying: *"I do find it very difficult when people are tearing their hair out in relation to trying to get a nurse, and I appreciate it, and I don't have them. I really don't have them."* Other nurses highlighted examples of where there were challenges arising, including, for example, communication problems due to language difficulties and where managers were unwilling to deal with them. The importance of managers having a physical presence was highlighted and one nurse spoke about one of her colleagues seeing her manager in *"the newsletter and having to ask if that was her boss"*. Some nurses highlighted areas where they felt they could have been better supported by their managers and noted that it was often "*them and us*".

Outcomes

Working in an environment where they felt valued, involved and listened to, as well as being provided with safe equipment, were issues highlighted by nurses as being very important to them; and these were linked with the culture of the organisation. These issues are now highlighted.

Feeling valued

The importance of feeling valued by patients was highlighted earlier in the section on the job. Many nurses also drew attention to the importance of feeling valued by managers. One nurse spoke about her experience, explaining:

> *I've worked extra shifts … I've been on for extra hours ... I know one of the, [person's name] an ADON (assistant director of nursing) came up personally and thanked me, but that was the only time in my four years. I've ever been thanked for helping out …*

This was also highlighted by another nurse, who recalled a recent experience where, due to adverse weather conditions, people found it very difficult to get to work. She noted that she had made it in to work and had stayed overnight, because she was on call, but the following day, when it was quiet because patients had not come to the service, she was told if she went home early she would have to take annual leave. Another participant, speaking about her manager, noted: *"I'd love to just be acknowledged about the hard work we do … we're putting in the extra hours and staying back; we're not taking a proper break. It's inhumane."* Another nurse spoke about the differences in recent years, saying:

Going back to a number of years ago, when I was very happy working here, I think when you were recognised, you got ... And I'm not necessarily looking for a pat on the back, but we were recognised, we were appreciated, and we were listened to. I think if that's returned, I think it will be a happier place to work.

Being involved, listened to and responded to

Nurses also highlighted the importance of being included, listened to and their voices being taken into account in decisions being made. One nurse, who had a very positive view of management, noted:

I feel that they involve you. There's constant contact and emails from management. People from management are very approachable. Everybody is very approachable. They listen as well.

Another nurse had a different experience, noting: "*If the people in the ground are not involved in what's going on and changes are being made"*, it makes it very difficult for staff. A senior manager, who spoke about the frustrations of spending a lot of time working on business plans that might never be taken on board, said:

But that's the frustrating bit around everything's that goes in and they seem to be going nowhere and that … I don't know how much influence we really have in that ... We're not at the table at a higher executive level.

An example was given that related to staff not being listened to in respect of staffing levels, but when an outside organisation examined the overall situation, "*They couldn't believe how diabolical it [level of staffing] was, and they implemented the change that we now have [more than double the number of] CMNs.*" The impact of not being listened to by decision-makers was highlighted by one nurse, who said:

When you voice a concern over patient safety or patient care, the concern is not listened to … and you have a management person telling you "You're not in a compromising position. You're fine." And you're thinking, "No. Actually I am." And it's just by the grace of God that nothing has happened.

A nurse working as a specialist highlighted challenges in taking up these types of posts and noted that, despite having a lot of information to show the benefits of particular approaches to dealing with people, their opinions are not taken into account. Others highlighted a lack of formal communication where they worked, with one nurse giving an example of having a ward meeting for the first time in four years. It was also noted that there is no place to have a grievance heard and this makes it very difficult to come to resolutions about things. One nurse in a specialist post recounted a very difficult situation she was currently experiencing, where she felt *"excluded from every single thing that happens here … and it's just heart-breaking"*

Having sufficient supports

Issues relating to relational supports have been highlighted earlier in this section. However, a number of nurses also drew attention to the need for basic resources to be made available to them, so that they can do their work safely, particularly in the context of the physicality of the work they do. One nurse noted: *"I'm only nine stone and a half and usually [I work with] a female healthcare assistant and you can have a 16-stone gentleman that's fully bed bound and frail ... Physically it's very difficult."* This nurse went on to say that, despite having more than 20 patients on the ward, they had fewer than 10 electric beds and *"they're all rusty. Staff have hurt their backs trying to lift up bed rails on them."*

Training and development

Career pathways are dependent on a number of factors, including training and education and promotional opportunities. Issues arising from these are now presented.

Continuous professional development

Some nurses drew attention to the support they received within the organisation to undertake further education, with one nurse noting: "*There's an encouragement to do education. Already I've done about four or five different education modules in eight months*". Another participant, however, highlighted differing experiences within the same local organisation, saying that the manager did not allow nurses to even attend local courses, *"even if it's only for a day".* This nurse went on to say: *"Many times, they won't even respond to your emails, so people just don't bother."*

It was also noted that, despite needing to undertake the professional development to ensure they were up to date in their practice, nurses would be told to *"do it yourself, do it in your own time"*. It was also noted that if it is mandatory training, it's different. One person said: *"If it's the manual handling or fire safety, all that sort of stuff, that is allowable."* Others, however, highlighted that because of staffing levels they have been unable to take part in mandatory training. A manager noted that, while they would try and support personnel to do non-mandatory training, it would need to be very specific to their area of work and, while nurses might come with *"an interest in an area that really isn't … hugely relevant ... We really wouldn't prioritise that".* It was also suggested, however, that some people *"weren't inclined to push themselves forward to do anything"*, potentially because of the busyness of their roles and due to being short-staffed.

Some recently graduated nurses highlighted deficits in their competency because *"it depended on who you were working with"* as to whether you would be given the knowledge and opportunities to develop competencies. One nurse noted:

> *Some of them just couldn't, they weren't the best of teachers, they just didn't have time to be explaining what they're doing …. They probably had 100 things in their head on top of trying to teach you what they're doing along the way, but some of them are fantastic overall.*

Promotion

Having opportunities for promotion is an important aspect of ensuring that career pathways are available for nurses. It is also important, however, to note that not all nurses want to work as managers or in a promotional role, and that for some, working as a staff nurse and being in direct contact with their patients is their career goal. One nurse noted: "*There are promotion incentives, but you do still need nurses. Not everyone can be a manager or a clinical nurse specialist or an advanced nurse practitioner."*

Throughout the course of this study, two main issues arose in respect of promotions. The first relates to the pay and conditions for managers and these were dealt with in the section on pay presented earlier. The second relates to the promotion process itself, and a number of individuals spoke of a lack of transparency, and of unfairness in the promotion processes, that take place at local level. This person stated:

> *It's a game of charades locally. It's legal charades, and that will be quite well noted, and accepted. Well, it's not accepted. It's done in such a covert, apparently legal way, there's nothing you can do about it, because you can't*

prove it. But, it would be accepted, that's how it's done … It would be given away before the interview.

Summary of organisational issues arising

In summary, this section has presented the findings on four key areas relating to the organisation. These are issues relating to pay and remuneration, organisational culture, including interpersonal relationships and outcomes, and training and development. Both positive feature and challenges arising were identified.

There was an extensive commentary in respect of pay and remuneration and, while a small number of individuals noted it was not all about the money and they were happy with their pay, in general the commentary relating to pay was around the challenges. First, it was suggested that the overall level of pay was too low, and attention was drawn to pay cuts, additional taxes, and the requirement to work extra hours, since the austerity measures had been put in place. Second, inequities in the level of pay relative to others was a source of anger and unhappiness and many unfavourable comparisons were made with the pay received by other healthcare workers (e.g. healthcare assistants, cleaners), other members of the multidisciplinary team (e.g. occupational therapists (OTs), physiotherapists), and those working in similar type professions (e.g. teachers).

The pay for nurse managers was also highlighted as particularly problematic, and personal examples were given of nurse managers' take-home pay being reduced on promotion. Working in the Dublin area was identified as impacting on the extent to which nurses were able to manage on their pay. Unpaid working time was also highlighted as a bone of contention, and this arises mainly because of the requirement for nurses to provide a *"round-the-clock service"*, resulting in their having to stay after completing a shift to give a handover to the nurses starting on the next shift. It also applies to their not being able to reclaim time in lieu.

The organisational culture was identified as important and was exemplified by the relational context, the outcomes experienced by nurses, and training and development. Relationships with others, including working as part of a team, were highlighted and it was noted that nurses increasingly take on a coordinating role across various team members. It was also noted that some tasks undertaken by nurses could be undertaken by others. While there were some exceptions, relationships with colleagues were generally very positive and were highlighted as a reason for staying. Relationships with managers, which almost always referred to nurse managers, were generally less positive and issues arising related to response to ongoing staffing problems or excessive workload. This, it was suggested, led to a *"them and us"* situation.

Outcomes from the organisational culture experienced by nurses included being valued, although this was generally in the absence of its absence, and several comments were made, and examples given, of where opportunities to show appreciation were missed.

The second main outcome referred to by nurses related to being involved, listened to and responded to, and again, examples were given of where the voice of nurses was not heard and not taken in to account. Some participants in the study drew attention to the absence of formal meetings or structures in place to deal with grievances. A small number of nurses drew attention to the absence of basic supports, such as appropriate lifting equipment and beds.

Training and development, including ongoing education and promotional opportunities, were also identified. Many nurses highlighted the lack of support, in terms of time off or payment for travel to take part in continuous professional development, and they identified this as having a negative impact on their ability to provide a good-quality service. While some noted that the mandatory training (e.g. manual handling, fire safety) was supported, others noted they were so busy that they had not taken part. The busyness of the service was highlighted as particularly problematic in this regard.

In terms of promotion, it was noted that many nurses want to work with patients and therefore have no interest in seeking out promotion. However, it was also suggested that the promotional process is not as robust as it should be and that there were promotions at local level where the job would be given away before the interview.

Intentions to stay / leave

Stay	Leave
• Enjoy the work • Supportive environment • Personal reasons • Limited alternatives.	• Excessive workload • Working hours • Pay • Organisational culture • Other opportunities.

Figure 33: Overview of reasons why nurses stay or leave

Overview

It is clear from the analysis of interviews undertaken that the reasons people stay or leave their job, organisation and profession are multifactorial and that, while there is much crossover between the categories, there are also differences. In this section, we highlight these similarities and differences.

Intention to stay

The decision-making process around intention to stay or leave a place of work is both complex and multifactorial and many interviewees identified multiple reasons for staying. One nurse noted that "*The positives outweigh the negatives, it can be rewarding at times.*" Others identified specific areas with which people were particularly satisfied as follows:

> *We'd have pockets-like wards, where staff go there, and they stay there for years … They're normally very specialised wards, that they've gotten the adequate training. They're very confident. They're guaranteed their staffing because of the acuity … And often there's special allowances like that … and a lot of it is leadership. The CNM 2 would be a very strong CNM 2. She would have an open-door policy and would work well with staff.*

Another nurse close to retirement also highlighted the social aspect of meeting people, being happy with her hours, having family, and being settled where she was.

Enjoy the work

In response to the question *"Why do you stay in your current job?"*, some participants in this study simply said, "*I enjoy what I do*"; "*every day is a good day, and every day you're learning something*"; "*I'm very happy now doing what I'm doing, and you know I'm happy with everything.*" One nurse commented that she was coming towards retirement, noting:

> *And I thoroughly enjoyed nursing. I will keep going as long as I'm allowed … but I thoroughly enjoy. The day I don't enjoy, is the day I go.*

When asked if there was anything that would make her leave their job, one nurse working in senior management noted that while the decision to go for the promotion had been difficult to make, once it was made she was happy with it and did not intend to move again. One participant, who had recently moved to a different position, said:

> *A completely different type of challenge, I can still switch off when I go home, and I can, you know, relax and eat my dinner, and still have energy to do the things I want to do. Whereas, it wasn't like that a year ago … I'm very happy now doing what I'm doing, and you know, I'm happy with everything.*

Supportive environment

A small number of nurses drew attention to the context within which they worked and highlighted this as the main reason why they stayed in their job. Some nurses said they stayed in the job they were in because of their patients and colleagues. One said:

> *I think a lot of us, yeah, I think a lot of us would probably think the same way. We stay in the job for our clients and the feedback we get from them, and also for the support we get from our colleagues and … and it's definitely not the money, anyway.*

One HR manager also drew attention to the management context, noting:

> *"Well that's [low turnover] our experience. When there is proper management in, when the CNM 2 is there to run the ward as opposed to manage patients as well and can deal with issues before they actually kind of spiral.*

A small number of nurses also highlighted the importance of their working hours, with one nurse noting: *"I don't work night shift and I don't work weekends"* as her reason for staying.

Personal reasons

Several nurses spoke about staying the job they were in because of family and financial considerations *("paying bills"; "having an elderly mother"; "being stuck"*). These reasons were also identified by others and one manager noted:

> *And I do know that there are certain people here, that do feel that way [would like to leave], but they are stuck because they have children to fund, in education … They have the financial commitments. You know?*

A number of nurses commented on the need to remain in their job because of financial commitments.

Location

The location of the service was identified as an important issue and several people drew attention to their living close to where they were working as a reason for continuing to stay in their job (*"I'm 10 minutes away from work. I go home"*). Managers highlighted that "*usually when you come to it, like a local hospital … people are settled*", and another person

noted that "*staff wouldn't normally leave a hospital because they normally live in the locality and it would just incur travel cost and issues for them*".

Not everyone agreed that this was still the case and one nurse manager noted that while previously nurses "*came back down the country because of the expense in Dublin … unfortunately, that's not so much the case anymore. While they come down, they're not staying."*

One nurse, who was working in a particularly difficult situation, drew attention to doing a *"two hours' drive every day up and down to work"*, but despite that she would not move to a hospital closer to her, because:

> *a lot of my friends and neighbours, and they've kind of warned me not to go to this hospital that is so close to me. Because, conditions as bad as they are, my family has mentioned it'll be a lot worse up there, and they are a lot more short-staffed than we are where I am at the minute.*

Limited opportunities

The third main reasons for nurses staying related to having limited opportunities either because of the location of their homes, or because there are limited opportunities for them to progress. This was highlighted by one nurse, who noted:

> *There [haven't] been the opportunities I suppose [to move]. I didn't see an opportunity for anything else and that's the reality … And I suppose in all of this I still get a great experience, so I think it works down to me in time. So, yes, the day will come, I have no doubt, when I will say, "You know what? I can't do this forever?"*

Some individuals noted they were already almost as high as they could go and so there were limited opportunities for them because of that, and that if they wanted to move they would end up going *"to the side"*. This was also the case for nurses in specialist posts where their careers had been in a particular area, and they had committed to working in that area. One nurse highlighted, this noting:

> *And I'm stuck career-wise because I don't want to go to CNM 3. I don't particularly want to go, you know, CNS-type ...*

The need to undertake additional training and education was highlighted as a prerequisite for being able to move to a different job. One nurse noted:

> *But yes, I would like to do a Master's. I would like to do whatever to help me to move on, if you know what I mean, but it's getting the time and the money and everything else to do that.*

Intention to leave

There was a depth of emotion around some of the interviews we conducted, and a small number of participants were distressed or angry when speaking about their intention to leave their job, the organisation or the profession. Some nurses spoke about entering nursing because they had family members ("*sisters", "aunts",* "*relatives and relations that were nurses*") who had encouraged them to do so. A number of nurses interviewed, however, said they would not want, or encourage, their own children to go into nursing now ("*I wouldn't want my daughter to be a nurse*"). One participant stated:

[I] wouldn't advise my worst enemy to engage in a nursing job … I would say the last three years, I would say the job would nearly want to come with a health warning.

Another nurse, who graduated in the previous four years, said:

But I think I've ruined my life doing nursing … it's just that it's a complete wasted effort, but I can't do this anymore. It's just there's so much is expected of us.

While there were a small number of exceptions, when participants spoke about leaving they generally highlighted an unhappiness or dissatisfaction with their current position. Exceptions included individuals who tended to move regularly – one nurse noted *"I give myself five years in every job"* – and then move on. Another nurse suggested that it was a problem in Ireland that people stay working for one organisation for a long time and that is *"a bad thing, because you only know that one organisation".*

Some concerns were expressed about the way in which nurses leaving the service was construed by some managers. One nurse highlighted that her manager had said it was common for nurses to leave because they wanted to travel, but she noted:

I said it's because we're not happy … In the two years, within two years 13 had left … I said well we're not happy, the patients aren't happy … And quality of nursing is going down the Swannee and I just kept it simple. We're just not happy, we're not staying because we're not happy.

Figure 34 below highlights the different reasons nurses gave in these interviews for leaving their job, organisation or profession.

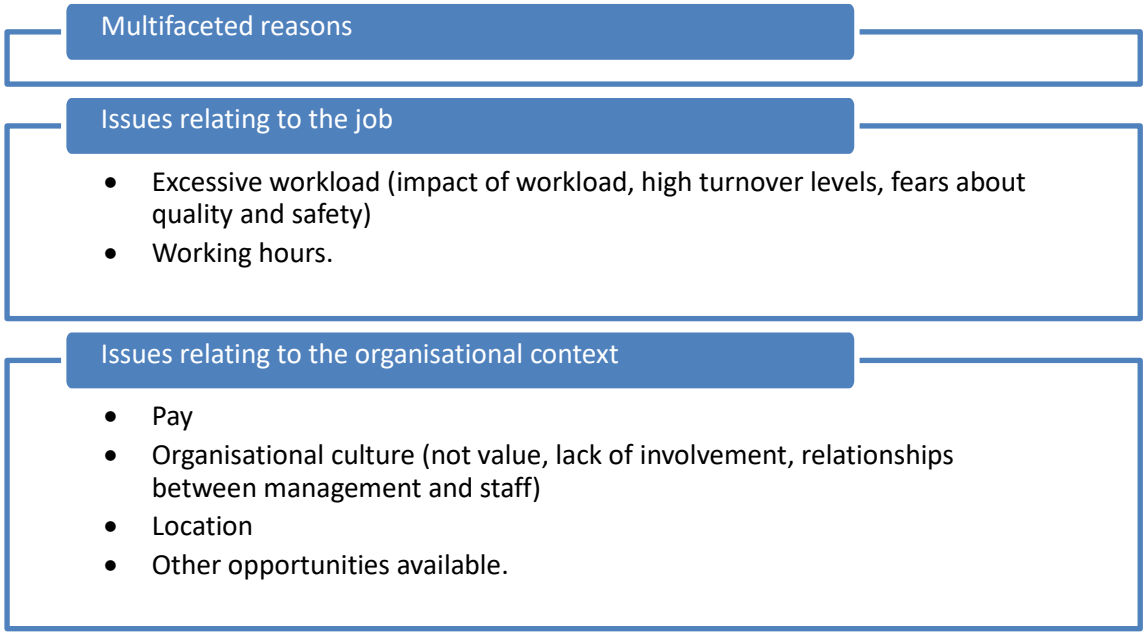


Figure 34: Reasons nurses gave for leaving

Multifaceted reasons for leaving

While some gave a single reason for people leaving their service, in many cases more than one reason was given. One nurse, for example, gave four reasons for leaving her current job. These were:

1. The physical strain, including working shifts and nights.
2. She was the only senior nurse remaining with a lot of junior staff and there were too many risks associated with that.
3. She felt she had been treated unfairly in a recent promotion competition.
4. Nobody in management had made any attempt to encourage her to stay.

At an organisational level, one person from HR noted:

> *And I mean they're overworked and they're overstretched. Their access to the appropriate training, their access to all the leave … it's not just about money. It's the lack of colleagues on the ground doing the job, that impacts the nurses that are there.*

Others were less explicit about the reasons for wanting to leave and one nurse noted: *"There is room for improvement in the work life* [balance] *and that's what I'm thinking."* Another participant suggested that nurses are not being "*completely honest"* if they say they haven't thought about leaving, *"especially the way things are".* This was echoed by another nurse, who noted:

> *And then you think the day will come when you've just had enough of that and you think there's more to life … And I've had those days recently.*

It was also noted that even if people do not leave, it has an impact, as *"you're not going to be extremely positive in your job, and ... You know, how are you going to be a hundred percent productive?"*

While recognising the multifaceted nature of reasons given for the decision to leave, for clarity, this section highlights issues arising in respect of each individual theme. The most common issue arising in respect of people leaving related to workload, which was generally linked with inadequate staffing levels. Issues arising in respect of this are now highlighted.

Issues relating to the job

Two main issues relating to the job people work in were identified as reasons why people leave, and these were:

- Excessive workload
- Working hours.

Excessive workload and inadequate staffing

Workload, often linked with inadequate staffing levels, was identified as a key source of difficulty for nurses and this was also highlighted as a common reason for leaving the service. In response to the question *"What is the biggest issue for you in thinking about leaving?*", one nurse said: "*Probably the workload …. The workload is horrendous."* Many nurses linked the workload with inadequate staffing levels. One nurse said: "*We are haemorrhaging staff at the minute … I think people want out [of] such a busy, acute ward*." This was echoed by another nurse, who said:

> *I really do believe a lot of it [retention problem] is staffing. Having worked in a different country as a nurse, their staffing levels ... There was always a good*

amount of staff. When there's more staff, it's less pressure on you. You're not having to look after 20 patients, all of whom might be really sick. You know, it reduces pressure.

The impact of low staffing levels was highlighted, and it was noted that even when nurses really enjoyed their work, it was very frustrating when they were unable to do it well because of insufficient staff. One nurse noted:

The reason that they're doing that [leaving] is because there was too much packed into the day. The day isn't long enough for them, so they need extra staff, they need acknowledgement for the extra hours that they're doing. It can't always be "That's your job. You've gotta do it. You just put up with it." That's why people are leaving.

This was acknowledged by managers who agreed that people "*have sought work elsewhere because they're maybe not getting their full cohort of staff*". One nurse, who was not thinking about leaving her job herself, spoke of her colleagues on a different ward, saying:

To know that, say people are out sick and you cannot get anybody to replace them. People are constantly on the lookout for new jobs coming up because they're burnt out and they're moving on.

This was also highlighted in respect of community services, where one public health nurse noted: "*We have very few public health nurses. There always seems to be a shortage of public health nurses."*

While many drew attention to staffing levels, it was also noted that even where staff were replaced, a high turnover level has an additional negative impact on those remaining. One nurse highlighted the impact as follows:

And I would imagine that will continue [high turnover of staff], because I know I got out, but there are several of my colleagues still down there who are looking actively to get out of it. Because I thought there being such a high turnover there are new staff coming in all the time, but the new staff don't have the experience so that puts extra pressure back on the old staff to make to fill that gap and to pick up for them and so that they are under more pressure again. So now they want to get out.

Fears about quality and safety

Fears arising from the quality of care and safety of the service were highlighted by a number of participants as a reason for leaving. One nurse noted:

They asked why was I leaving, and they knew after all of our concerns. I spent most of the three years filling out some [risk assessment] forms … because we're so afraid that something is going to come back and bite us.

This was echoed by another nurse, who drew attention to the "*fear factor*" and always being worried *"that you're going to be sued or that you're going to be liable for something", particularly if you are the most senior nurse with a lot of junior staff".* Concerns about risk and safety of the service were also highlighted by a person from HR, who noted: "*again, due to the lack of staff, they're working in what they feel are unsafe environments. And all of that comes in to play in terms of retention."*

There was a lot of sympathy also for more junior staff, and one staff nurse with many years' experience noted her sympathy for junior staff *"and the amount of responsibility that's heaped upon them".*

In response to a question regarding why it is difficult to get people to apply for nurse management positions, it was suggested that:

> *It would be probably because of the fact that the shortage is all staff nurses and that just the pressures within the [type of] hospital itself and working within budgets and lack of resources. Just it's the added pressure of taking on the management role. They prefer to stay in their staff nurse post.*

A number of individuals referenced the work of the Health Information and Quality Authority (HIQA), particularly as a reason for nurses not wanting to become managers. One person noted:

> *HIQA, the expectations are just so high ... It just became a fear. HIQA even puts the fear into the best of people.*

Working hours

Several nurses spoke about a need to have reduced working hours. One nurse, who had already interviewed for a new post, highlighted the strain of working 12-hour shifts as follows:

> *It's just for me, it's the physical side of it. I actually love my job, but for health reasons, I can't do nights, so I do all day shifts. I'm not getting any younger. The 12-hour shifts are killing me at the moment.*

Another nurse gave an example of one of her colleagues who had left because she was given leave of absence for a year and another who left because she needed reduced hours, noting: *"They weren't able for the hours."* Responding to requests to reduce hours was identified as a source of discontent and it was also viewed as a lack of willingness to invest in the individual. One nurse involved in undergraduate education suggested that the organisation should be saying:

> *That we really, really are investing in you, that we really want to keep you. We want you to stay here. Like, we offer out all the options now – like if they want to come [and] stay with us for a year, go off for a year or two, that their job, their permanent post will remain for them so.*

Another nurse working in a very busy area with inadequate staffing spoke about a colleague who had requested a decrease in her working hours. She noted:

> *Yeah, and I think I feel that our management has their head in the sand, because we had one nurse leave two weeks ago, and she wanted to keep a contract with the hospital [doing 12 to 24] hours a week … just because she's dropping her hours, and it was a blank no. It was an absolute, blank no: "No, we're not doing that anymore. Good luck, and see you", after 19 years working there.*

Several others spoke of their own experiences, or those of their colleagues, who had left because they were unable to get reduced hours. Many drew attention to the physicality of nursing and the difficulties involved in this in later years. There was a strong view that reduced hours should be accommodated and that this would, in the longer term, be more beneficial for people.

Issues relating to the organisational context

A number of issues relating to the organisational context were highlighted and one manager, with regard to the problem of not being able to support staff, noted: *"If we don't support the staff they'll leave us all*." Other issues arising in respect of the organisational context related to:

- Pay
- Cultural issues including not being valued, lack of involvement in decision-making
- Poor management.

Pay

Much of the commentary on pay has been presented in the previous section on organisational context. While a small number of participants suggested *"it's not all about pay"*, remuneration was identified by several individuals as a very important reason for why people are leaving, particularly in the context of the cost of living. One junior nurse already doing a master's in an area outside of nursing, and who did not intend to work in nursing, spoke about how she had been influenced by nursing colleagues who had decided not to go into to nursing after graduation:

> *My friends leave college now this year, next year. They're all going off into bigger salaries. Some of them will be starting on €28,000 or 26 and lower, but in a few years' time they'll be on a lot more …*

Another person from HR suggested the reason nurses are moving to agencies is "*because the rates were just higher than what we were paying",* although it was also noted that the agency framework "*has sort of brought that differential in terms of the rate of pay back somewhat".*

As noted previously, working in the Dublin area was highlighted as particularly problematic with regard to pay. Others simply noted that they were "*struggling to make ends meet at the end of it, so it really is worthless"* and that they were *"on the breadline*". One person said:

> *Pay is the big reason. Ask any junior staff, they'll tell you that themselves, that's why they're leaving. There's actually junior staff, that if they're in a community setting, they'll actually tell you come the end of the week, they have no money for petrol or diesel … they simply can't afford it. They have no money left after just paying very basics, even rent.*

Others highlighted the potential to earn more money elsewhere:

> *They need to look at our wages. They need to look at our hourly rate, because the financial rewards are better in other countries. So, they're losing our experienced, our best trained nurses, to England, Australia, America, wherever, because we just can't afford to live on our wages here … There's no disposable income anymore.*

Organisational culture

As with the challenges identified in previous sections, outcomes arising for nurses from the organisational culture were identified as reasons to leave. These include not feeling valued, not having a voice in matters that affect them, and relationships between management and staff.

Not feeling valued

A number of nurses indicated in this study that they did not feel valued and this was reflected in the reasons participants gave for leaving their job. One nurse said:

> *I just feel like every day we come in, it's the same issues, they're never being resolved, and we just really feel taken for granted. I think a change would be as good as the rest at the minute for me.*

Another nurse, speaking about the high turnover level in her place of work, noted there was nobody, saying *"Oh, please don't leave"* or *"We'll be so sorry to see you go."* Another nurse, who had already applied to transfer to a different ward, noted:

> *There has to be a source of happiness when you come to work. There has to be a source of feeling worthy and appreciated regardless what your role is in life.*

Lack of involvement

One nurse spoke about a previous job she had worked in, where there were a lot of people as well as herself leaving, noting that there was: *"very poor morale generally. There was a lot of unhappiness. People were quite shocked at decisions that were being made."* One nurse spoke about a number of difficulties that had arisen in her work, about which she went to management. She noted:

> *When I went to them, they did''t like me giving up my point of view. It was all about how I said it to them, rather than what I said. I was really upset by that. Generally, there was a really bad feeling in the hospital.*

Another nurse, who was leaving the ward where she worked, noted: *"No matter what I've said or whatever suggestions I have, they haven't been taken on board,"* and this was a major reason for why she was leaving.

Relationships between management and staff

One participant, who had already applied to move to a different ward within the same hospital, highlighted the impact of a difficult colleague, noting:

> *I would feel that management are very aware of it and in some ways nearly encouraging her by saying things like, "Well that's the way to be, you know" ... She doesn't see the damage or certainly doesn't acknowledge the damage, on the floor, the damage this person is doing to the whole work environment.*

Availability of opportunities

One nurse, when describing a demanding work, environment said:

> *I would maybe look for alternatives to where I am … I wouldn't leave the profession altogether. I have to say I like nursing.*

A number of nurses, however, did speak about accessing other opportunities outside the profession, with one nurse noting:

> *What age am I now? I'm [over 40 years], so I've been in this since I was 18 … No. I'd like a second career now …Yes. And, of course, nurses are extremely sensible, and extremely practical, so you're not going to leave a job unless you have something concrete lined up.*

Another nurse noted that colleagues would have conversations that would highlight other career opportunities. One recently qualified nurse had identified an alternative environment and was actively thinking about pursuing a career in that area. She said:

I might transfer. I don't know. My sister works in a multinational pharmaceutical plant, and I'm thinking of putting in my CV there and get out of nursing altogether. She has a fantastic job. Like when I tell my sister what we're kind of doing, and what goes on she can't believe it. I don't know. There's no reward.

Summary of reasons given for people staying or leaving

This section has focused on the reasons given by respondents as to why nurses stay or leave their job, organisation or profession and, as highlighted earlier, these reasons are often complex and multifactorial.

Nurses say they stay where they are working for four main reasons and these are: they enjoy the work they do; they work in a supportive environment; they have personal reasons for staying, including living in a location that suits them; and they have limited opportunities to move elsewhere.

The reasons given as to why nurses leave are also multifactorial and this is highlighted in the commentary presented. For clarity, the main reason identified is excessive workload, due to in adequate staffing and high turnover levels. As with earlier sections, many nurses expressed fears about the quality of their work and the safety of patients, where the workload is too great. Some nurses highlighted difficulties in the hours they work, particularly because of the physicality of the work they do. The importance of being able to adopt more flexible and short working hours was highlighted.

The organisational context was seen as having a strong impact on nurses' intention to leave and pay was identified as an important issue, particularly in respect of nurses living in the Dublin area. An organisational culture, where nurses do not feel valued and where they are not involved in decisions about matters that affect them, was identified as particularly problematic. Challenges in the relationships between management and nurses were also highlighted and this issue was also identified as a reason why nurses leave their place of work. A small number of nurses noted that, in terms of location, where they live and where they work were not compatible and this was given as a reason for seeking alternative employment. However, it was noted by one nurse that this in itself was not a sufficient reason for leaving their current job.

Finally, it was highlighted that there are many more opportunities now for nurses both within the health services and outside, and these were also identified as reasons for leaving.

Recruitment

This study focused on both recruitment and retention of nurses and while the main input related to retention, some issues were also raised around recruitment (Figure 35)

Figure 35: Key issues arising in respect of recruitment

Recruitment process

There was some commentary about the overall recruitment process which, it was highlighted, involved a lot of teams of people across a lot of different stages. One person from HR explained:

> *Because by the very nature of it, it's set up, it's all process. So, you have we'll say, there may be five processes for any one post ... What happens is you have one team on a job order, you've one team on the job spec. You've one team on the ad, you've one team on setting up the campaign and the interviewing of applicants; another team on the Garda Clearance; another team on contracting.*

The lengthy recruitment process, even for temporary posts, was also highlighted. Another HR person noted that they had run a particular recruitment process and that potential applicants had said *"it was too long-winded, and they wouldn't apply for it".* This was supported by another nurse manager, who said *"You get somebody who is dying to get into post and get started and it just goes on and on and on and then. It [the job] might be only temporary."* In response to a question of whether the process was easy or difficult, one nurse manager suggested that while there "*is a lot of paperwork, it is not necessarily arduous*". While one nurse who had recently been recruited into the post highlighted some difficulties in the communication around the process, in general this did not arise in the interviews with participants.

Agency nurses

It was reported that in some areas they were allowed to engage agency staff, while waiting for vacancies to be filled. Whereas one manager noted *"they're excellent",* it was also highlighted that they are not *"being inducted",* and that they are "*not permanent and that they may be somewhere else next week",* which has a negative impact on continuity of care, as well as creating addition responsibilities for others. Another participant noted that for some, agency nursing is in addition to another full-time substantive post and consequently, they are not always available at times they are needed.

Recruitment of nurses from overseas

A small number of comments were made about the recruitment of overseas nurses and particularly the additional challenges arising from this. It was noted that the process is *"incredibly expensive", "requires a long period of adaption"* and takes a very long time. Another director noted that some jurisdictions do not have nurses with the experience needed by the Irish services.

Retention of new graduates

The benefits of being able to offer a clear pathway to graduates and to indicate to them, at an early stage in their undergraduate education, that posts will be available was highlighted. In one hospital, a number of different initiatives were underway to retain new graduates, which included:

- Developing a booklet in terms of career pathways, for what is available for ... within the hospital.
- Speaking with the undergraduates, throughout their education, about career pathways and where they would see themselves *"not alone in four years' time"* but also in the longer term.
- Meeting with them regularly throughout their training and internships and giving them opportunities to *"sort of dabble here, dabble there"* and try out different experiences to identify where they might be most interested.
- Providing assistance with the application form and giving them *"interview prep".*
- Asking them to identify options of where they would like to be placed and then, in so far as is possible, placing them where they want to go. It was noted that this meant some new graduates went *"straight into theatre, going straight into the emergency department, straight into paediatrics",* which would not have happened before.
- Putting a graduate programme in place where new nurses were mentored and supported.

This nurse highlighted:

> *It actually has paid off, um, dividends because our retention rate of our new grads, um, one year post registration … for the last two years [we] have almost had 100% retention with one year post registration.*

Challenges in recruiting into nurse management roles

A number of people highlighted challenges in recruiting nurse managers and it was noted that there is a huge difficulty in this area, particularly in CNM 3, ADON, and director posts. Difficulties in filling senior posts in care of the elderly were highlighted as particularly problematic and it was suggested that *"A lot of nurses don't want the director of nursing posts in an older person's service."* Two main reasons were identified. First, the challenges in trying to manage a service in the context of not being able to get enough staff and second, the requirement for managers to be the *"person in charge"*. One senior manager noted:

> *If they were managing a full complement of staff, it may be a bit less arduous but there's an awful lot of pressure on those management grades then because of that, and it's very unattractive for that reason.*

This was also supported by another manager in a community hospital, who noted that the main vacant posts in their hospital were CNM posts, which nobody is willing to take it on because of the shortages of staff nurses and the lack of resources.

Person in charge

A number of participants noted that being identified as a *"person in charge"* for the purpose of HIQA inspections was very onerous and challenging, and that this is also an issue in recruiting managers. One person noted:

> *The amount of paperwork, the amount of keeping things up to date, the amount of policies to make sure that there are staff training, training needs analysis, service users assessments and needs ... It's huge. I mean, the regulations are there … Down to budgets, down to transports, everything. It's huge … It's very difficult to get good CNM 2s who are at person in charge level per HIQA regulations … some have reverted to staff nurses.*

Another person noted that "*It places a level of responsibility that wasn't there prior to the regulator being as active as they are now.*" Another manager noted that despite the additional responsibilities and pressures, there is no remuneration for taking on this post.

Competing opportunities

It was suggested that the retention and recruitment challenges being experienced in Ireland take place in the context of a global shortage of nurses and there are many competing opportunities both in Ireland and abroad. A number of nurses, however, drew attention to differences in supports available in the UK to nurses, compared with those in Ireland. A recently qualified nurse who, at the time of the interview, was in the process of moving to the UK, spoke about having a mentor and a period of induction in her new role. A nurse manager said: *"It's their (candidates) market … They can pick and choose, and they play one off the other."*

This issue was also highlighted by other participants in the study, who noted there are more attractive opportunities for nurses outside the HSE. Some of these related to *"pull factors"* such as location, pay and conditions and non-frontline posts, while others related to *"push factors*", particularly the unattractiveness of some settings over others.

An increase in non-frontline nursing posts (clinical, but not necessarily nursing) that have come into the system was also highlighted as potentially problematic for retaining and recruiting nurses. Areas identified included audit and research posts. It was noted that while *"It's a fantastic opportunity for people, they're leaving frontline nursing because they see these jobs as no night-duty, Monday to Friday, and they're getting a CN 2 or CN 3 salary scale."*

Pay, terms and conditions in the non-HSE sector

A number of managers highlighted the opportunities available to nurses in the private sector and it was noted that these settings were more attractive to nurses than the public sector. It was also noted that previously, nurses working in specialist areas might not have had opportunities to practise their specialisms in the private sector, but that this had changed, as many private hospitals have extended their range of services, thus making this sector attractive to these nurses. It was suggested that remuneration was the main attraction for these nurses moving away from the HSE sector. One manager noted:

> *Private hospitals offer quite a significant sum of money to attract people to take up a job in the private hospitals.*

Another director of nursing drew attention to this issue in respect of attracting nurses to work with people with an intellectual disability. This director highlighted the availability of better-paid work in the voluntary sector, noting:

> *Services all over the country, from Dublin and other parts of the country, and every one of them are struggling to get nurses trained in the area of intellectual disability. It's a huge problem … When I've followed it up, they've gone and left*

the country. Now there is a number of private providers, from [another jurisdiction], setting up services … They're actually paying the ID nurses at better rates of the pay than the HSE. So, they're even losing nurses to those groups as well and they're really struggling.

Others commented on hospitals in the UK that were actively recruiting nurses, and one director of nursing noted:

Another issue that we have, is that [name of UK based specialist hospital] aggressively recruit. This year, nearly all of our interns have been offered lucrative contracts in [that hospital]. Free accommodation, and then subsidised accommodation, and promotion roles in six months of going over.

Failure to recognise experience gained in the private sector was also highlighted, in terms of pay and conditions. It was noted, for example, that only public-sector experience gained by nurses is recognised for the purpose of increments, and this means that a nurse working in a private sector, who comes to the public sector, starts at the lowest end of the scale. The following example was given:

If I'm an occupational health nurse and I'm a very experienced, just say I am, a very experienced occupational health nurse, 10 years working in a private occupational health company and I'm expected to come in at say the start of the scale. That makes no sense.

Summary of key issues relating to recruitment

While many of the issues arising in this study related to the retention of nurses, some issues in respect of recruitment also arose. Participants in the study spoke of a long and drawn-out approach to the recruitment process, which made it difficult for individuals to remain interested in the job. A small number of comments were also made about the recruitment of agency staff and nurses from overseas. Specifically, it was noted that nurses are more willing to work for agencies because of the flexibility of their hours and the higher levels of pay. In respect of the recruitment of overseas nurses, the focus was on the length of time the process takes and on the pool of nurses available to come to Ireland.

It was suggested that much more could be done to retain new graduates in the system and a number of potential interventions were highlighted. These ranged from adopting a focused approach from the beginning of their education, all the way through to ensuring that newly qualified graduates are given an opportunity to work in an area that interests them.

Two main challenges were identified in respect of recruiting managers. First, it was noted that nurses opting for promotion may actually be worse off in terms of their take-home pay, due to the combination of a small increase in salary and a loss of other allowances. Second, it was noted that the role of *"person in charge"* of a designated service was not attractive, given the level of responsibility and the fact that it did not have any additional salary.

The final issue arising in respect of recruitment related to the alternative opportunities available to nurses both within and outside the health system. Specifically, it was noted that private hospitals and other non-HSE organisations are in a position to provide better pay and conditions for nurses, and this places the HSE at a disadvantage in the recruitment of personnel.

Conclusions: study with nurses

Findings arising from qualitative and quantitative data drawn from a survey completed by 3,769 nurses and interviews undertaken with nurses and nurse managers (n = 44) and HR personnel (n = 6) highlight a number of issues relevant to career and job intentions. The results indicate that 36% of nurses intended to leave their job in the next two years. Conclusions presented below highlight factors that may be driving nurses' job and career intentions.

Conclusions: positive aspects of the work and the organisation

Nurses are highly engaged in their work, perceive their work to have a significant impact on the lives of others, and have positive views of their co-workers.

The highest index score was identified in respect of impact (overall index score is 82%) with 92% of nurses taking part, for example, either agreeing or strongly agreeing that their work makes a positive difference in patients' or clients' lives. This finding was also reflected in the qualitative findings where nurses spoke about being affirmed and valued by their patients and clients and, their co-workers. Perceptions of co-workers is recorded as the second highest index score (77%) with 82% of respondents reporting they are happy to work with their co-workers. Findings from interviews also highlighted nurses' enjoyment of the profession of nursing, particularly where they were working in areas where they have a strong interest, or, in situations where they had undertaken additional study and had opportunities to use the skills and expertise they had developed. Quantitative findings also showed that nurses are highly engaged in their work and almost 80% report being proud of the work they do.

Conclusions: workload and staffing levels

Nurses perceive a significant increase in workload and work demands arising from patient complexity and numbers, along with increased administrative and regulatory demands. This is coupled with inadequacies in staffing.

Many examples were given of demands arising from the number, turnover and complexity of patients/service users as well as from regulatory and documentary requirements. Participants reported that these demands have increased to the extent that they have become particularly acute over the last 3-5 years. This increase in demands is occurring in the context of limited and inadequate staffing levels and several examples were given of workplaces where fewer nurses now worked despite an increase in the number of patients.

Negative consequences as a result of this increased workload were identified for both nurses and patients.

The consequences of increased workload and inadequate staffing for nurses are burnout, responsibility overload, negative working relationships, being fearful of making mistakes, working long hours, sometimes unpaid, and limited flexibility in working time. Consequences for patients include a lower level of service quality and safety.

There is evidence that workload and staffing issues are influencing nurses' career intentions. Among nurses who indicated an intention to leave their current job over the next two years

(36%), problematic staffing levels (66%) and an excessively demanding work environment (52.5%) were the most frequently cited reasons for this intention.

Conclusions: pay

Satisfaction with pay had the lowest index score of any questionnaire measure (23%), and dissatisfaction with pay was the most prominent issue arising in the qualitative data. This emerged in four respects: overall pay levels, inequities in pay, payment of nurse managers, and unpaid working time. Work location exacerbates negative views on pay in some instances.

The following issues were highlighted in the qualitative findings in terms of pay for nurses:

- ***overall pay levels*** are considered to be too low and the gap between salary and take home was identified as too great.
- ***inequities in pay*** between nurses and a range of other workers were noted. These include:
    - health care assistants (who it was suggested had a higher starting salary despite not having a similar type training or professional responsibility),
    - other healthcare professionals, particularly allied health professionals (who it was suggested start off with a salary that is 10,000 more than a qualified nurse), and
    - other non-healthcare workers (e.g. teachers).
- ***nurse manager pay*** was identified as very problematic and it was noted that on promotion many nurse managers took a reduction in their pay because of the loss of specialist and / or location allowances as well as loss of shift work pay.
- ***unpaid working time*** was common: the quantitative data shows that more than one-fifth (22% of respondents) reported working overtime without pay at least twice a week. This was highlighted as a problem in the interviews with nurses, particularly where time in lieu was not possible due to the busyness of the workplace.
- ***location,*** particularly being based in Dublin where rents are much higher than elsewhere was highlighted as a pay-related issue.

Conclusions: being involved, feeling valued and supported

Not being valued, involved, listened to or having issues responded to as well as not having sufficient supports were identified in the qualitative data as sources of dissatisfaction. These are also reflected in the quantitative data where information sharing (index mean 29%) and perceptions of manager (index mean 44%) account for two of the lowest four index scores in the study.

More than three quarters of respondents (76%) agreed that "*changes are made without talking to the people involved in them*" and a similar proportion agreed that "*there are often breakdowns in communications*" (74%). Eighty-one percent agreed that "*decisions are frequently made over their heads*". In terms of management support, less than one quarter of respondents (23%) agreed that "*to a large extent*" their manager gives a high priority to job satisfaction.

Conclusions: training and promotion

Nurses felt that work demands overrode training opportunities.

Just over half (54%) of nurses agreed they received the training they needed to do their job well. Commentary relating to this issue generally refers to being unable to undertake continuous professional development due to the busyness of the workplace.

Promotional opportunities were not embraced due to concerns over increased workload that is not matched by financial gain, and perceptions that the promotion process is not as fair or transparent as it could be.

Only 30% of nurses indicated they would apply for a suitable promotional opportunity in their organisation. The two most common reasons given for not applying were:

- it would not be worth it financially (26%) (this is linked with the pay for managers issue noted previously); and
- concerns about the workload / responsibility (25%).

In the qualitative data, concerns are also raised about the promotional process, particularly at local level, where it is suggested it is not always transparent. This is also reflected in the very small proportion (16%) of respondents who agreed with the statement *"my organisation has a clear and fair promotion process".*

Conclusions: joint influences on job and career intentions

A total of 25 individual, employment, structural and perceptual / attitudinal characteristics were examined simultaneously in multiple regression models to establish which were the most important predictors of three outcomes – intent to stay or leave current job, organisation or nursing profession.

The results of these regression models indicate that the following are of key importance in understanding nurses' job and career intentions:

- *Age* (younger respondents are more likely to intend to leave)
- *Time taken to get to work* (those who travel longer distances are more likely to intend to leave)
- *New recruit status* (new recruits are more likely to intend to leave)
- *Global job satisfaction* (lower levels are associated with intention to leave)
- *Levels of burnout* (higher levels are associated with intention to leave)
- *Levels of organisational commitment* (lower levels are associated with intention to leave)
- *Training and promotional opportunities* (lower levels are associated with intention to leave).

An implication of these results is that certain groups in the nursing population are more likely to intend to leave their job, organisation or profession, and that these groups may benefit from targeted policy intervention. For example, a regression analysis of newly-recruited nurses showed that a mismatch between job expectations and on-the-job experiences is an important factor in predicting their intention to leave the organisation.

Further analysis that focused on perceptions of the job and the organisation confirmed the importance of global job satisfaction, organisational commitment and burnout in predicting nurses' job intentions, and showed that different aspects of the work and the organisation underpin or drive these three elements.

- global job satisfaction is driven by: satisfaction with pay, autonomy, impact, effort-reward ratio and responsibility overload

- organisational commitment is driven by: training and promotion opportunities, autonomy, impact, perceptions of co-workers and information sharing
- burnout is driven by: satisfaction with pay, responsibility overload, effort-reward ratio and autonomy.

An implication of this is that efforts to improve drivers of global job satisfaction, organisational commitment and burnout may lead to improvements in these three important aspects of work, which in turn may impact on nurses' job and career intentions.

Section 5: Findings from the study with consultant doctors

This section presents the findings from the study with consultant doctors.

Quantitative results are presented in two main sections:

- **The first section** includes both descriptive and bivariate analysis. It presents the results for each of the questionnaire indexes, grouped according to whether they are primarily related to the perceptions of the job, or perceptions of the wider organisation, as per the conceptual framework. This first section also includes a consideration of respondents' perceptions of recruitment and job expectations for those who were recruited in the past two years. For each index, the overall score is presented, how each index is related to other indexes is described, and significant differences across important demographic, employment and structural groups are highlighted. Where possible, comparisons with other recent studies (mainly the CSEES 2017 study) are presented. However, it should be borne in mind that the aims, design and samples of studies are rarely exactly comparable. As well as the questionnaire indexes, questionnaire items that assess level of job demands (such as amount of overtime normally worked) are presented.

- **The second section** is based on the regression analysis which focuses on what we regard as the key outcomes in this study: intention to leave current job, likelihood of leaving current organisation, and likelihood of leaving the profession. In these analyses, a wide range of independent variables have been incorporated, grouped into two major 'blocks': the first block incorporates individual, employment and structural characteristics and as such may be considered as comprising 'fixed' elements of the issues under investigation. The second block incorporates respondents' perceptions of the job and the organisation and includes both 'drivers' and 'outcomes' as listed in the Terms of Reference. The regression analyses therefore allow an examination of how the outcomes vary across perceptual elements of respondents' work, after adjusting for important individual, demographic and structural characteristics. Note that the Appendix provides an alternative analysis of intention to leave the organisation which provides additional

insights into how the indexes are related both to one another and to the outcome. This is referenced in the discussion of the regressions.

- **The third section** presents the results of the qualitative findings based on the analysis of interviews with stakeholders. In keeping with an interpretive paradigm, these are presented according to the broad themes that emerged. These findings, however are aligned with the conceptual framework in so far as the broad structure adheres to the structure of variables related to the job and organisation and those related to intention to stay / leave.

Part 1: Findings from the survey of consultant doctors

This section presents the findings from the consultants' study and includes quantitative findings relating to the work and work context, the organisational context, and intention to stay in or leave their current job, organisation or medical profession.

For each of the questionnaire indexes in the survey:

- A brief description of the index is provided. Indexes are expressed as percentages: See Section 2 (Methodology) for more information on how the indexes were computed.
- A graph showing responses to individual items on the index is presented. (If more than 5% of respondents did not answer the question, this is noted below the graph.)
- A summary of subgroup differences is presented, highlighting statistically significant differences in index means between groups.
- All data underlying these descriptions, along with index reliabilities, are in the data compendium.
- The Appendix (Table A2) presents the intercorrelations between the indexes for readers who are interested in how these indexes are related to one another.

All analyses are weighted to provide nationally representative estimates, on the basis of job category and gender.

The end of the chapter presents key themes emerging from the interview data relating to the consultants.

Issues relating to the job

This section presents the findings from the survey about:

- Engagement
- Autonomy
- Responsibility overload
- Impact
- Job satisfaction specific
- Job satisfaction global
- Burnout
- Effort-reward ratio.

Engagement

This index measures the extent to which doctors feel enthusiastic and inspired by their work.

Overall findings

The overall mean engagement score for consultants is 76%, indicating high overall engagement. For example, 83% of consultants agreed that they are proud of the work that they do.

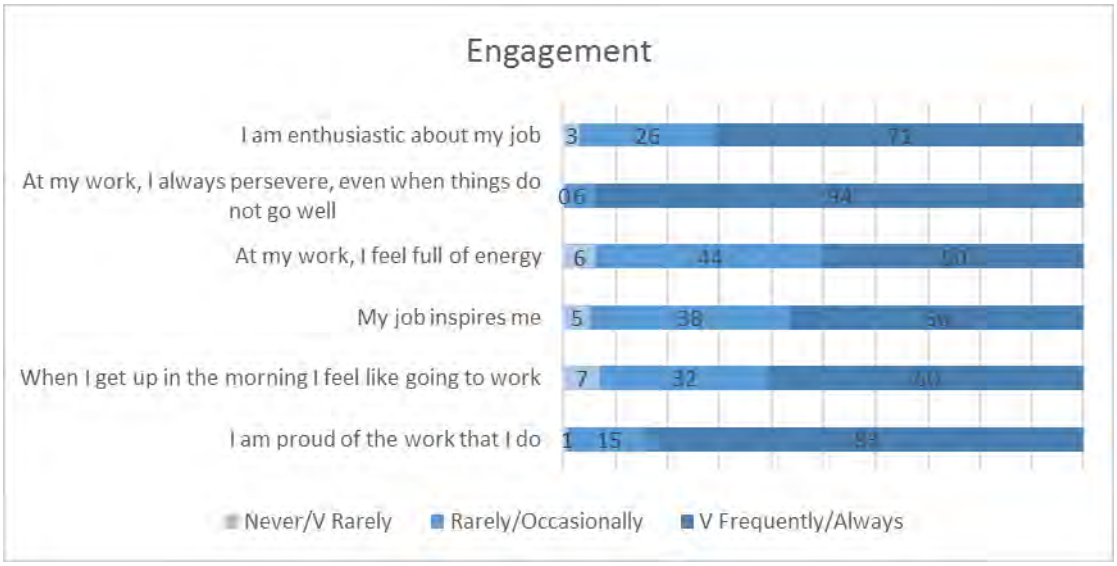


Figure 36: Engagement

Significant findings

- Engagement was significantly higher among consultants who obtained their initial qualification in another EU country (82%) than consultants obtaining their initial qualification in the Republic of Ireland (74%) or a non-EU country (74%).
- Consultants working part-time had significantly higher engagement scores (82%) than those working full-time (75%).
- Hospital consultants had significantly lower engagement scores (75%) than other consultants (80%).
- Consultants who intended to leave their current job in the next two years had significantly lower engagement scores (71%) than consultants who did not intend to leave (78%).
- Engagement scores did not differ significantly across consultants' age groups, gender, geographic region, or sector (public, private or both public and private).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for Employee Engagement of 72%.

Autonomy

This index measures doctors' perceptions of freedom and independence in their day-to-day work.

Overall findings

The overall mean on the autonomy index for consultants is 60%, indicating moderate to high overall autonomy. For example, 56% of consultants agreed that they can decide on their own how to go about doing their work.

Figure 37: Autonomy

Significant findings

- Autonomy was significantly lower among consultants who obtained their initial qualification in a non-EU country (53%) than among consultants obtaining their initial qualification in the Republic of Ireland (60%) or a non-EU country (64%).
- Female consultants reported significantly lower autonomy scores (56%) than males (61%).
- Consultants working part-time had significantly higher autonomy scores (64%) than those working full-time (59%).
- Consultants working in private settings had significantly higher autonomy scores (74%) than those working in public settings (57%) or across both public and private settings (59%).
- Hospital consultants had significantly lower autonomy scores (58%) than other consultants (65%).
- Consultants who intended to leave their current job in the next two years had significantly lower autonomy scores (50%) than consultants who did not intend to leave (64%).
- Autonomy scores did not differ significantly across consultants' age groups or geographic region.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for autonomy among civil servants of 61%.

Responsibility overload

This index measures the extent to which doctors feel a sense of responsibility overload in their job.

Overall findings

The consultants' mean responsibility overload score is 30%, indicating low overall responsibility overload. For example, 38% of consultants agreed that too much is expected

of them in their job. Note that higher scores on this measure indicate a greater sense of overload.

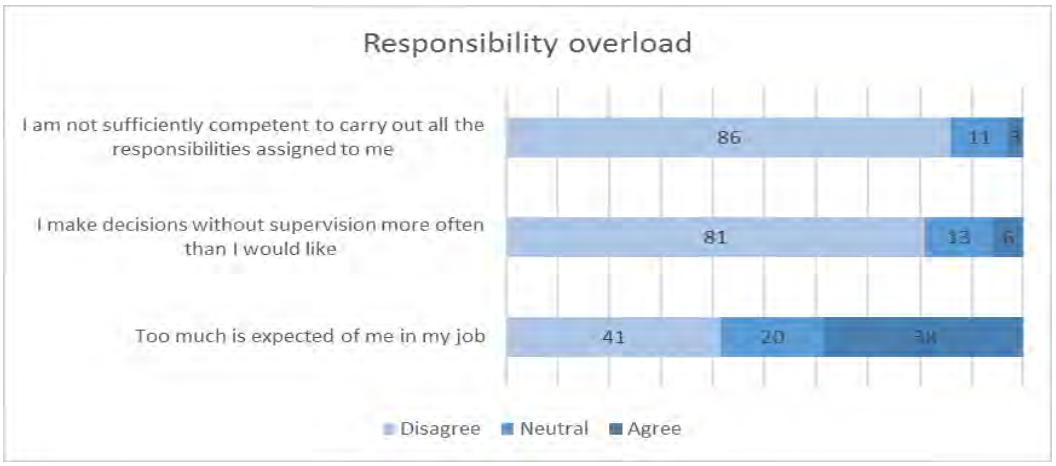


Figure 38: Responsibility overload

Significant findings

- Responsibility overload scores were significantly higher among consultants aged 31-40 (36%) than among consultants aged 51 or older (28%) and did not differ from the scores of consultants aged 41-50 (32%).
- Females reported significantly higher responsibility overload (34%) than males (29%).
- Consultants working in private settings had significantly lower scores on this index (21%) than consultants working in public settings (33%). The responsibility overload score of consultants working in both public and private settings (29%) did not differ from that of consultants working in public settings.
- Responsibility overload scores did not differ significantly across consultants' initial country of qualification, geographic region, full- / part-time status, or setting (hospital / other consultant).

Impact

This index measures the extent to which doctors believe that their work has a significant impact on the lives of others.

Overall findings

The mean on the impact index for consultants is 85%, indicating high overall perception of impact. For example, 96% of consultants agreed that their work makes a positive difference in patients' or clients' lives.

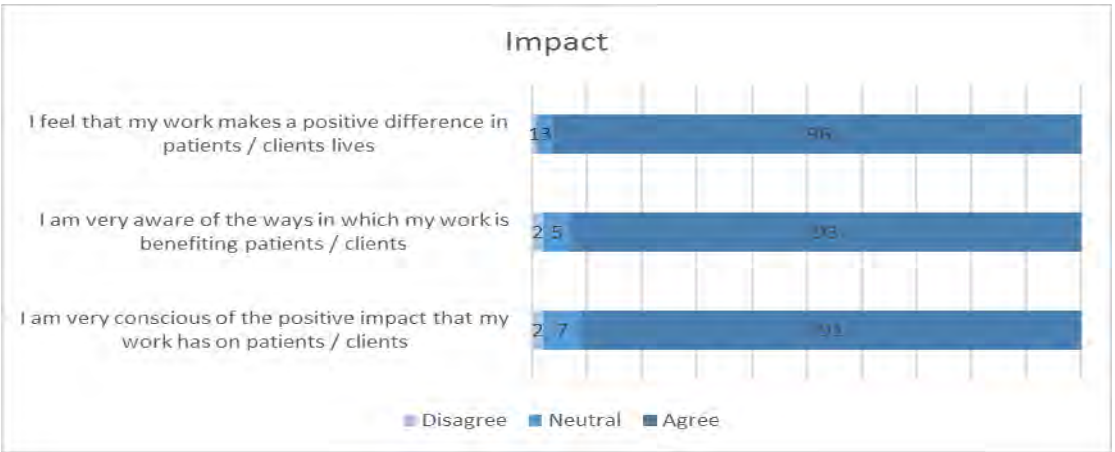


Figure 39: Impact

Significant findings

- Consultants aged 50 or older had the highest mean impact score (86%), followed by those aged 41-50 (85%) and 31-40 (80%), with the lowest impact score among consultants aged 30 or under (78%). The impact score of consultants aged 31-40 was significantly lower than the scores of consultants aged 51 or more.
- Consultants working in private settings had an impact score (91%) that was significantly higher than that of consultants working in public settings (84%), while the impact score of consultants working in both public and private settings (86%) did not differ significantly from that of consultants working in public settings.
- Hospital consultants had significantly lower impact scores (85%) than other consultants (88%).
- Impact scores did not differ significantly across country of initial qualification, gender, geographic region, or full- / part-time status.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for Employee Impact of 70%.

Job satisfaction specific

This index measures doctors' level of satisfaction with specific aspects of their job (physical working conditions, flexibility of hours, physical demands, quality of care).

Overall findings

Consultants had a mean on the job satisfaction specific index of 49%, indicating moderate levels of satisfaction with specific aspects of the job. There is some variation in responses to individual items. For example, 55% of consultants reported that they were satisfied with the quality of care given to patients / service users, while 24% were satisfied with the deployment of support staff.

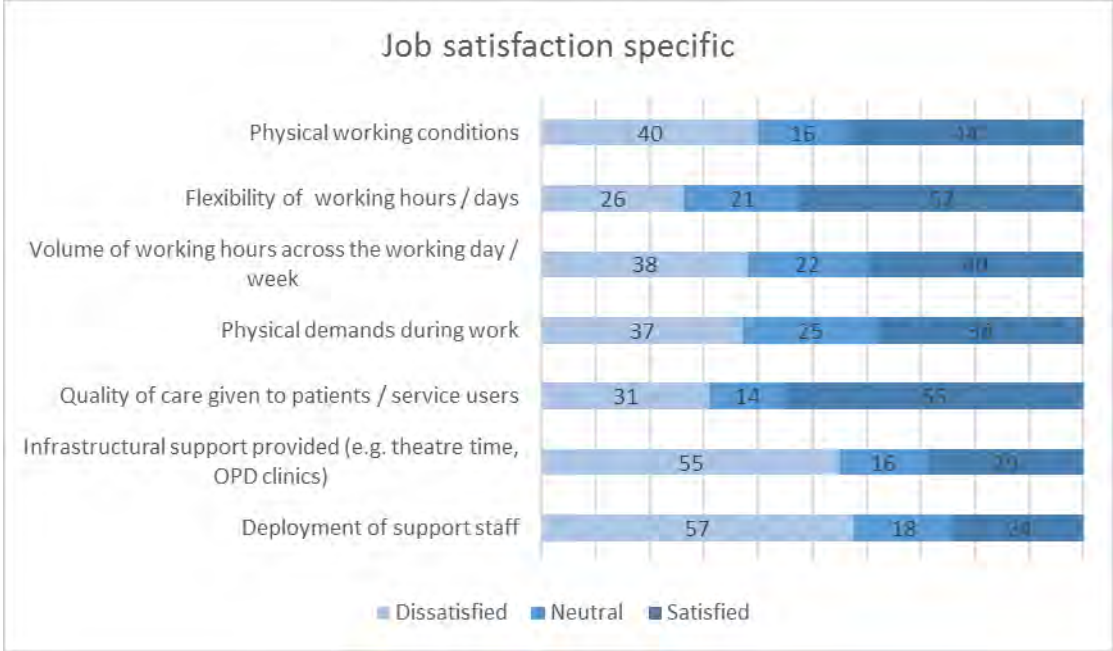


Figure 40: Job satisfaction specific

Significant findings

- Consultants who obtained their initial qualification in Ireland had significantly higher job satisfaction specific scores (53%) than those obtaining their initial qualification in another EU country (45%) or non-EU country (51%).
- Females had significantly lower specific job satisfaction scores (44%) than males (48%).
- Consultants working part-time had significantly higher scores on this index (56%) than those working full-time (47%).
- Consultants working in private settings had significantly higher job satisfaction specific scores (70%) than those working in public settings (46%) or in both public and private settings (47%).
- Hospital consultants had significantly lower specific job satisfaction scores (46%) than other consultants (60%).
- Consultants who intended to stay in their current job for the next two years had significantly higher levels of specific job satisfaction (51%) than consultants who intended to leave their job in the next two years (42%).
- Specific job satisfaction did not differ significantly across age group or geographic region.

Job satisfaction global

This index measures doctors' general job satisfaction.

Overall findings

The global job satisfaction index mean for consultants is 58%, indicating moderate to high levels of overall job satisfaction. For example, 57% of consultants agreed that, all things considered, they were satisfied with their current job.

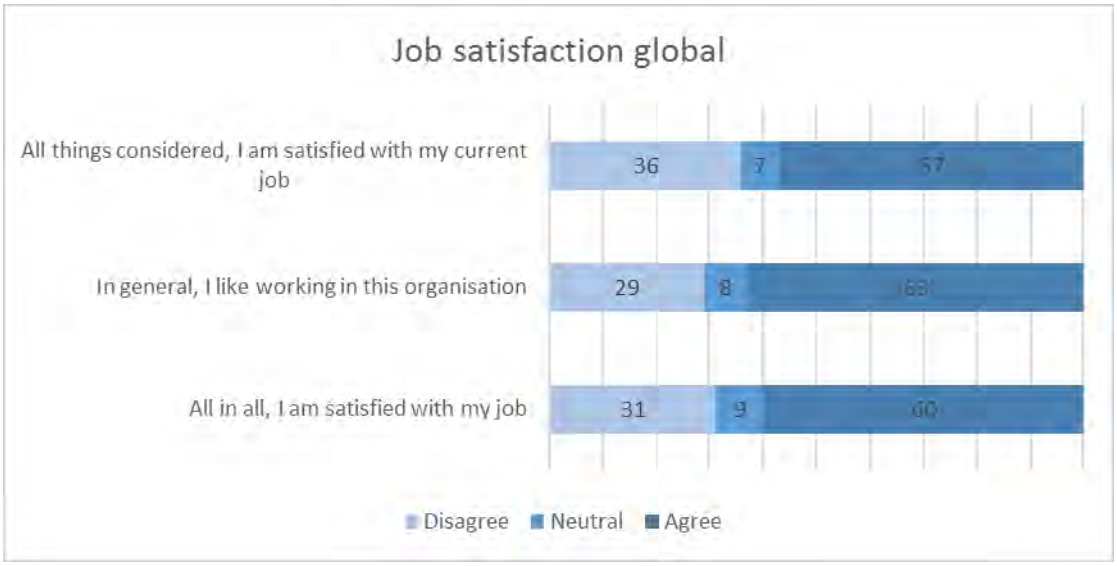


Figure 41: Job satisfaction global

Significant findings

- Consultants working part-time had significantly higher scores on this index (67%) than those working full-time (56%).
- Consultants working in private settings had significantly higher global job satisfaction scores (76%) than those working in public settings (53%) or in both public and private settings (60%).
- Hospital consultants had significantly lower global job satisfaction scores (55%) than other consultants (69%).
- Consultants who intended to stay in their current job for the next two years had significantly higher levels of global job satisfaction (64%) than consultants who intended to leave their job in the next two years (44%).
- Global job satisfaction did not differ significantly across age group, country of initial qualification, gender, or geographic region.

Burnout

This index measures doctors' feelings of work-related burnout. Higher scores indicate higher levels of burnout.

Overall findings

Consultants had a mean of 51% on the burnout index, indicating moderate levels of overall burnout. For example, 31% of consultants always or often felt exhausted in the morning at the thought of another day at work.

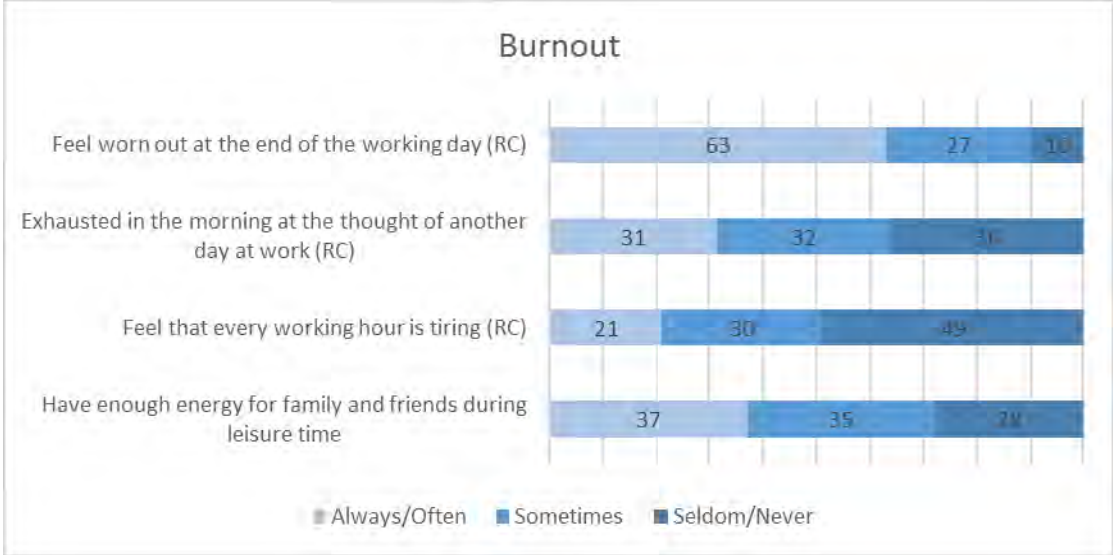


Figure 42: Burnout

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- Females had significantly higher burnout scores (57%) than males (49%).
- Consultants working part-time had significantly lower scores on this index (45%) than those working full-time (52%).
- Consultants working in private settings had significantly lower burnout scores (44%) than those working in public settings (54%) or in both public and private settings (50%).
- Hospital consultants had significantly higher burnout scores (52%) than other non-hospital consultants (47%), including, for example, those working in public health and community settings.
- Consultants who intended to stay in their current job for the next two years had significantly lower levels of burnout (48%) than consultants who intended to leave (58%).
- Burnout scores did not differ significantly across age group, country of initial qualification, or geographic region.

Effort and reward

These indexes measure the extent to which doctors find reward in their work, and the amount of effort they put in to their work. In this report, the two indexes are combined to form the effort-reward ratio. Higher scores on this ratio mean that more effort is put in, relative to reward received, and vice versa.

An effort-reward ratio of 1 means that respondents reported putting the same amount of effort in as rewards experienced. A ratio greater than 1 indicates that respondents reported expending more effort than rewards experienced, and a ratio of less than 1 indicates that

respondents reported receiving more rewards than effort expended. Therefore, higher ratios indicate more negative outcomes[10].

Overall findings

The first three items on the graph below measure effort, while the remaining seven measure reward. Consultants reported moderate levels of effort. For example, 39% agreed that they had constant time pressure and a heavy workload. Their responses to the reward items varied. For example, 17% agreed that their promotion prospects were poor, while only 6% agreed that considering all their efforts and achievements, their salary / income was adequate. The mean effort-reward ratio for consultants is 1.56. Ratios over the value of 1 indicate more effort put in than reward received.

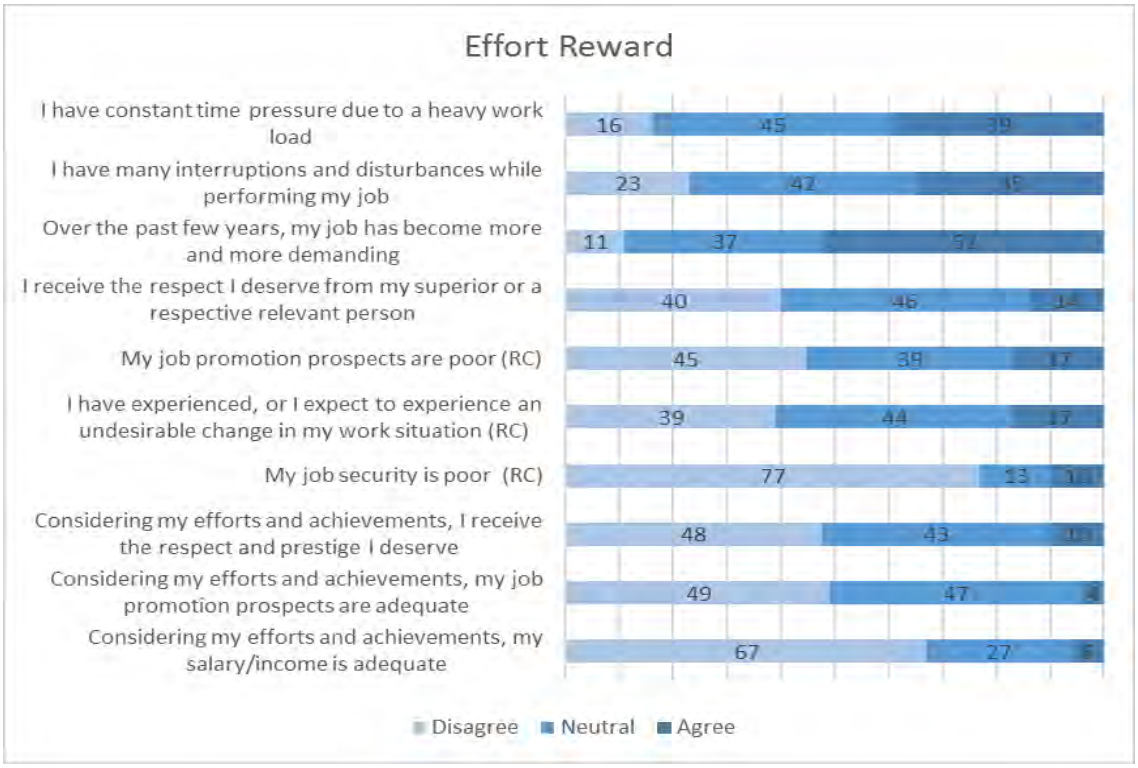


Figure 43: Effort reward

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- Consultants who obtained their initial qualification in a non-EU country had a significantly higher effort-reward ratio (1.81) than those obtaining their qualification in Ireland (1.53). The effort-reward ratio of consultants qualifying in another EU country (1.61) did not differ from that of consultants qualifying in Ireland.
- Consultants who intended to leave their current job in the next two years had an effort-reward ratio (1.95) that was significantly lower than consultants who intended to stay (1.37).

[10] There are seven effort items and three reward items. Therefore, effort-reward ratio = Effort/[2.333*Reward] (See http://www.uniklinik-duesseldorf.de/fileadmin/Datenpool/einrichtungen/institut_fuer_medizinische_soziologie_id54/ERI/PsychometricProperties.pdf)

- Effort-reward ratio did not differ significantly across age group, gender, geographic region, full- / part-time status, sector or setting (hospital / other consultant).

Benchmark: The Royal College of Physicians national study of wellbeing of hospital doctors in Ireland reported the effort reward-ratio was 1.4.

Issues relating to the organisation

This section presents the findings from the survey about:

- Satisfaction with pay
- Paid and unpaid overtime / time in lieu and working schedule
- Information sharing
- Organisational commitment
- Perceptions of co-workers
- Perceptions of manager
- Perceived quality of workplace
- Recruitment process (new recruits only)
- Job expectations (new recruits only)
- Intention to leave organisation
- Intention to leave medical profession.

Satisfaction with pay

This index measures the extent to which doctors are satisfied with their level of pay. Consultants working in the private sector only (10.6%) were not asked these questions.

Overall findings

The mean for consultants on the satisfaction with pay index is 31%, indicating low overall satisfaction. For example, 67% of consultants disagreed that their pay adequately reflects their performance.

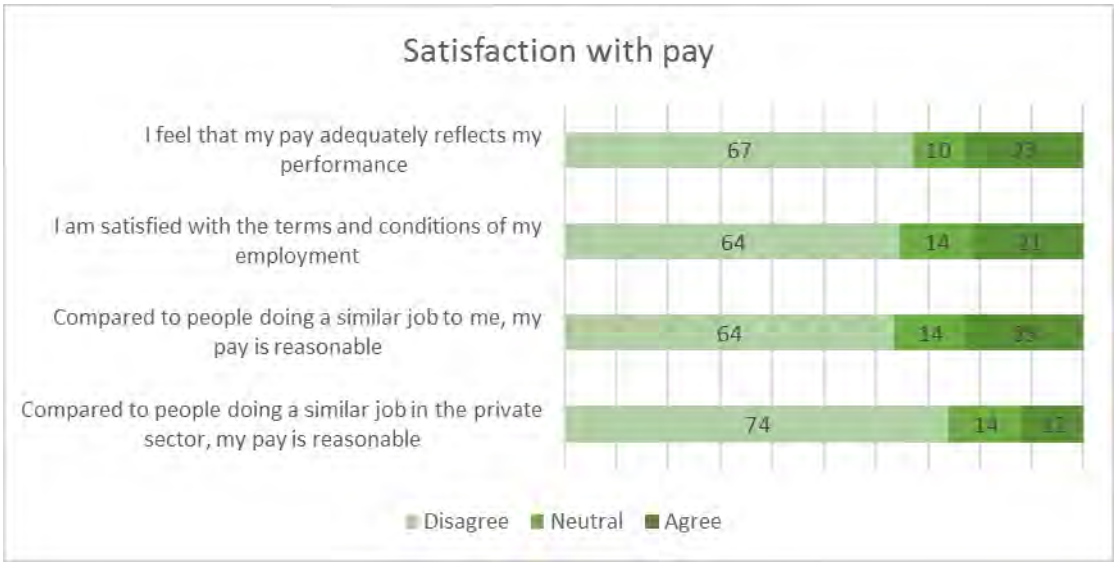


Figure 44: Satisfaction with pay

Note. Respondents working only in the private sector were not asked this question (10.6% of consultants).

Significant findings

- Consultants who obtained their initial qualification in another EU country reported significantly higher satisfaction with pay (42%) than those obtaining their initial qualification in another EU country (29%) or Ireland (29%).
- Consultants working part-time had significantly higher satisfaction with pay scores (38%) than consultants working full-time (29%).
- Hospital consultants had significantly lower pay satisfaction scores (29%) than other consultants (37%).
- Consultants who intended to stay in their current job for the next two years had significantly higher levels of satisfaction with pay (33%) than consultants who intended to leave (23%).
- Satisfaction with pay did not differ significantly across age group, gender, geographic region, or sector (public or both public and private).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall scale mean for satisfaction with pay among civil servants of 46%.

Paid and unpaid overtime and working hours

In addition to satisfaction with pay, consultants were asked about the frequency with which they worked overtime with pay, without pay, and with time in lieu.

- It was common for consultants to work overtime without pay: 61% did this once a week or more often.
- About 36% of consultants worked overtime with pay once a fortnight or more often.
- It was less common for consultants to work overtime with time in lieu. About 83% indicated that they did this very rarely or never (Table 32).

Table 32: Frequency of overtime with pay, without pay, and with time in lieu: consultants

Consultants	Very frequently (about twice a week or more often)	Frequently (about once a week)	Occasionally (about once a fortnight)	Rarely (about once a month)	Very rarely (about once every 3 months)	Never	Total
Overtime with pay	12.6	14.5	9.2	12.5	7.8	43.4	100.0
Overtime without pay	41.5	19.0	9.9	5.6	5.3	18.7	100.0
Overtime with time in lieu	2.8	2.4	5.8	5.6	10.4	73.0	100.0

- Consultants also provided information on their working hours over the past four weeks (Table 33). Daytime work (8am-8pm) was most frequent, with 94% of consultants indicating that this was their usual work schedule.
- About one in five consultants (22%) had been on call in the past four weeks; 10% had worked evenings; and 14% had worked weekends.
- Fewer than 5% of consultants had usually worked shifts or nights over the past four weeks.

Table 33: Working schedule over the past four weeks (daytime, evenings, nights, weekends, shifts, on call)

Consultants	Usually (at least half of the days worked over the previous four weeks)	Sometimes (fewer than half of the days over the previous 4 weeks but at least one hour)	Never (on no occasion over the previous 4 weeks)	Total
Daytime past 4 weeks (8am-8pm)	93.5	5.5	1.0	100.0
Evening time past 4 weeks (finish 8pm-midnight)	10.3	55.9	33.8	100.0
Night time past 4 weeks (finish midnight-8am)	2.6	37.6	59.7	100.0
Saturday / Sunday past 4 weeks	14.1	64.0	21.9	100.0
Shifts past 4 weeks (usually changes in working schedule and unsociable hours)	4.5	15.4	80.0	100.0
On call past 4 weeks	22.3	57.3	20.4	100.0

Information sharing

This index measures doctors' perceptions of the extent to which information is shared and decisions are communicated.

Overall findings

Consultants had an overall mean of 32% on the information sharing index, indicating low levels of information sharing. For example, 62% of consultants agreed that people do not have any say in decisions which affect their work.

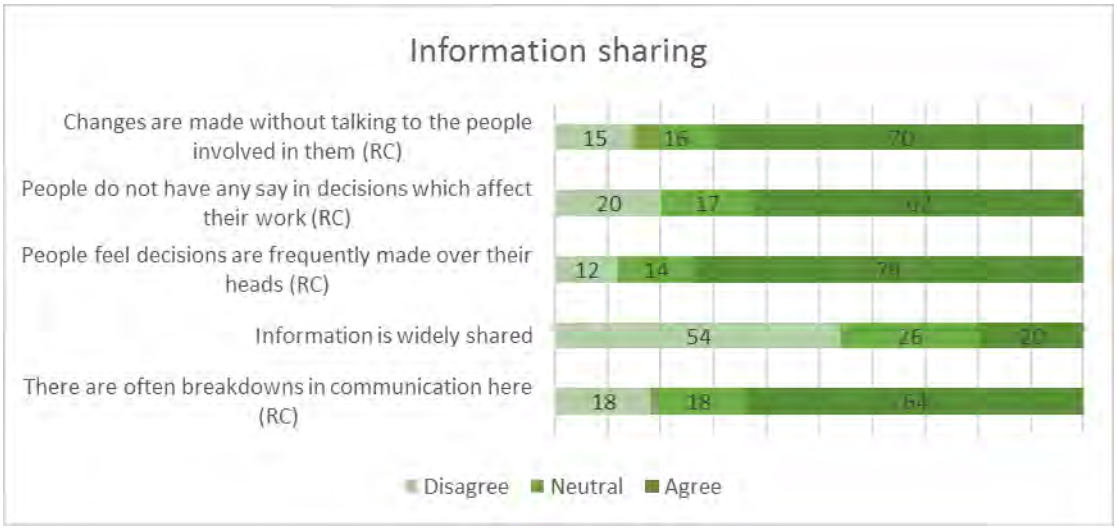


Figure 45: Information sharing

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- Females reported significantly lower levels of information sharing (27%) than males (32%).
- Compared to consultants working in Dublin (35%), consultants in the rest of Leinster, Cavan and Monaghan (27%) and Munster (27%) reported significantly low levels of information sharing. Information sharing scores reported by consultants working in

Connaught and Donegal (34%) did not differ from those reported by Dublin-based consultants.

- Consultants working part-time had a significantly higher information sharing score (37%) than those working full-time (31%).
- Information sharing scores of consultants in private settings (45%) were significantly higher than those of consultants working in public settings (29%) or in both public and private settings (31%).
- Consultants who intended to stay in their current job for the next two years reported significantly higher levels of information sharing (34%) than those intending to leave (26%).
- Levels of information sharing did not differ significantly across age group or country of initial qualification.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for involvement climate among civil servants of 38%.

Organisational commitment

This index measures doctors' level of commitment and sense of belonging to their current organisation.

Overall findings

The overall mean for consultants on the organisational commitment index is 49%, indicating a moderate degree of commitment. For example, 40% of consultants disagreed that they do not feel a strong sense of belonging to their organisation.

Figure 46: Organisational Commitment

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa. 5.4% of respondents did not answer this question.

Significant findings

- Organisational commitment was significantly higher among consultants based in Dublin (54%) than among those working in the rest of Leinster, Cavan and Monaghan (44%), Munster (45%) and Connaught and Donegal (45%).
- Organisational commitment scores were significantly higher among consultants working part-time (55%) than among those working full-time (48%).
- Consultants working in private settings had higher organisational commitment scores (55%) than those working in public settings (46%), and the organisational commitment score of consultants working in both private and public settings (50%) was not significantly different from that of those working in public settings.
- Consultants who intended to leave their current job in the next two years had an organisational commitment score (40%) that was significantly lower than that of consultants who intended to stay (53%).
- Organisational commitment scores did not differ significantly across age group, country of initial qualification, gender, or setting (hospital / other consultant).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall scale mean for commitment to the organisation among civil servants of 54%.

Perceptions of co-workers

This index measures doctors' perceptions of their colleagues.

Overall findings

The overall mean on the perceptions of co-workers index is 77%, indicating moderate to high positive perceptions. For example, 83% of consultants agreed that they are happy to work with their co-workers.

Figure 47: Satisfaction with co-workers

Note. 6.1% of respondents did not answer this question.

Significant findings

- Consultants working part-time had a significantly higher score on this index (81%) than consultants working full-time (76%).

- Hospital consultants had a significantly lower score on the perceptions of co-workers index (76%) than Other consultants (81%).
- Consultants who intended to leave their current job in the next two years had a perceptions of co-workers score (72%) significantly lower than that of those who intended to stay (79%).
- Perceptions of co-workers scores did not differ significantly across age group, country of initial qualification, gender, geographic region, or sector (public, private, or both public and private).

Perceptions of manager

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported a similar index mean (72%), using a different scale for social support among civil servants.

This index measures doctors' perceptions of their immediate managers.

Overall findings

The overall mean on the perceptions of manager index is 41%, indicating low to moderately positive perceptions. For example, 21% of consultants agreed that their manager gave them helpful feedback to improve their performance.

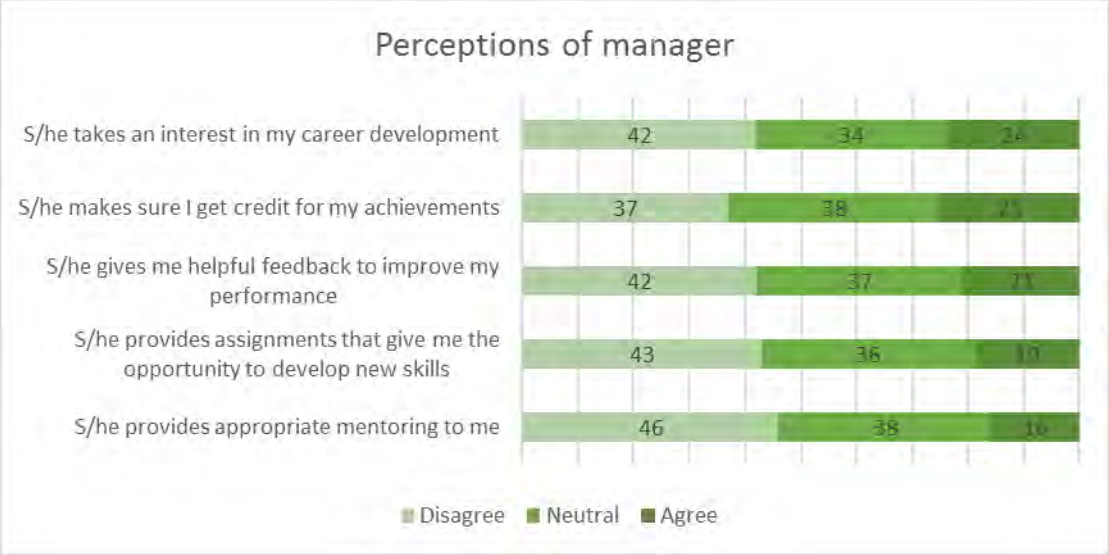


Figure 48: Satisfaction with manager

Note. 7.0% of respondents did not answer this question.

Significant findings

- Consultants who obtained their initial qualification in a non-EU country had a perceptions manager score (46%) that was significantly higher than that of consultants who qualified in Ireland (37%) or another EU country (39%).
- Consultants working full-time had a significantly lower perceptions of manager score (39%) than those working part-time (51%).
- Hospital consultants had a significantly lower score on this index (39%) than other consultants (51%).

- Consultants who intended to leave their current job in the next two years had a perceptions of manager score (37%) significantly lower than that of those who intended to stay (43%).
- Perceptions of manager scores did not differ significantly across age, gender, geographic region, or sector (public, private, or both public and private).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for manager support among civil servants of 61%.

Perceived quality of workplace

This index measures doctors' perceptions of characteristics of workplace that are relevant to high quality, safe health care.

Overall findings

The overall mean on the perceived quality of workplace index is 61%, indicating moderate to high positive perceptions. For example, 53% of consultants agreed that it nearly always meets its patients' or clients' care treatment goals.

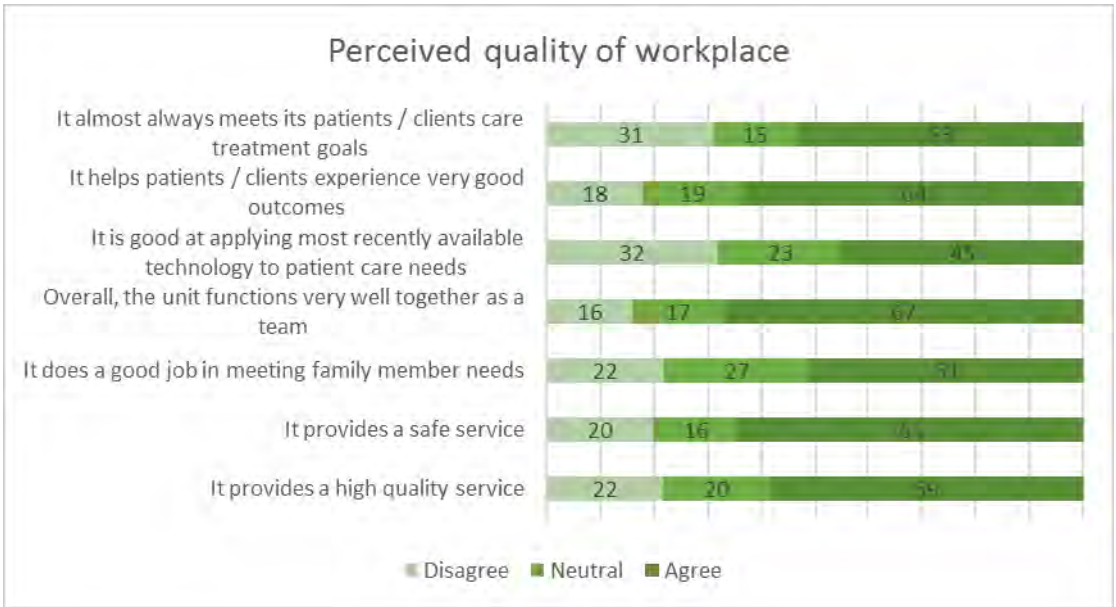


Figure 49: Perceived quality of workplace
Note. 5.5% of respondents did not answer this question.

Significant findings

- Consultants working in Munster had a perceived quality of workplace score (55%) that was significantly lower than that of consultants working in Dublin (63%). The scores on this index for consultants based in the rest of Leinster, Cavan and Monaghan (60%) and Connaught and Donegal (61%) did not differ from those of Dublin-based consultants.
- Consultants working full-time had a mean score on this index (60%) that was significantly lower than that of consultants working part-time (66%).
- Consultants working in private settings had a perceived quality of workplace score (73%) that was significantly higher than that of consultants working in public settings

(60%), while the score for consultants working in both public and private settings (59%) did not differ significantly from the public setting score.

- Hospital consultants had a score on this index (59%) that was significantly lower than that of other consultants (68%).
- Consultants who intended to leave their current job in the next two years had a perceived quality of workplace score (56%) significantly lower than that of those who intended to stay (63%).
- Perceived quality of workplace scores did not differ significantly across age, country of initial qualification or gender.

Recruitment process

This index measures doctors' perceptions of the efficiency and fairness of the recruitment process. It was answered only by consultants who had been recruited in the previous two years (19%).

Overall findings

The overall mean score for consultants on the recruitment process index is 56%, indicating a moderate level of satisfaction. For example, 62% of consultants were satisfied with the interview process.

Figure 50: Satisfaction with recruitment process

Note. Percentages are based on respondents who were in their current job for two years or less (19.4% of all respondents).

Significant findings

- Consultants who intended to leave their current job in the next two years had a recruitment process score (51%) that was significantly lower than that of consultants who intended to stay (62%).
- Recruitment process scores did not differ significantly across age group, initial country of qualification, gender, geographic region, full- / part-time status, sector (public, private, both public and private), or setting (hospital / other consultant).

Job expectations

This index measures doctors' perceptions of the extent to which job expectations matched job experiences. It was answered only by consultants who had been recruited in the previous two years (19%).

Overall findings

Consultants had a mean of 69% on the job expectations index, indicating a moderate to high- level match between job expectations and experiences. For example, 54% of consultants felt that the job met their original expectations.

Figure 51: Job expectations and reality

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa. Percentages are based on respondents who were in their current job for two years or less (19.4% of all respondents).

Significant findings

- Consultants who intended to leave their current job in the next two years had a job expectations score (61%) that was significantly lower than that of consultants who intended to stay (74%).
- Job expectations scores did not differ significantly across age group, gender, country of initial qualification, geographic region, full- / part-time status, sector or setting (hospital / other consultant).

Intentions of leaving the organisation and the medical profession

These two indexes measure the doctors' intent to leave their current organisation and the medical profession. They are constructed from two related questions, which are described together in this section.

Overall findings

The overall mean for consultants for the intent to leave the organisation index is 44%. This index comprises the first item in the first graph below and the first and second items in the second graph below. The mean for the likelihood of leaving the profession index is 32%. This index comprises the second item in the first graph below and the third and fourth items in the second graph. Higher scores on these indexes indicate a higher intention of leaving. Across all consultants, 37% indicated that they thought about leaving the organisation often

or all of the time and 28% thought about leaving the medical profession often or all of the time (first graph). One-fifth of consultants (19%) indicated that it was likely that they would leave their organisation within the next year, and 20% indicated that it was likely that they would leave the medical profession within the next year (second graph).

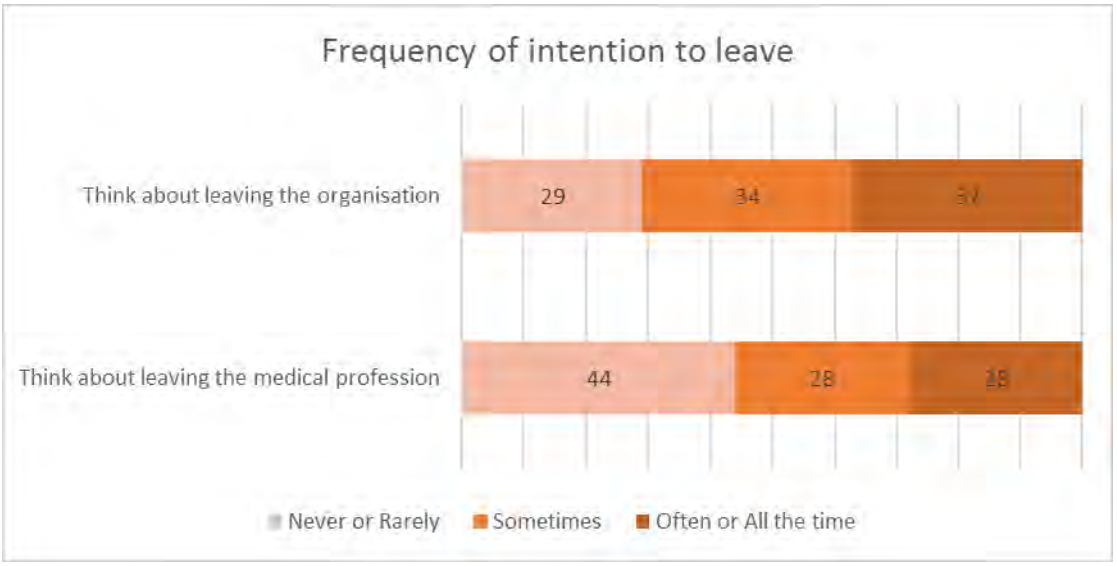


Figure 52: Intention to leave – frequency of thinking about it

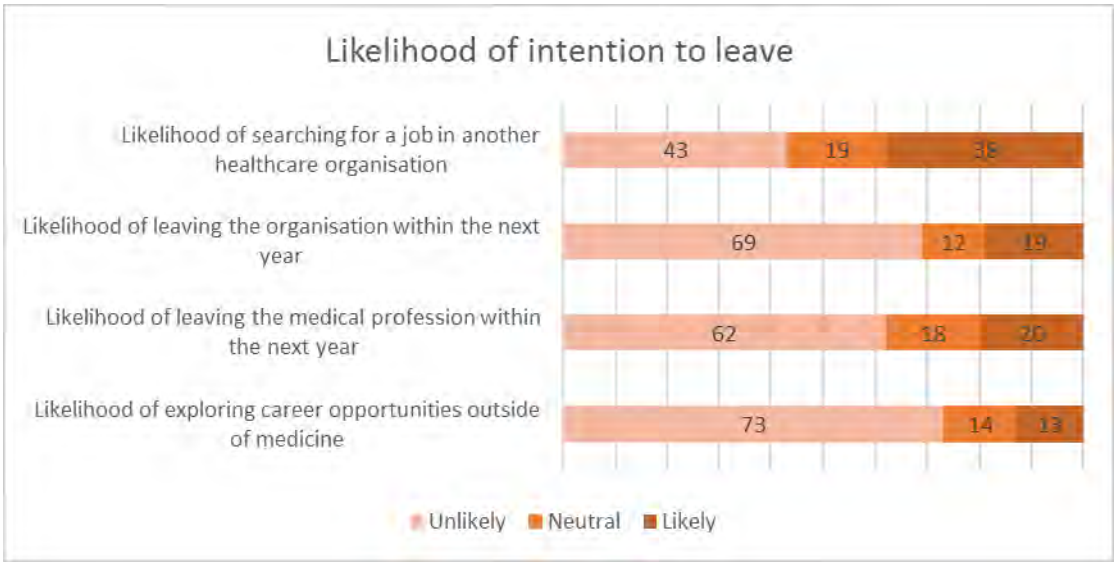


Figure 53: Intention to leave - likelihood

Significant findings – leaving the organisation

- Consultants who obtained their initial qualification in a non-EU country had a significantly higher intention to leave organisation score (53%) than those qualifying in Ireland (50%) or another EU country (44%).
- Consultants working part-time had a higher score on this index (48%) than those working full-time (43%).
- Consultants working in public settings had a significantly higher score on the intention to leave profession index (47%) than those working in both public and private settings (40%); while the score of consultants working in private settings (40%) did not differ from that of consultants working in public settings (most likely due to the small sample size).

- As would be expected, consultants who intended to leave their current job in the next two years had a score on this index (68%) that was significantly higher than that of those intending to stay (33%).
- Intention to leave the organisation scores did not differ significantly across age group, gender, geographic region, or setting (hospital / other consultant).

Significant findings – leaving the profession

- Consultants who obtained their initial qualification in a non-EU country had a significantly higher intention to leave profession score (40%) than those qualifying in Ireland (30%) or another EU country (35%).
- Consultants working in both public and private settings had a score on this index (27%) that was significantly lower than that of consultants working in public (35%) or private (36%) settings.
- As one might expect, consultants who intended to leave their current job in the next two years had a score on this index (51%) that was significantly higher than that of those intending to stay (24%).
- Intention to leave the profession scores did not differ significantly across age, gender, geographic region, full- / part-time status, or setting (hospital / other consultant).

Part 2: Regression models for consultants' job intentions

Key points

Three sets of multiple regression analyses were carried out in respect of consultants' job intentions. These examined three outcomes (intention to stay in or leave current job over the next two years; likelihood of leaving current organisation; and likelihood of leaving medical profession). A total of 28 explanatory variables (categorised into individual, employment and structural characteristics, and perceptions of job and of organisation) were included in the analyses. It should be noted that the total number of consultants (700) is not as big as that of nurses. This means that the statistical analyses are not as powerful as they could have been, had more doctors taken part in the survey.

The three outcomes have predictors in common, as well as predictors that are unique to each. In the regression models of consultants, new-recruit status, effort-reward ratio and global job satisfaction were significantly associated with all three outcomes. Full- / part-time status was associated with intention to leave or stay in current job and likelihood of leaving organisation, but not likelihood of leaving profession, while satisfaction with pay was associated with both likelihood of leaving organisation and leaving profession but was not associated with intention to leave or stay in current job over the next two years.

Most of the models indicated the presence of mediating influences, i.e. some characteristics explained the relationships between other characteristics and the outcomes.

Key findings

The models indicate that the following characteristics are of key relevance to consultants' job and career intentions (i.e. are statistically significant for two or all three of the outcomes): length of time in the current job; working in public, private or both public and private settings; global job satisfaction; burnout; organisational commitment; effort-reward ratio; and satisfaction with pay.

The alternative regression model of consultants' intention to leave the organisation provides further insight into the manner in which perceptions of the job and of the organisation are related to one another and, in turn, to intent to leave. This alternative model demonstrates the importance of global job satisfaction, organisational commitment and burnout (Table A5, A8). Additional analysis (Table A11) confirms that a range of perceptions measures, when considered jointly, all serve to 'drive' these three 'impact' measures:

- Satisfaction with pay, perceived quality of workplace, information sharing, autonomy, effort-reward ratio, responsibility overload and perceptions of co-workers 'drive' global job satisfaction (with absolute values of partial correlations[11] ranging from .13 to .28)
- Perceived quality of workplace, perceptions of manager, perceptions of co-workers, information sharing, satisfaction with pay and impact 'drive' organisational

[11] This is the correlation between an independent variable and the dependent variable after the linear effects of the other variables have been removed from both the independent variable and the dependent variable.

commitment (with absolute values of partial correlations ranging from .13 to .24), and

- Responsibility overload, perceived quality of workplace, effort-reward ratio and information sharing 'drive' burnout (with absolute values of partial correlations ranging from .13 to .27).

As a set, the regression models of these three outcomes may provide initial indications for policy formulation at both organisational and structural levels. In particular, they provide information on (i) groups in the study population that are more likely to intend to leave and (ii) specific aspects of the work that could be the targets of policy (i.e. positive (negative) scales with low (high) overall means and significant relationships with intent to leave, or with significant relationships with the impact measures of global job satisfaction, organisational commitment, and/or burnout).

Intention to leave or stay in current job over the next two years

Three-tenths of consultants intended to leave their current job in the next two years. Of those intending to leave, 32% intended to leave Ireland and not return and 30% intended to stay in Ireland.

Consultants who intended to stay in their current job over the next two years were working full-time and in their current job for two years or more. They also reported higher levels of autonomy and global job satisfaction and had lower effort-reward ratios (i.e. perceived a higher level of reward relative to effort).

In the initial model, satisfaction with pay was significantly associated with consultants' intention to leave / stay in their current job. However, satisfaction with pay is mediated by global job satisfaction and effort-reward ratio, i.e. it is not statistically significant in the presence of these two variables. Similarly, in the initial model, consultants working in private or both public and private settings were more likely to intend to stay in their current jobs, compared to consultants working in public settings. This relationship is mediated by global job satisfaction: work setting is related to differences in global job satisfaction, which in turn predicts intent to stay in or leave current job.

There were no significant differences in consultants' intent to leave / stay in current job by setting, geographical region, hospital vs other consultants, age, gender, country of initial qualification, time taken to get to work, frequency of working overtime with and without compensation, frequency of working unsociable hours, and time spent on tasks not appropriate to the medical profession. A majority of the questionnaire indexes did not predict consultants' intention to leave or stay in current job (engagement, autonomy, impact, responsibility overload, specific job satisfaction, information sharing, perceptions of co-workers and of manager, burnout, information sharing, organisational commitment, and perceived quality of workplace).

Respondents who indicated an intention to stay in their current job over the next two years (67.7% of all consultants) were asked to rate the relevance of a range of factors to this intention. Two of these factors – suitable working hours / days (40%) and personal or family reasons (51%) – were rated as highly relevant by over two-fifths of respondents.

Consultants who indicated an intention to leave their current job over the next two years (28.8%) were asked to rate the relevance of a range of factors to this intention. The two factors with the most frequent rating of highly relevant were that staffing levels were a problem (44%) and there were better job opportunities elsewhere (43%).

Respondents who intended to leave their current job in the next two years were asked what their career plans over the next two to five years were. Almost equal proportions (just over 30%) of consultants who intended to leave their current job in the next two years planned to leave Ireland without returning or planned to leave Ireland but to one day return. One in 10 planned to stay in Ireland, while 28% were not sure of their plans.

Likelihood of leaving organisation

Likelihood of leaving the organisation was higher among new recruits, males, those qualifying in Ireland, those who took longer to get to work, and those who were less satisfied with their pay. Five of the questionnaire indexes assessing perceptions of job and of organisation were also significantly associated with likelihood of leaving current

organisation: likelihood of leaving was lower among consultants who reported higher autonomy; global job satisfaction and organisational commitment; and lower effort-reward ratios (i.e. perceived relatively more reward than effort in their work) and lower burnout.

Several characteristics were not related to consultants' likelihood of leaving their current organisation. Among the individual, employment and structural characteristics, these were: hospital vs other consultants; setting; geographical region; age group; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; engagement; impact; responsibility overload; job satisfaction specific; information-sharing perceptions of co-workers and of manager; and perceived quality of workplace.

Likelihood of leaving the medical profession

Likelihood of leaving the medical profession was significantly associated with two individual, employment and structural characteristics. Consultants who were not new recruits (i.e. in their current job two years or more) and who qualified outside of Ireland were less likely to leave the medical profession. Four of the measures of perceptions of job and of organisation were significantly associated with likelihood of leaving the medical profession. Likelihood of leaving was lower among consultants who reported higher job satisfaction and organisational commitment, and lower effort-reward ratios and burnout.

Individual, employment and structural characteristics unrelated to consultants' intention to leave the medical profession were: setting, hospital vs other consultants; geographical region; age group; gender; full- or part-time status; time taken to get to work; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; engagement; impact; autonomy; responsibility overload; job satisfaction specific; information sharing; perceptions of co-workers and of manager; and perceived quality of workplace.

Overview of regression models

This section presents the results of three sets of multiple regression models. These show the influence of a range of characteristics on three outcomes:

1. Intention to leave or stay in current job over the next two years
2. Likelihood of leaving current organisation
3. Likelihood of leaving medical profession.

Separate models are presented for NCHDs (n = 637; next section) and consultants (n = 700). Doctors working in other job categories (e.g. public or community health, research, education) are not analysed separately, since the number, unfortunately (101), is too small for reliable analysis.

The advantage of multiple regression is that it allows the examination of multiple respondent characteristics simultaneously, thereby providing an indication of which are the most important in predicting the outcome. In this way, the results of regression models can be used to guide initial policy formulation. For example, differences in the factors influencing respondents' intentions to leave their current job and leave the medical profession may have different policy implications (e.g. at organisation level vs system level).

All analyses are weighted with a sampling weight which provides nationally representative estimates on the basis of gender and job category (NCHD in training, NCHD not in training, hospital consultant, other consultant, community / public health, other).

Explanatory variables

For the models, the same set of explanatory variables was used, with the exception of the training opportunities and promotional opportunities indexes (consultants did not answer these questions) (Table 12, Methodology). In line with the theoretical framework guiding the study, variables are categorised into two blocks: *individual, employment and structural characteristics* and *perceptions of job and of organisation*. All continuous variables (questionnaire indexes) have been re-scaled separately for NCHDs and consultants to have a mean of 0 and a standard deviation of 1. This facilitates interpretation, since the model estimates show the expected change in the outcome for a one-unit change in explanatory variable.

Interpreting the regression models

To facilitate interpretation of the results, a summary of findings is presented alongside the more detailed regression results. The Methodology section provides a technical description of how the models were built.

For *logistic regression* (intent to stay vs intent to leave), each variable in the model is associated with an OR.

The example below shows ORs for age and global job satisfaction for NCHDs. Since age is split into categories (30 or less, 31-40, 41-50 and 51 or older), the model requires that one of these is selected as the *reference group.* Age 51 or older is the reference group, meaning that all other age groups are compared to it. The same logic applies to all characteristics that are measured as two or more categories.

The first row shows that respondents aged 30 or less are about 1.60 times more likely to express an intent to leave their current job, compared to respondents aged 51 or older, and, conversely, that respondents aged 30 or less are about three-fifths (OR = 0.623) more likely to express an intent to stay in their current job than respondents aged 51 or older. The odds are *adjusted* in the sense that these age-related differences hold after the other variables in the model have been accounted for.

In the lower part of the extract below, the OR for satisfaction with pay shows that respondents with a mean pay satisfaction score of +1 are about half as likely (OR = 0.496) to express an intent to leave their current job or; conversely, are about 2.02 times more likely to express an intent to stay in their current job, compared to respondents with an average pay satisfaction score (score of 0), again, after the other variables in the model have been accounted for.

Examples of odds ratios: extract from regression model of leaving/staying in current job over the next two years (NCHDs)

Variable	Comparisons	Odds of leaving	Odds of staying
Age	Age 30 or less vs Age 51+	1.604	0.623
	Age 31 to 40 vs Age 51+	0.899	1.112
	Age 41 to 50 vs Age 51+	0.396	2.525
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		0.496	2.016

For *linear regression* (i.e. intent to leave organisation, intent to leave profession), the model results correspond to **the change in outcome associated with a one-unit change in each explanatory variable**. In the second example shown below, the first row shows that NCHDs aged 30 or younger have an expected score on the likelihood of leaving organisation index that is 0.09 points, or just under one-tenth of a standard deviation, higher than that of respondents aged 51 or older. The other age-group differences can be interpreted in a similar way.

The bottom part of the table below shows that for every one-unit increase in satisfaction with pay, likelihood of leaving the organisation decreases by one-tenth of a standard deviation (-.10 points).

Examples of linear regression results: extract from regression model of intent to leave profession (NCHDs)

Variable	Comparisons	Expected change in outcome
Age	Age 30 or less vs Age 51+	0.093
	Age 31 to 40 vs Age 51+	-0.010
	Age 41 to 50 vs Age 51+	0.002
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		-0.100

Intention to stay in or leave current job

About three-tenths of consultants (28.8%) intended to leave their job in the next two years, while 67.7% intended to stay (3.5% did not respond to this question). Table 34 summarises the results from the logistic regression models of intent to stay in or leave current job in the next two years. Table 35 shows the detailed model output.

Of the 28 variables examined, a majority is not significantly predictive of intention to leave current job.

Consultants who intended to stay in their current job over the next two years were working full-time and in their current job for two years or more. They also reported higher levels of autonomy and global job satisfaction and had lower effort-reward ratios (i.e. perceived a higher level of reward relative to effort).

In contrast, consultants who intended to leave their current job in the next two years were working part-time and in their current job two years or less. They reported lower levels of autonomy and global job satisfaction and had higher effort-reward ratios.

In the initial model, satisfaction with pay was significantly associated with consultants' intention to leave / stay in their current job. For example, a one-unit (one standard

deviation) increase in satisfaction with pay was associated with an OR of 1.70 for intention to stay. However, satisfaction with pay is mediated by global job satisfaction and effort-reward ratio, i.e. it is not statistically significant in the presence of these two variables. In other words, the relationship between satisfaction with pay and intent to leave / stay in current job is accounted for by global job satisfaction and effort-reward ratio. Similarly, in the initial model, consultants working in private or both public and private settings were 1.8 times more likely to intend to stay in their current jobs, compared to consultants working in public settings. This relationship is mediated by global job satisfaction: work setting is related to differences in global job satisfaction, which in turn predicts intent to stay in or leave current job.

There were no significant differences in consultants' intent to leave / stay in current job by setting, geographical region, hospital vs other consultants, age, gender, country of initial qualification, time taken to get to work, frequency of working overtime with and without compensation, frequency of working unsociable hours, and time spent on tasks not appropriate to the medical profession. A majority of the questionnaire indexes did not predict consultants' intention to leave or stay in current job (engagement, autonomy, impact, responsibility overload, specific job satisfaction, information sharing, perceptions of co-workers and of manager, burnout, information sharing, organisational commitment, and perceived quality of workplace).

The pseudo r-square statistic describes the amount of variation in the outcomes (intent to stay or leave) that is accounted for by the explanatory variables. It is not intended as an absolute measure of explanatory power, but rather as a means to compare one model with another. In this case, the pseudo r-square for the final model of consultants' intention to leave or stay in their current job (.281) is just over twice the magnitude of that for the initial model (.122), meaning that the three perceptions of job / organisation characteristics double the amount of variance explained.

Table 34: Summary of multiple logistic regression models of consultants' intention to stay in or leave their current job in the next two years

Characteristics **unrelated** to intention to staying in or leaving current job	Characteristics **mediated** by other variables	Characteristics related to **intention to stay** in current job	Characteristics related to **intention to leave** current job
Individual, employment and structural characteristics			
• Setting (hospital, community / other) • Geographical region • Hospital vs other consultants • Age • Gender • Country of initial qualification • Normal time taken to get to work • Frequency of overtime with compensation • Frequency of overtime without compensation • Working unsociable hours more often than not in past 4 weeks	• Satisfaction with pay (mediated by global job satisfaction and effort-reward ratio) • Sector (public / private / both) (mediated by global job satisfaction)	• Working full-time • In current job more than 2 years	• Working part-time • In current job less than 2 years
Perceptions of job and of organisation			
• Engagement • Autonomy • Impact • Responsibility overload • Job satisfaction (specific) • Information sharing • Perceptions of co-workers • Perceptions of manager • Burnout • Information sharing • Organisational commitment • Perceived quality of workplace • Time spent performing tasks not appropriate to medical profession		• Higher level of autonomy • Higher global job satisfaction • Lower effort-reward ratio	• Lower level of autonomy • Lower global job satisfaction • Higher effort-reward ratio

Table 35: Odds ratios and significance tests for multiple logistic regression models of consultants' intention to stay in or leave their current job in the next two years

Consultants	Model 1: individual, employment and structural characteristics only (pseudo r square = .122)				Model 2: Model 1 with perceptions of job and of organisation (pseudo r square = .281)			
	Odds of leaving	Odds of staying	chi-square	p	Odds of leaving	Odds of staying	chi-square	p
Individual, employment and structural characteristics								
Private or both public and private settings vs public setting	0.552	1.812	7.947	.005				
Part-time vs full-time	2.549	0.392	12.633	<.001	3.599	0.278	19.268	<.001
New recruit (past 2 years) vs not new recruit	1.896	0.527	6.954	.008	2.260	0.442	9.090	.003
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)	0.587	1.704	21.494	<.001				
Perceptions of job and of organisation								
Autonomy (mean=0, SD=1, higher scores indicate higher sense of autonomy)					0.738	1.355	6.435	.011
Job satisfaction global (mean=0, SD=1, higher scores indicate higher satisfaction)					0.522	1.916	23.966	<.001
Effort-reward ratio (mean=1.56, SD=0.93, higher ratios indicate more effort and less reward)					1.570	0.637	8.433	.004

Relevance of factors for staying in or leaving current job

Respondents who indicated an intention to stay in their current job over the next two years (67.7% of all consultants) were asked to rate the relevance of a range of factors to this intention. These are shown in Table 36. Two of these factors – suitable working hours / days (40%) and personal or family reasons (51%) – were rated as highly relevant by over two-fifths of respondents, while 24-34% of respondents indicated that the remaining four factors were highly relevant: patients or service users were easy to work with (29%); there was a lack of available alternatives (25%); it would be too disruptive to leave (34%); and the location was convenient (24%). The two most highly rated factors (suitable working hours / days, personal reasons), indicate that, aside from the findings of the regression model, consultants are opting to stay in their current job for personal reasons or out of convenience.

Table 36: Relevance of factors (those who intend to stay only): consultants

Relevance of Factors (those who intend to stay only) (NCHDs only)	Not at all relevant	Not very relevant	Neither relevant nor irrelevant	Somewhat relevant	Highly relevant	Total
Suitable working hours / days	4.4	7.9	12.1	35.2	40.3	100.0
Patients / service users are easy to work with	5.3	10.9	19.4	35.3	29.1	100.0
Lack of available alternatives	15.1	16.9	15.9	27.0	25.2	100.0
Too disruptive to leave	10.1	10.5	15.1	30.5	33.8	100.0
Convenient location	8.0	9.1	17.1	42.2	23.6	100.0
Personal or family reasons	3.0	5.7	13.0	27.0	51.3	100.0

Note. Percentages are based on respondents who indicated intent to stay in their current job over the next two years (67.7% of all respondents).

Respondents who indicated an intention to leave their current job over the next two years (28.8% of all consultants) were asked to rate the relevance of a range of factors to this intention. These are shown in Table 37. The two factors with the most frequent rating of highly relevant are that staffing levels were a problem (44%), and that there were better job opportunities elsewhere (43%). In addition, 22% felt that working hours or days were not suitable, and 38% felt that the work environment was too demanding. These ratings are broadly consistent with the results of the logistic regression model, in that effort-reward ratio and global job satisfaction were statistically significantly related to intention to stay / leave. Note that 22% rated coming to the end of a work contract or training programme or retiring as very relevant: 12% of consultants were on a fixed-term contract.

Table 37: Relevance of factors (those who intend to leave only): consultants

Relevance of Factors (those who intend to leave only) (NCHDs only)	Not at all relevant	Not very relevant	Neither relevant nor irrelevant	Somewhat relevant	Highly relevant	Total
Working hours / days not suitable	19.6	18.5	14.6	25.4	22.0	100.0
Work environment is too demanding	10.3	11.2	10.9	29.8	37.7	100.0
Staffing levels are a problem	9.1	9.3	4.4	33.4	43.9	100.0
Patients / service users are difficult to work with	31.6	28.6	17.9	15.3	6.5	100.0
Better mentoring / supervision elsewhere	34.0	24.8	21.7	14.0	5.6	100.0
Better job opportunities for me elsewhere	13.0	8.2	8.3	27.1	43.3	100.0
Better training opportunities for me elsewhere	29.2	13.8	20.0	20.8	16.2	100.0
Location of my workplace is inconvenient	36.9	18.9	21.4	13.0	9.8	100.0
Personal reasons	21.8	11.6	26.4	26.1	14.2	100.0
Coming to the end of a contract / training programme / retiring	38.8	8.5	16.1	14.4	22.2	100.0

Note. Percentages are based on respondents who indicated intent to leave their current job over the next two years (28.8% of all respondents).

Respondents who intended to leave their current job in the next two years were asked what their career plans over the next two to five years were. Almost equal proportions (just over 30%) of consultants who intended to leave their current job in the next two years planned to leave Ireland without returning or planned to leave Ireland but to one day return. One in 10 (10.4%) planned to stay in Ireland, while 28% were not sure of their plans over the next two to five years (Table 38).

Table 38. Career plans over the next 2-5 years (those who intend to leave only): consultants

Career plans over the next 2-5 years (those intending to leave current job only)	Percent (consultants)
Stay in Ireland	30.1
Leave Ireland for work or training opportunities, with a plan to return to Ireland in the next two to five years	10.4
Leave Ireland for work or training opportunities, without a plan to return to Ireland	31.7
Not sure	27.8
Total	100.0

Note. Percentages are based on respondents who indicated intent to leave their current job over the next two years (60.7% of all respondents).

Likelihood of leaving current organisation

The outcome measure is an index based on responses to three items: frequency of thinking about leaving the current organisation (never / rarely / sometimes / often / all of the time); likelihood of leaving the current organisation within the next year; and likelihood of searching for a job in another healthcare organisation (very unlikely / unlikely / neither likely nor unlikely / likely / very likely). For this analysis, the index has a mean of 0 and a standard deviation of 1, which facilitates the interpretation of results.

Table 39 summarises the results from the linear regression models of consultants' likelihood of leaving the organisation in which they are currently working. Table 40 shows the more detailed model output.

The results show that likelihood of leaving the current organisation is significantly associated with several individual, employment and structural characteristics. Likelihood of leaving the organisation was lower among consultants who were not new recruits; who were female; who qualified outside of Ireland; and who were more satisfied with their pay. Five of the questionnaire indexes assessing perceptions of job and of organisation were also significantly associated with likelihood of leaving current organisation: likelihood of leaving is lower among consultants who reported higher autonomy, global job satisfaction and organisational commitment, and lower effort-reward ratios (i.e. perceived relatively more reward than effort in their work) and burnout.

Working in private, or both public and private (as opposed to public) settings was significant in the initial model but lost significance in the final model. Further analysis (not shown here) indicates that setting is mediated by global job satisfaction. In other words, the relationship between setting and leaving the organisation is accounted for by differences in levels of global job satisfaction between consultants working in various settings.

Several characteristics were not related to consultants' likelihood of leaving their current organisation. Among the individual, employment and structural characteristics, these were: hospital vs other consultants; geographical region; age group; working full- or part-time; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; engagement; impact; responsibility overload; job satisfaction specific; information sharing; perceptions of co-workers and of manager; and perceived quality of workplace.

The final model explains 47% of the variation in consultants' likelihood of leaving the organisation, while the initial model, which included only individual, employment and structural characteristics, explains 21% of the variation.

Table 39: Summary of multiple linear regression models of consultants' likelihood of leaving the organisation

Characteristics **unrelated** to likelihood of leaving current organisation	Characteristics **mediated** by other variables	Characteristics **related** to likelihood of leaving current organisation
Individual, employment and structural characteristics		
• Hospital vs other consultants • Setting (hospital, community / other) • Geographical region • Age group • Full-/part-time status • Frequency of overtime with compensation • Frequency of overtime without compensation • Working unsociable hours more often than not in past 4 weeks	• Setting (public/private/both (mediated by global job satisfaction)	• New recruits (in current job 2 years or less) • Males • Qualified in Ireland • Take more time to get to work • Lower satisfaction with pay
Perceptions of job and of organisation		
• Engagement • Impact • Responsibility overload • Job satisfaction specific • Information sharing • Perceptions of co-workers • Perceptions of manager • Perceived quality of workplace • Time spent performing tasks not appropriate to medical profession		• Lower autonomy • Lower global job satisfaction • Higher effort-reward ratio • Higher burnout • Lower organisational commitment

Table 40: Parameter estimates and significance tests for multiple linear regression models of consultants' likelihood of leaving the organisation

Consultants	Model 1: individual, employment and structural characteristics only (r square = .207)			Model 2: Model 1 with perceptions of job and of organisation (r square = .473)		
	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Individual, employment and structural characteristics						
Private or both Public and Private settings vs Public setting	-0.131	-3.383	<.001			
New recruit (past 2 years) vs Not new recruit	0.102	2.606	.009	0.141	4.315	<.001
Female v Male	-0.101	-2.573	.010	-0.105	-3.198	.001
Country of qualification: Other country vs Ireland	0.139	3.533	<.001	0.153	4.560	<.001
Normal time taken to get to work (in 15 minute increments)	0.165	4.135	<.001	0.115	3.411	.001
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)	-0.365	-9.734	<.001	-0.080	-2.228	.026
Perceptions of job and of organisation						
Autonomy (mean=0, SD=1), higher scores indicate higher sense of autonomy				-0.100	-2.707	.007
Job satisfaction global (mean=0, SD=1, higher scores indicate higher satisfaction)				-0.265	-5.202	<.001
Effort-reward ratio (mean=1.56, SD=0.93), higher ratios indicate more effort and less reward				0.089	2.343	.019
Organisational commitment (mean=0, SD=1, higher scores indicate higher commitment)				-0.228	-5.585	<.001
Burnout (mean=0, SD=1, higher scores indicate higher levels of burnout)				0.104	2.602	.009

Likelihood of leaving the medical profession

The outcome measure is an index based on responses to three items: frequency of thinking about leaving the medical profession (never / rarely / sometimes / often / all of the time); likelihood of leaving the medical profession within the next year; and likelihood of exploring career opportunities outside of medicine (very unlikely / unlikely / neither likely nor unlikely / likely / very likely). For the analysis, the index has a mean of 0 and a standard deviation of 1, which facilitates the interpretation of results.

Table 41 summarises the results from the linear regression models of consultants' likelihood of leaving the medical profession. Table 42 shows the more detailed model output.

The results show that likelihood of leaving the medical profession is significantly associated with two individual, employment and structural characteristics. Consultants who were not new recruits (i.e. in their current job two years or more) and who qualified outside of Ireland were less likely to leave the medical profession. Four of the measures of perceptions of job and of organisation were significantly associated with likelihood of leaving the medical profession. Likelihood of leaving was lower among consultants who reported higher job satisfaction and organisational commitment, and lower effort-reward ratios and burnout.

In Model 1, consultants working in privately funded settings were less likely to leave the medical profession than those working in public or both publicly and privately funded settings. This was not significant in the final model and further analysis (not shown here) indicates that the relationship between public/private settings and intent to leave the medical profession is accounted for by differences in global job satisfaction. Similarly, satisfaction with pay, which was significant in Model 1, was not significant in the final model; further analysis indicates that the relationship between satisfaction with pay and intent to leave the medical profession is accounted for by variations in global job satisfaction, burnout, and effort-reward ratio.

Individual, employment and structural characteristics unrelated to consultants' intention to leave the medical profession were: setting; hospital vs other consultants; geographical region; age group; gender; full- or part-time status; time taken to get to work; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; engagement; impact; autonomy; job satisfaction specific; responsibility overload; information sharing; perceptions of co-workers and of manager; and perceived quality of workplace.

The final model explains 33% of the variation in consultants' likelihood of leaving the organisation, while the initial model, which included only individual, employment and structural characteristics, explains 14% of the variation.

Table 41: Summary of multiple linear regression models of consultants' likelihood of leaving the medical profession

Characteristics **unrelated** to likelihood of leaving profession	Characteristics **mediated** by other variables	Characteristics **related** to likelihood of leaving profession
Individual, employment and structural characteristics		
• Hospital vs other consultants • Setting (hospital, community / other) • Geographical region • Age group • Gender • Full- or part-time status • Normal time taken to get to work • Frequency of overtime with compensation • Frequency of overtime without compensation • Working unsociable hours more often than not in past 4 weeks	• Public/private/both public and private-funded organisations (mediated by global job satisfaction) • Satisfaction with pay (mediated by global job satisfaction, effort-reward ratio and burnout)	• New recruits (in current job 2 years or less) • Qualified outside of Ireland
Perceptions of job and of organisation		
• Engagement • Impact • Autonomy • Job satisfaction specific • Responsibility overload • Information sharing • Perceptions of co-workers • Perceptions of manager • Perceived quality of workplace • Time spent performing tasks not appropriate to medical profession		• Lower global job satisfaction • Higher effort-reward ratio • Higher burnout • Lower organisational commitment

Table 42: Parameter estimates and significance tests for multiple linear regression models of consultants' likelihood of leaving the medical profession

Consultants	Model 1: individual, employment and structural characteristics only (r square = .143)			Model 2: Model 1 with perceptions of job and of organisation (r square = .332)		
	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Individual, employment and structural characteristics						
Private or both Public and Private settings vs Public setting	-0.140	-3.562	<.001			
New recruit (past 2 years) vs Not new recruit	0.082	2.017	.044	0.121	3.333	.001
Country of qualification: Other country vs Ireland	0.148	3.700	<.001	0.160	4.355	<.001
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)	-0.312	-8.034	<.001			
Perceptions of job and of organisation						
Job satisfaction global (mean=0, SD=1, higher scores indicate higher satisfaction)				-0.178	-3.351	.001
Effort-reward ratio (mean=1.56, SD=0.93), higher ratios indicate more effort and less reward				0.141	3.425	.001
Burnout (mean=0, SD=1), higher scores indicate higher sense of burnout				0.218	4.996	<.001
Organisational commitment (mean=0, SD=1, higher scores indicate higher commitment)				-0.184	-4.031	<.001

Part 3: Qualitative findings from consultant doctors' study

Introduction and overview

This section presents the findings arising from a thematic analysis of interviews conducted with consultant doctors. A number of positive aspects of the work are presented and these are followed by a consideration of issues arising in respect of pay, HSE culture, the distribution of resources across the system, and relationships with others. The section concludes with a consideration of issues identified as directly impacting on decisions to stay or leave the service.

Positive aspects of being a consultant

While a number of positive aspects of working as a consultant were identified, there was a strong focus on the satisfaction they got from being able to help patients and families.

Working with patients and families

Many participants, in response to the question "*What are the best parts of your job?",* highlighted this aspect of their work. Consultants highlighted being able to *"treat somebody successfully"; "turn around a parent's anxiety and worry"; "reassure people";* and "give them a diagnosis".

One consultant highlighted the capacity to help people, irrespective of whether they were diagnosed with a problem or not, and to support them where they likely to die:

> *I absolutely adore patients … I love it. I'd give up otherwise … It is the greatest reward of all on Earth. Nothing compares to it. Nothing … You go in there, you smile, and they smile back at you. Number one. And you tell them nothing's wrong and they bounce out the room. You tell them there's something wrong, but you tell it the right way, and can you do something about it, "Yes we can …" You … you … It's sad, but people do die. And it's sad when you've done your best, and it doesn't happen. But it's also heartening to support them when they are dying … And assure their family when the patient does pass. But that's my job. And I said vocation, and I mean it.*

Many gave specific examples of where, because of their role, knowledge and expertise, they were able to comfort people at times of great need; and, while noting this was beneficial for the patient and families, they explained that it also had a positive impact on them.

Working in an area they enjoyed

Consultants have trained for many years in the area they work in, and consequently the area they work in is very specialist. A number of consultants noted their commitment to working in an area they felt passionately about, and where they believed they could make a difference. One individual noted:

> *I enjoy [name of speciality]. I love it. It's something that had always interested me. I'm very happy to be here and to be working in Ireland. I did work outside of Ireland. For me personally, my view of the people working in [name of speciality] is that, they do it for the love of it because it's something that really motives them.*

Autonomy

Autonomy was clearly identified as an important aspect of the work and this was identified by a number of consultants. One consultant said:

> *I mean there's a number of things that I think are very good. I supposed I would have to say autonomy as a consultant working here. I find the autonomy of the workplace. In other words, the fact that I have a bit of flexibility of how I structure my day I suppose, and the type of work I want to do. I find that probably one of the best things.*

It was also highlighted, however, that different consultants have different levels of autonomy. One consultant compared his level with some of his colleagues, noting:

> *I have an unusually high level of autonomy in my particular job, which means that I have [fewer] frustrations perhaps than many of my colleagues.*

This was echoed by another consultant, who spoke about *"having much more autonomy"* than in a previous consultant role. This consultant highlighted that the positive impact of this was being able to get access to a new treatment that would greatly benefit one of the patients.

Being part of a multidisciplinary team

Being part of a multidisciplinary team, which functioned well, was highlighted as a very positive feature of working as a consultant and issues relating to this are presented in the section below on relationships.

Challenges arising in working as a consultant

A number of key challenges arising are now considered.

Pay

Almost all consultants interviewed raised issues relating to pay, with many noting that while it was not the only issue, it was very important. This was apparent in comments such as: "*Okay, it's not all about pay, but it's the bottom of it*"; *"pay really matters"; "I think a lot of the problems would go away if they restored their previous salary levels."* It was highlighted that:

> *There was no problem getting doctors to apply for jobs here when the salaries were better. It's always acknowledged ... That's what's attracted people to jobs. They were well remunerated and certainly when the crash came, and they changed the new entrance. It fell off a cliff and it was always going to happen.*

It was also noted that:

> *You can never articulate that in the media or whatever, but it [pay] is the biggest factor. It wouldn't be the only factor but, in my opinion, the biggest factor.*

While most of these interviewed highlighted negative aspects of pay, one consultant, who was coming to the end of a working career, said:

> *I think the pay is good, it's just that unfortunately ... maybe it's not as much as it used to be because of the cutbacks. You know the pay differentials. I still have my [pay] cut, but it's never affected me. It's still a good pay. I think the pay is good …*

In general, commentary about pay was situated within the context of having a relatively high salary, compared with an average worker, but balancing this with a number of other considerations, including:

- Having invested in their career and sacrificed a substantial amount
- Working very hard
- Having very high levels of responsibility
- Being paid less than colleagues doing similar type work in Ireland or elsewhere
- Finding it difficult to maintain a standard of living with their take-home pay due to their personal circumstances.

These issues are highlighted below.

The following quote notes that while being relatively well paid, consultants and their families have to make many sacrifices in order to achieve their grade. One person said:

> *I fully agree with that we're, relative to the rest of the country, on a salary scale that far exceeds that of the average worker. But, you have to keep context, where that has come from … I've moved my family around the world for training. We went to [non-EU country]. We lived there for [number of years], we moved back and there's massive costs involved in that. And with all the moving around that happens in training, my [partner] had to give up their job, so we didn't have an option but for my [partner] to stay home and mind the kids.*

Another consultant linked the level of responsibility with a *"modest increase"* in the pay, as follows:

> *I'm hearing from my junior colleagues that they're definitely not attracted to taking on the additional responsibility: the arduous paperwork, the arduous responsibility that goes with being a consultant for the modest increase in salary that goes with the step up.*

Another individual highlighted the gap between salary and take-home pay as follows:

> *You put in all these hours and you get your big salary, but it's decimated by the time you take it home … You know the increased UPC, pension contribution, everything you're left with like 45% of your gross or less … then you try and augment it with your 10 hours of private but again the tax man …*

Inequities in pay

Inequities in pay between medical colleagues were highlighted in respect of those who had been employed since the "*new contract*" was implemented and those who had been working in the service prior to that, and who had better pay and conditions. There was a high awareness of this issue and it was raised by consultants who were on the pre-2010 rate of pay, as well as those who were on the *"new contract"*. One consultant who was on the new contract said, "*so I am doing the same work as my colleagues for less salary"*, while another consultant who was not on the new contract noted:

> *They would be bitterly resentful about it. They're doing the same work and they'll never be on the same pay. That's what got them really. And, of course, you've got two people working side by side in a department getting paid differently for the same job. I don't think anyone has a problem with the idea of*

an increment salary scale. You do not expect to get paid the same amount, but to never earn as much as your colleague, that's where the resentment goes.

A particular issue was highlighted in respect of public health specialists who, it was suggested, were not appropriately compensated. One public health doctor explained that, despite having completed specialist training, they were paid at a significantly lower level than colleagues who had opted to work in other areas. It was noted:

We are paid well, but we're just not paid as well as some of other colleagues … I think there should be a recognition of parity amongst those that have completed accredited training programmes similar to other colleagues. There should be at least some kind of recognition in pay that they have gone through this … [This inequity] also instils kind of a perception, I think, that public health is not as important as clinical medicine.

One person suggested that there are inequities inherent within the system where, for example, on-call duties are remunerated in the same way, irrespective of whether an individual is likely to be called. Another consultant highlighted differences between specialities where those whose work is procedure-based have a higher possibility of greater remuneration in the private sector, compared with their colleagues whose work does not include procedures. An example of this is highlighted below:

Now, that surgeon is getting the same salary as the psychiatrist halfway down the road. That psychiatrist might be on call, but doesn't get called in. The surgeon's in every night he's on call. So, you could have a madness, where consultants are paid the same salary in completely different specialties, with a completely different workload.

It was noted that the level of pay sends an important message about the worth of the work being carried out: the existence of inequities sends a message that the work is not as important. This is highlighted in the following quote:

I think you should never underestimate the powerful sense that people get when they feel they're appropriately paid and when agreements that they have entered into are honoured, and it is very hard to overcome those kinds of deficits.

This was echoed by another consultant, who said:

There is a sense that the message that that lower pay gives to new recruits … is all part of the dis-incentivisation that is giving entirely the wrong message.

This issue of agreements *"being honoured"* is also raised in the next section on HSE culture.

HSE culture and supports

Many consultants spoke about the HSE and its role in delivering services, and while much of it focused on particular challenges arising, there was some positive commentary about recent improvements that have taken place, including the development of clinical programmes. One consultant highlighted this, noting that, despite these improvements, there is a lot of negativity about the service. This consultant said:

A strong opinion of mine is that actually I've been back for [more than 10] years now, and things are so much better than they were and yet people are complaining more if anything! ... I think there's been a lot of negative talk from

the leaders in medicine about how bad things are here. I really don't see that. I think that things are a lot better than they were ... Some of the healthcare programs have really improved. The healthcare delivery, like the breast cancer strategies, stroke. And I think the medicine, the health care that we perform here is much better than it used to be.

Other consultants, however, highlighted difficulties with the HSE, some of which were of a general nature and others that were more specific. One person who had left the HSE said:

I am very happy now. I'm in a voluntary hospital having left the HSE and it's fantastic and the HSE was horrific … It's horrific, and I think the best term I've heard … is that "the HSE is a toxic employer". The HSE is riddled with bullying, paternalism, favouritism ... It is the most corrupt system in the world.

This was echoed by another consultant who, based on a particular negative experience, said:

And I think people applying for jobs wouldn't have to look very far, or talk to many people to realise that there's, if you like, a sorry history to the relationship between senior management and clinicians. Which I have to say would reflect a sense of an anti-medical philosophy within the upper ranks of the HSE, that we would certainly have been aware of as consultants.

One consultant, who did not want to be interviewed, but who emailed the following views to the Research Team, said:

Also, on a smaller scale and more individually, we as a consultant would feel that the HSE does everything possible to give us nothing and obstruct service development / improvement whenever they can:

- *No resources to do, improve efficiency or support our work*
- *No respect*
- *No salary even if I work 80 hours per week, half of that for no pay*.

Another consultant contrasted the HSE with the voluntary hospitals, noting that:

I think the HSE is pretty awful, compared with the voluntary hospitals. My experience with the voluntary hospitals is there's always been a desire to make things happen, but no money … And you go to an HSE hospital, there's money but no desire.

Specific issues relating to organisational culture and support related to:

- Lack of trust and goodwill
- Lack of transparency and a fear of speaking out
- Lack of involvement in decision-making
- Inequities in supports and allocation of resources.

Lack of trust and goodwill

Very strong views were articulated in respect of the corporate and management HSE and, in general, these views were overwhelmingly negative. One issue that created significant anger related to *"the breach of the 2008 contract"* which, it was suggested, resulted in a "*total lack of trust in HSE management*"; and this was "*the biggest upsetting matter*". One consultant noted:

Yes, yes. We signed a contract, but they said, "Ah, no. We're not gonna do that."

Another individual said:

I feel that there has been a huge breach of trust between the HSE and consultants. They reneged on the deal that we didn't look for. I signed over considerable autonomy and took on extra working hours and I have not been remunerated for that, and I absolutely distrust them when it comes to any matters regarding a contract. They have been in gross breach of it, and not acknowledged it at any level … I am extremely unhappy … So, no, I'm not happy!

Another participant spoke about the loss of goodwill in recent years. One consultant recalled that:

There was goodwill, doctors, nurses especially, because I wouldn't know too much about the other groups. But doctors and nurses always had goodwill. Always. And the system ran on goodwill, and everyone enjoyed goodwill. Because goodwill is a factor that puts people in a good mood, and people will go the extra mile if there's goodwill. They will go a long, long way. They'll do without pay, they'll do the extra hours, they'll do everything. As long as you treat them right.

It was also suggested that:

We cannot have just a purely business-oriented management of the health service, either. These are people at the end of the day … They are not numbers, they are patients, they are people, and they need a health service that has strong medical leadership and direction within us.

Lack of transparency and fear of speaking out

Throughout the collection of data from consultants in this study, it was clear that there were strong concerns that the information provided would not be sufficiently anonymised and many sought assurances, over and above those ordinarily looked for in studies of this type, that their personal details would be confidential to the study team. While some of this may arise from the type of unique and potentially identifiable posts held by individual consultants, it nevertheless was an unexpected feature of the data collection with this group.

The following quote highlights this concern:

And I'll say the other thing is, I was talking to some of my colleagues and I was surprised by how reticent some of them are to express their views straightforwardly. And they would consider me "bold", so I'm surprised by that.

Other consultants spoke about a culture of hiding problems or of not acknowledging issues arising. One consultant spoke about this, noting:

An awful lot of stuff's been put under the carpet. I think there are issues that have arisen, and if you raise an issue ... I'll give you an example. You might find this hard to believe, but I submitted [a high number of] incident forms. Right, so there seem to have been incident forms all over the place … and they are gone into the ether! ... Never discussed. Except for one that was turned against me.

Another consultant stated: *"But you cannot criticise, you cannot do anything … I wouldn't trust the HSE as far as I'd throw them."* This consultant went on to give a number of examples of safety issues arising, which were brought to the attention of the HSE, but where nothing was done.

Lack of involvement in decision-making

Involvement in key decisions being taken was highlighted as important and when people were involved, it was highlighted as being a positive feature of their work. One consultant who led a specialist service spoke of the experience of being able to make and implement decisions, noting:

> *So, actually, this is very nice the way it works, because then at least you can prioritise and you've more input into how things actually run.*

Others, however, who raised this issue, generally related a poor experience of being involved and one consultant suggested: "*We have all the responsibility, but we have none of the power – in terms of making changes that effect patient care."*

Many examples, ranging from those with a very high patient impact to low patient impact, were highlighted in the course of this study and consultants identified their exclusion from the decision-making process as problematic. On a general note, one consultant said:

> *It's going down the tubes. If they want to bring in say that [new service] that they've decided on, they haven't even thought about the doctors. They haven't thought about the nurses that are going to run it. It sounds wonderful, it's pie in the sky. I saw a comment this morning which was, "This is blue sky thinking without the blue skies."*

Other consultants spoke about not being consulted or involved in decisions that had significant implications for their patients. One consultant noted:

> *I suppose sometimes decisions are taken above my head, above my immediate line manager's head, where we haven't been consulted at all, and there is nobody who actually knows more about our area that the two of us, so decisions can seem extremely arbitrary.*

This consultant went to explain that staff had been allocated to the unit *"which we're delighted for! But it wasn't the staff we wanted or necessarily needed."* The consultant went to note:

> *In this area there is nobody who has more expertise than I have on what we need, and it's extremely dismissive of my expertise and of my line manager's expertise that we are completely bypassed on major appointments, or resource allocations without [them being discussed] with us. I think it's incredibly short-sighted and incredibly limited, because we are not necessarily empire-building and we're not looking for people for the sake of it – at all. I don't want to manage more people than I need, so when I do want people I want them to be the appropriate people, and it's really frustrating.*

Others drew attention to not having a process for resolving issues that arose and the following quote, from a consultant who had worked at a different hospital in Ireland, highlights the differences that can exist within the Irish system. The consultant said:

> *But we used quite an "open door" management policy, where, if you had a problem, you scheduled a meeting with a general manager, or whoever, and you'd say, "Yes, that's there. That's grand. Or, that's unfair, but they can't afford it." Or whatever and do it in quite an open and transparent attitude to problem solve. And unfortunately, I don't find that in this new position that I work in. And it really ... lowers physician morale.*

It was also suggested that in the *"bigger hospitals, you become more of a number and you have less influence over your own working day and less influence over ... management are more inclined to impose things"*. One consultant spoke about the closure of specialist beds in a hospital, which was strongly opposed at the time by the consultant and other colleagues, and which has since been documented as having been "*a miscalculation*". This consultant noted that the decisions were predicated on a belief that alternative services would be available and accessible, but noted:

> *I think even the most genuine and sincere of senior HSE knew in their heart of hearts that they couldn't deliver on the level of [alternative service] that was promised, and indeed they didn't.*

The consequences for patients were significant, including *"unnecessary deaths"*; *"lack of access to care"*; *"significantly increased travelling distance for patients"*; *"reduced continuity of care between the treatment teams";* and *"challenges for families and patients"*.

A number of consultants were despondent about the lack of involvement and inclusion in decision-making and noted:

> *We've highlighted all of this, but nothing has changed. Essentially, we would have to withdraw our services, I think, for it to be taken seriously.*

Leadership

Issues relating to leadership were also highlighted by consultants and it was suggested that structurally there is *"a lack of a clearly defined leadership structure"*, *"no governance*", and "*no strategic development*" in some areas. One person recommended a stronger role for clinical directors, noting:

> *I know they've appointed clinical directors, but they don't really seem to have a whole lot of influence so far anyways. I mean, people that are doing it are good people, but I think maybe the clinical director's role needs to be maybe strengthened or advanced … in some way.*

Others, however, balanced leadership and decisions to implement things in particular with the autonomy valued by consultants in their work. This is highlighted in the following quote:

> *The autonomy is actually nice in one way, and I think most consultants really value that autonomy. I think on the other hand it means a lot of frustrations because there [are] a lot of difficulties over the way things are done.*

Situations where consultants feel they are being imposed on can create difficulties, as one consultant explained:

> *I mean I had it [autonomy] myself, but I've accepted it now, and I'm okay. I'm just gonna work in my own little office doing my own work. 'Cause I think there [are] a lot of people with strong ideas, about how things should be done right. To some extent, unless everyone's saying exactly the same thing ... those people who feel their opinion or ideas are aren't valued, they tend to get a bit, as I said, disenfranchised, I think. And we have had a few problems. A few people have left the department and things like that.*

Inequitable distribution of resources

Many examples were given of frustrations arising due to inequitable distribution of resources, which led to challenges in implementing protocols, and high-quality patient care. There was a strong belief that those working in smaller hospitals outside city areas had

fewer resources and a number of consultants highlighted difficulties in this. One participant working in a smaller hospital said:

> *I have spent half a career trying to work out how these resources are allocated and who makes these decisions! ... But, you're expected to provide the same service as the university teaching hospital (in large city). That's the sort of thing that's being pulled all the time.*

Several participants noted a lack of transparency in how budgetary decisions are made. One individual noted:

> *They have very little autonomy in that way in what they can do. They can kind of fiddle around the edges a lot of the time and they kind of are just given a block budget and say, "There you go." Nobody knows how it's allocated in the HSE: is it data, population, anything like that? For example [name of city] would have a significantly bigger budget than [this city], even though they have a significantly smaller population.*

Concern that budgets are not allocated on the basis of need was also highlighted by a consultant, who noted:

> *We're bringing [number of interviewees] I think in to interview for two posts. But they have money somehow. Is it because [a politician] is in their catchment area? But they say, "Well we've got money." But our hospital tells us there's money for nothing.*

The impact of not having equity of resources was highlighted, particularly in the context of decisions to standardise certain services. This is explained in the following quote, where one consultant noted:

> *There is the corporate decision-making process. It's kind of a "one-size-fits-all" approach. So, you get in and stuff is "imposed on you" and you have to comply with X, Y, and Z, even though your colleagues and the [big city] hospitals might have twice as many staff as you have to implement this and half the number of patient s… This is where we would feel that we get really short-changed …*

Decisions to create centres of excellence and allocate substantial funding to the provision of specialist services in some areas were identified as problematic. A number of consultants working in hospitals in areas outside of Dublin drew attention to the removal of services from smaller more local hospitals, and it was noted this had an impact on patients and on medical staff. One participant said:

> *Because of politics and they've taken resources from here, my patients don't get [the test] here. They have to wait on the waiting list [in a different hospital] to have [the test]. Do you know what I mean? … It's just, it's ridiculous. Absolutely ridiculous.*

Another participant gave the following example of differences between the funding and resources allocated to hospitals in city areas, compared with those outside that location. This consultant said:

> *To get an MRI scanner in [this county], we'd have to raise half the cost of it. No one would pay that. You either need an MRI scanner or you don't need one. They need to acknowledge that we need one, but they said they would not fund it unless we raise half the cost ourselves … This is the sort of thing where you go "Jesus". You'd never hear that [in respect of some hospitals] having to raise half the amount … It's frustrating. It's very frustrating.*

Lack of facilities and supports

A number of consultants referred to a lack of basic facilities they needed to do their work. These ranged from office space to theatre allocation, as highlighted below:

> *In one situation, I do a clinic and the suggestion is I might have a junior doctor in with me. There is not physical space for a junior doctor; there is barely room for myself and the patient. I have to stand up to let the patient out of the room when they come in … So, the physical environment of where I do my clinical work is very poor.*

Another consultant spoke about being unable to adhere to the guidelines relating to timelines for certain procedures, noting:

> *But we can't adhere to that because we don't have the space or the theatre, and it's not the job and it's not the patients, it's that side of things. It just wears you down … You actually get to a point that you can't, and that's when service deteriorates, and that's my worry, for all our service. That you're balancing and you're relying on goodwill a lot, but then people get tired of the goodwill. They do it for a little bit.*

The futility of recruiting personnel without the necessary supports in place was also highlighted and one participant noted:

> *We're recruiting surgeons, and there [are] no theatres for them to operate in. How stupid is that? So, they go off ... Well what do they do? They go off and do private work. And make shed loads of money.*

Others spoke of more organisational issues, where they were unable to effect change. One consultant, who was working in a voluntary hospital at the time of the interview, highlighted an experience in his previous HSE position. The contrast between both organisations is highlighted below:

> *[In] several clinics I was at, 30% of the charts were missing, no results, nothing available for the patients; complete waste of time on my part and their part. Patients travelling an hour or two and then, you know, not having the available information, there [were] no clerical staff to make sure the results were there. Whereas here in [my current hospital] my secretary gets the charts out two weeks in advance, [goes] through everything, makes sure everything is there, but there, it's just a complete shambles … It took two years to get [a simple low-cost solution identified by the consultant]. That's the kind of thing that just drives people to burnout, they just get fed up.*

Relationships with others

Many consultants raised issues about the relationships they have with others and there were many positive comments, particularly about their team own members. One consultant said: "*The reason I get up for the job is I have a good team that I work with."* Another individual spoke about having great colleagues, noting:

> *I find personally, working where I do work, that I've great colleagues and a great team. There's a great spirit of kind of collective, I suppose, ownership and motivation towards doing what's right. I have no complaints actually with the setting that I work in. It's very, very good. Very collaborative, and very collegial.*

One participant mentioned a particular area that attracted team players, noting:

> *But for me personally, it's always been a very supportive and positive environment to work with … But generally, again, this is from my point of view,*

but I find [name of specialist area] colleagues great to work with. Just generally, not only at the medical doctor level but also, anybody who tends to be in that area.

Others, in response to why they stay in their current job said, "*I suppose I enjoy working with the people here that I'm with, the staff",* while another participant noted that even though the location was very inconvenient, having a good team was more important:

Well, I suppose we have a good team; we have a very low turnover of staff, and we work in a very challenging area and I suppose I have good relationships with the team, and that's one of the major reasons I'm in this job. This job is very inconvenient for me on a personal level in that it's far from my home, but I've opted to stay in it because we function well, and there's a lot to be said for that.

Another individual highlighted the need to work on building and maintaining a team, noting:

And like, there's a really good ... and everybody works, like, we've worked very, very hard on this, but it's a really good team model, and you have everybody. You have the nurses, you have the surgeons, [other specialists]. Everybody works very closely together. And it is that that is very good.

The importance of having good colleagues was also highlighted by others who, because of the specialist nature of their work, did not work as part of a team. One person noted:

One of the difficulties in my role is that I haves a degree of "professional isolation", and that is the downside of my more independent role, [it] is just that I don't have close peers working with me.

There was little commentary about the relationship between consultants and NCHDs, with the exception of the impact of the European Working Time Directive. One participant noted: *"I think what's been really different too is this European Working Time Directive killed us, you know."* This individual went on to say:

So, doctors are no longer on call for 24 hours, so there's no loyalty or dedication to a team, or a commitment.

A small number of comments were made relating to the relationship between consultant colleagues. One consultant noted that some colleagues could "*do more encouragement and training of junior doctors as well and more teaching you know*", while another highlighted the challenges arising from colleagues working in *"silos"* or in a non-collaborative way. This participant worked in an area that required integration with many other medical specialities and suggested:

In [my speciality], because we actually have to integrate with everybody, with pre-operative care, with every other discipline ... but there has to be a huge amount of reciprocation there. So, people go, "Oh yeah, it must be busy ... I don't know how you do that. Good luck, I'm off."

This participant highlighted the importance of systematising this type of integration, rather than leaving it to the decision of individual consultants.

Relationship with health service managers

While a small number of consultants highlighted good working relationships with health service managers, in general, where comments were made they referred to difficulties and challenges arising. One consultant compared a previous experience with the current, one noting:

> *I couldn't even pass the building without having panic attacks. It was so awful working there. It's just wonderful to come to work where the management, the function of management, is to support the provision of clinical care. You never meet a manager, you're never taken to a meeting, they just let you get on with your job, and they're there as support and background when you need resources, as it should be.*

Another participant recalled being on first-name terms with the health service managers prior to the HSE formation in 2006 and reported that: *"Once the HSE took over in 2006, everything changed, and it became just a totalitarian nightmare to work for as consultant."* This person highlighted the role played by a one senior manager, noting that this person was "*a big bully"* and that *"a really huge culture of bullying prevailed in the organisation under him … very autocratic dictatorship, very threatening, intimidating".*

Others reported that they did not feel respected noting, that "*clinicians [are] always side-lined and disregarded, and actually defamed, and maligned by management".* This was supported by another participant, who said:

> *And the problem is that the people at the coal face are not being treated properly, and they're being knocked down, they're being put down. It seems as if administration [is] more important than the coal face people.*

An example of a lack of support was given by one consultant, who had achieved a very significant international accolade. This consultant said:

> *the CEO turns around and doesn't say congrats … [The reason is] bitterness, I think it's because I'm a thorn in [his / her] side. I'm a bold, naughty boy!*

Another consultant explained:

> *Never have I been asked by any manager: "What can we do for you to improve the service to the patients?" I admit that I have developed over time less and less respect for management, after disappointment after disappointment by small and large managers. Managers manage their money and we manage the service provision to our patients.*

Some consultants suggested that there were too many managers ("*We are vastly overmanned by managers"*) and that there is "*an unequal concentration of resources in management, and particularly senior management".* This person suggested that this is a problem *"that must be addressed".* Another consultant suggested that some management personnel are not competent to do the job they are tasked with, noting that some have reached the positions they are in "w*ithout any exams, with no experience".*

One consultant suggested that there needs to be a complete change in the situation between *"administration and the people who work [as clinicians]".* This person noted:

> *Every single person in there wants to do a job, wants to do what's right for the patient. But there are people in there stopping them from doing it, there are people in there who are not doing it. And those people should actually be weeded out.*

Finally, one consultant noted:

> *I love my job! And I love being able to come to work every day and serve the patients … And, just to be enabled to do it in the most efficient manner possible is all we're asking of the health service management.*

Reasons to stay

Multiple reasons were identified by consultants for staying in their current post, and while these mainly related to family and personal reasons, a small number of consultants highlighted other issues. These issues included:

- Already working in the best possible place and being proud of what is being achieved
- Autonomy in their work
- Challenges of having to start over again
- Feeling a sense of responsibility to their job and their country.

One participant said:

> *I know that we have the best department probably in the country, and certainly in [name of city] … So, if I was to go somewhere else it would be to try and make them a better place … The same way that we are here, you know.*

This consultant followed this by saying:

> *I'm proud of what I do, you know … I don't have to buy wine, and I have drawers full of thank-you cards!*

It was suggested that for some consultants, at least, the level of autonomy was higher in Ireland than in other jurisdictions, and the response to the question of whether a particular consultant would leave was:

> *I don't think so because I'd be honest with you, I would prefer to work in Ireland than in the US, because I value the autonomy … I think it's such a nice part of the job. So, I enjoy that. I think that a very strong selling point for people working in Ireland as consultants, that you do have a lot of freedom to make your own decision on how you work day to day, even though you're appointed under a certain job description. I think once you come in and do a reasonable day's work, and you put in an honest shift, you're free to really change and mould the job the way that you want to do it.*

Another consultant highlighted the responsibility felt towards the country, noting:

> *I, as well, you do feel a sense of responsibility. The country educated you … It wasn't free fees. But relative to free fees. We do feel an obligation, I do think, to pay that back somehow … And help. I want to help change it around for the better.*

This sense of responsibility was also noted by another consultant, who highlighted their reluctance to move due to their commitment to their team and difficulties arising in getting a replacement consultant. This consultant said:

> *Difficulty in recruiting a replacement for me. I set up this service and I'm quite loyal to the team and so I would be reluctant to leave. I had considered moving and I've been offered work closer to home, but I'd be slow to leave until I have somebody to replace me.*

Starting all over again was identified by one individual, who noted that this would be very difficult to do. The many different aspects of decisions to stay or leave were also highlighted by this participant, who identified issues relating to money and family responsibilities as also being part of the equation. This participant noted:

And that would be a very difficult thing to do, it'd be starting all over again, to try and make change and so on and that would be exceedingly difficult to do.

Family reasons

However, the most commonly mentioned reasons for staying in the job they were in were identified as personal reasons; and in response to the question "*Why do you stay?",* several consultants drew attention to their family situation, with one noting:

My position is I have [number of] children. So, it's really, they're happy where they are. My daughters are big into [name of activity], and we're really lucky with a really good [activity supports] here in [name of area]. So, to be honest, that is the only reason that we would stay … The only reason this all works for me now, but I can't see how people would come back. I don't know how people come back to this and stay.

Another participant said:

I live in [name of county]. I'm happy here. I have [number of children] in secondary school so I can go nowhere at the moment. I'm not just going to uproot everybody! I did commute for years as a consultant to [a town in another county]. It's just not doable in the long run. So, if I was to work at [another city], I'd have to live there during the week and stuff so ... for someone like me, I'm stuck! … Uprooting everybody just 'cause my job is difficult. You know what I mean? It's not an option at the moment. But if I was, if I was young and I had a young family, I would be looking in a heartbeat to move.

Even where the consultant themselves wanted to move, family commitments meant they stayed where they were, and one consultant said: "*At the moment, one of the reasons for keeping me in Ireland is that I have a lot of family commitments" and "if I didn't have those responsibilities, I suppose, I would be very tempted to go back".* Finally, another consultant noted:

I'm working in the catchment area where I grew up, so I'm looking after my parents' friends and my friends' parents and that's a very honourable thing to be able to provide – some comfort and caring to people in their hour of need … So that's largely what fires me, to be honest.

Reasons why it is difficult to retain and recruit consultants

A number of reasons why it is difficult to retain, and recruit consultants were highlighted and these reflect the issues already raised in this section.

Better opportunities elsewhere

Two main reasons were given for leaving and these were that there were better opportunities elsewhere and better pay. In terms of better opportunities elsewhere, mainly in other countries, it was suggested that other countries were making a strong effort to recruit doctors from Ireland. One consultant said:

Nursing [staff] and doctors, and probably physios and everybody else. There's no one to touch them … That's why the other countries want them. That's why the other countries are saying, "This is a sale, this is an auction. We're going to give more than they're [Ireland] giving. Come on over to us."

Several participants highlighted the willingness of *"our own Irish doctors"* to go elsewhere and many other countries, such as the UK, the US, Australia, the Middle East and, to a lesser extent *"other European countries",* were mentioned. One person noted:

The [named university] students, they're excellent students, excellent quality graduates but very few of them are staying in-house to do medicine or staying in Ireland … Many of them go to New Zealand: they say the work-life balance is so much better and training is better, everything, you're more encouraged.

Impact of pay

Many examples were given of the impact of pay on retention and recruitment and it was noted that "*You're well paid in general but in relative terms, you can earn more money elsewhere."* Examples of colleagues who had left the service were given and one consultant noted:

Nowadays, you can make much more money anywhere else than you can here ... Even here, in [a county] we had a guy … for years and he went off to work in the UK. They can make a fortune! … We like to think that it's good work, but I know for a fact that the pull of other places, particularly the financial and the tax and all the rest … is better [in] other places.

One consultant spoke about having *"received a phone call six months ago from [another country] asking if I'd be interested in a €300,000 a year job tax free".* This consultant *also* reported he had *"two job offers last year from the private sector".* Another consultant noted:

If I can make €600 grand in the private service, what do I need this €117 business for [payment for being on call], all the headaches, on call; supposedly they have to be on call and available?

Another consultant spoke of unsuccessfully trying to attract interest in a vacant consultant post in Ireland and noted: *"but [senior registrar] tells me that she doesn't see any value in taking the extra responsibility for the kind of pay that's being offered for new entrant consultants".* Another example was given of a consultant, who had been recruited on the new contract but who expected the lower pay to be resolved, and who was now actively seeking to leave:

I know exactly one colleague in particular in [county] who's actively looking to go back to [non-EU country] and part of the problem is he's just sick of this business of being paid less than everybody else. You know, I think when he came back, he thought it would all be fixed and within a year or two, it would roll back on us. But, now he's actively looking to go back.

This was also highlighted in the context of consultants coming back to Ireland where the cost of living, particularly in Dublin, would excessive:

And then you have the high-class colleagues of mine, really high fliers working in [name of city] and other places who really could do with coming home. But living say [in] Dublin, they'd need to come back to Dublin and they would find it difficult to buy a house and send kids to school in Dublin with the same standard that they're living in currently. So, they're opting not to do [this], and that is a travesty for [the] health service in general and leadership.

Challenges in attracting consultants to specific posts

A number of respondents highlighted the challenges experienced in attracting consultants to specific posts, particularly small hospitals in rural areas. One participant, highlighting two posts that had been subject to advertising three to four times in a rural area, noted that it

was difficult to recruit consultants to work there, and that this would have a long-term implication for the sustainability of the hospital:

> *They're too difficult. They're [consultants posts] not attractive. The people want to go and work in the cities where they have a large number of colleagues … So, it's going to be very hard. I'll be honest with you, I don't see [that] these are the hospitals that will be sustainable.*

The importance of family in attracting consultants to take up positions in Ireland was also highlighted, although it was noted that they failed to return either because the opportunities were not there, or the pay and conditions were insufficient to attract them back. One consultant said:

> *And what will attract them back? Practicality, Irish people want to be at home. They want to be home with their family. I left behind a large number of colleagues who really, really want to come home. But either the posts aren't there, which was a big thing, or the salary is a real problem for an individual's family"*

This was supported by another consultant, who said:

> *So really, the only thing that's really attracting them back at the moment is because their wife wants their kids to play rugby and visit the grandparents on a Sunday afternoon. That's what's really bringing them back.*

It was also noted that the level of supports available in Ireland relative to elsewhere were poor. One participant highlighted the lack of access to specialised equipment, such as MRI scanners for research purposes, noting that if someone was interested in research, they would not be attracted to Ireland. This is highlighted in the following quote:

> *Even though you might want to do research and people would encourage you to do it, maybe you don't really have the access to MRIs for research. You know what I mean? Because it's completely booked out with clinical patients and if you worked somewhere in the US or England, I'm sure you'd have more access, especially [in university settings], to do research.*

Other basic supports, such as access to food when people are on call, or accommodation for staff if they are required to stay on site, was highlighted. One consultant, who was regularly on call, told of having to stay and pay for accommodation locally, as *"no accommodation [is] provided by the hospital",* and this person also noted *"there's nowhere to eat in the evenings if I'm on call on the weekend"*

Recruitment process

The recruitment process for consultants was identified as problematic. First, it was suggested that the planning process does not start early enough and secondly, it was noted that the process itself is slow and fraught with difficulties. There was some agreement that *"they never recruit until someone's left",* despite a lot of notice having been given. It was suggested that this highlighted *"no concern for, absolutely no concern for the clinical care of patients, and no concern for the staff"*.

Another consultant gave an example of a situation where – out of three consultants – two will be retiring in the next year; and again, concern for patients was identified as a core issue. That consultant said:

And we flagged this, and we've had various discussions, but the problem is, again, the senior management over in the [other HSE Hospital], at the regional level, at the [named geographical] level, are not taking it seriously and they are not really succession planning; and I'm not sure what's going to happen and, you know, I feel my patients have been left in the lurch!

Another consultant spoke about the approval process to get to recruit a consultant, noting there were seven different structures included in the process, and that the proposal could be *"blocked"* at any point along the way. This participant noted:

There's a recruitment process that beggars belief, where I have to write the major job descriptions. It has to go to [seven named organisations / structures]. Any of the places along there can block that … Far too many people with different agendas can block that along the way ... many of whom are completely invisible.

The lengthy process was considered to be *"really, really frustrating",* and:

You do all your paperwork and you get it approved, and then you join a queue for advertising and then you join in a queue for interviewing with public appointments, and then by the time all of the paperwork is done, and I do get that, it's very important, but it's very slow.

Summary of issues raised by consultants

Throughout the collection of data from consultants in this study, it was clear that there were strong concerns that the information provided would not be sufficiently anonymised and this was an unexpected feature of data collection with this group.

A number of issues were raised by consultants in this analysis, and while several positive aspects of being a consultant were identified, many challenges were highlighted. Positive aspects of being a consultant included working with patients, and this was identified by a number of consultants as a reason for remaining in their jobs. Consultants are obliged to train for many years. They undertake basic specialist training early in their careers and this is then followed through with additional higher specialist training and a fellowship. Being able to work in areas that are of interest to them is central to their work and is an important aspect of their job satisfaction. The matter of autonomy was raised as a core issue central to operating as a consultant and was valued in enabling them to achieve better outcomes for their patients.

In terms of the challenges of being a consultant, pay was identified as one of the biggest issues arising. While some of the commentary was made in respect of the actual amount of pay, and it was noted by many consultants that there were opportunities for much higher levels of pay in other jurisdictions, or the private sector in Ireland, most of the commentary focused on the inequity in pay for consultants who had joined the service in latter years. It was suggested that these consultants, who were being paid less and who had far less favourable terms and conditions, were already leaving the service and Ireland.

In addition to pay, the culture of the HSE, along with relationships with mangers, was identified as the most common source of frustration for consultants. While one person noted that many new developments had taken place, and that in general, the situation was more positive now than it had been 10 years ago, there was an extensive commentary about negative issues in respect of the HSE. Specifically, it was suggested that there is a lack of

trust and goodwill due to *"the breach of contract"* in respect of newly appointed consultants. It was also suggested that there was a lack of transparency about problems and a lack of involvement by consultants in decision-making, even in situations where their patients were directly affected. Some issues were raised about leadership, although there were different perspectives, depending on whether the focus was on autonomy, thus allowing consultants to practise in their preferred way, and adopting a common approach to the implementation of the service. When consultants identified a lack of autonomy in their work, it was noted to be negative both for them and for the implementation of their service.

Some issues were raised about the inequitable spread of resources throughout the service and it was suggested that some hospitals and specialities were much better funded and resourced than others. This means that while budgets are held at local level, the scope for doing anything differently is very limited. Inequities were highlighted in the number of consultants available, as well as other services, depending mainly on geographic area and it was suggested that this lack of transparency and fairness within the system was problematic.

Relationships with other members of the medical team and with other professionals within the multidisciplinary team were generally reported to be very good. In contrast, relationships with HSE managers were mainly reported to be negative and it was suggested that there were too many managers. It was also highlighted that there was a lack of value and respect for the work done by consultants and a lack of recognition, by managers, of their knowledge and achievements. A number of examples highlighting this were given and it was identified as a source of distress.

In terms of intention to stay or leave, there was a striking focus on family reasons (e.g. children in school, being settled in the local community, being able to do the activities they want) as the main impetus for remaining in the service, although a number of other issues were also identified, including: feeling a sense of pride in their work; the challenges of having to start over again; and feeling a sense of responsibility for their team and obligation to the country.

The reasons behind the difficulties in attracting consultants back to Ireland were linked strongly to pay and it was suggested that the pay and conditions elsewhere were more attractive for consultants than in Ireland. The recruitment process was also identified as playing a significant role in the recruitment of consultants and a number of frustrations were identified in this regard.

Conclusions: study with consultants

The Irish Medical Council register was used to provide the study population, and, in total, 700 responses were received. Note that although the sample of respondents is broadly representative of the population of consultants, the number of respondents was lower than desired. Twelve interviews with consultants were also conducted. Results indicate that 30% of consultants intended to leave their job in the next two years. Of this 30%, about one-third intended to leave Ireland without a plan to return. Conclusions presented below highlight factors that may be influencing consultants' job and career intentions.

Conclusions: positive aspects of the work and the organisation

Consultants perceive their work to have a significant impact on the lives of others, are highly engaged in their work, and have positive views of their co-workers.

In interviews, consultants highlighted the positive and life-changing impact they can have on people's lives because of the high level of expertise they have developed. This was identified as the most positive aspect of being a consultant and was also reflected in the quantitative data where the index measuring impact had the highest score (85%) of all areas measured. High levels of satisfaction with co-workers and other team members emerged in the interviews, which is consistent with the high index score for perceptions of co-workers (77%), and the mean score of consultants on the engagement index (76%) which was also high.

Conclusions: pay

Overall satisfaction with pay among consultants is low (mean index score: 30%). There is considerable anger about recent changes to newly-recruited consultants' pay scales. Inequities between training requirements and pay scales of consultants and public health doctors was considered unfair. Almost two-thirds of consultants (64%) who intended to leave their jobs in the next two years rated better opportunities elsewhere as highly relevant to this intention.

The study identified general dissatisfaction with the level of pay (the mean score on the satisfaction with pay index, answered by consultants working partly or entirely in a publicly-funded setting was low, at 30%). For example, 74% of consultants disagreed with one of the items on this index namely, "Compared to people doing a similar job in the private sector, my pay is reasonable".

Interviewees expressed considerable anger in respect of those who have been recently appointed on a lower pay scale. It was strongly suggested that the pay is not commensurate with the level of training undertaken which is extensive, takes place over many years, and, often includes a necessity of relocating to another country in order to gain sufficient expertise. It was also highlighted that consultants work hard, have a high level of responsibility, and are paid less than others, particularly those in the private sector. Indeed, consultants who indicated an intention to leave their current job over the next two years were asked to rate the relevance of a range of factors to this intention. The two factors with the most frequent rating of highly relevant were that staffing levels were a problem (48%) and there were better job opportunities elsewhere (64%).

A particular issue was highlighted in the interviews with respect to public health doctors, who undertake similar types and levels of training to consultants in other areas but are paid at a lower level. This is considered unfair by those doctors.

Conclusions: information sharing and decision-making

Overall, consultants' level of satisfaction with information sharing and their involvement in decision-making was low. The information sharing index had a mean score of 32%. Consultants working in private settings reported significantly higher levels of information sharing and autonomy than those working in public settings. Interviews with consultants also highlighted a lack of involvement in decision-making as an area of frustration particularly when decisions have implications for clinical practice. There is also evidence of a loss of trust between consultants and HSE managers.

Consultants had a low mean index score on the measure of information sharing and decision-making (32%). For example, 74% of consultants agreed with one of the items on this index - namely "People feel as if decisions are frequently made over their heads". This finding is borne out in the interviews, where many consultants mentioned feeling frustrated by a lack of involvement in decision-making, particularly where it impacts on clinical practice.

In the interviews, consultants also voiced a lack of trust and loss of goodwill between consultants and HSE managers. A number of them highlighted changes to their contract that had not been agreed by them.

While high levels of autonomy were mentioned as a positive feature of being a consultant by interviewees, in situations where this was not the case, there was considerable dissatisfaction. The overall autonomy index mean (60%) indicated moderate to high levels of overall autonomy. However, consultants working in private settings had substantially higher autonomy scores (74%) than those working in public settings (57%). This is consistent with variations in information sharing scores, where consultants in private settings reported significantly higher levels on this index (45%) than those in public settings (29%).

Conclusions: relationships with managers

The overall perceptions of managers index score for consultants is low. This reflects low satisfaction with management and is one of the lowest scores across all areas measured. Interviews with consultants highlighted a number of difficulties in their working relationships with HSE management: lack of transparency, fear of speaking out, and inequitable spread of facilities, personnel and resources. Working in the HSE environment was viewed less favourably than working in voluntary and private settings.

The mean overall perceptions of manager score reported by consultants was low, at 41%. and for example, only 24.5% of consultants agreed with one of the items on this scale namely – "My manager takes an interest in my career development".

In the interviews, consultants drew attention to a lack of transparency within the HSE and a fear of speaking out because of potential consequences for them and their service.

Several consultants provided examples of a lack of facilities and supports they identified as central to doing their job well and attention was drawn to the inequitable spread of personnel and other resources across organisations. The HSE environment was compared unfavourably with the voluntary and private sectors. The difficulties identified in respect of the culture of the HSE are understandably reflected in the relationships between consultants and management.

Conclusions: joint influences on job and career intentions

A total of 28 individual, employment, structural and perceptual / attitudinal characteristics were examined simultaneously in multiple regression models to establish which were the most important predictors of three outcomes – intent to stay or leave current job, organisation or medical profession.

The results of these regression models indicate that the following are of key importance in understanding consultants' job and career intentions:

- *New recruit status* (new recruits are more likely to intend to leave)
- *Full-/part-time status* (full-time workers are more likely to intend to leave);
- *Setting* (consultants working in public settings are more likely to leave compared with those working in private or both public and private settings);
- *Global job satisfaction* (those reporting lower levels are more likely to leave);
- *Burnout* (those reporting higher levels are more likely to leave);
- *Organisational commitment* (those reporting lower levels are more likely to leave);
- *Effort-reward ratio* (those reporting higher effort compared with rewards are more likely to leave); and
- *Satisfaction with pay* (those reporting lower levels of satisfaction are more likely to leave).

An implication of these results is that certain groups in the population of consultants are more likely to intend to leave their job, organisation or profession, and that these groups may benefit from targeted policy intervention.

Further analysis that focused on perceptions of the job and the organisation confirmed the importance of global job satisfaction, organisational commitment and burnout in predicting consultants' job intentions, and showed that different aspects of the work and the organisation underpin or drive these three elements.

- global job satisfaction is driven by: satisfaction with pay, perceived quality of workplace, information sharing, autonomy, effort-reward ratio, responsibility overload and perceptions of co-workers

- organisational commitment is driven by: perceived quality of workplace, perceptions of manager, perceptions of co-workers, information sharing, satisfaction with pay and impact

- burnout is driven by: responsibility overload, perceived quality of workplace, effort-reward ratio and information sharing.

An implication of this is that efforts to improve drivers of global job satisfaction, organisational commitment and burnout may lead to improvements in these three important aspects of work, which in turn may impact on consultants' job and career intentions.

Section 6: Findings from study with non-consultant doctors (NCHDs)

This section presents the findings from the study with non-consultant doctors.

Quantitative results are presented in two main sections:

- **The first section includes both descriptive and bivariate analysis.** It presents the results for each of the questionnaire indexes, grouped according to whether they are primarily related to the perceptions of the job, or perceptions of the wider organisation, as per the conceptual framework. This first section also includes a consideration of respondents' perceptions of recruitment and job expectations for those who were recruited in the past two years. For each index, the overall score is presented, how each index is related to other indexes is described, and significant differences across important demographic, employment and structural groups are highlighted. Where possible, comparisons with other recent studies (mainly the CSEES 2017 study) are presented. However, it should be borne in mind that the aims, design and samples of studies are rarely exactly comparable. As well as the questionnaire indexes, questionnaire items that assess level of job demands (such as amount of overtime normally worked) are presented.

- **The second section is based on the regression analysis** which focuses on what we regard as the key outcomes in this study: intention to leave current job, likelihood of leaving current organisation, and likelihood of leaving the profession. In these analyses, a wide range of independent variables have been incorporated, grouped into two major 'blocks': the first block incorporates individual, employment and structural characteristics and as such may be considered as comprising 'fixed' elements of the issues under investigation. The second block incorporates respondents' perceptions of the job and the organisation and includes both 'drivers' and 'outcomes' as listed in the Terms of Reference. The regression analyses therefore allow an examination of how the outcomes vary across perceptual elements of respondents' work, after adjusting for important individual, demographic and structural characteristics. Note that the Appendix provides an alternative analysis of intention to leave the organisation which provides additional insights into how the indexes are related both to one another and to the outcome. This is referenced in the discussion of the regressions.

- **The third section presents the results of the qualitative findings** based on the analysis of interviews with stakeholders. In keeping with an interpretive paradigm, these are presented according to the broad themes that emerged. These findings, however are aligned with the conceptual framework in so far as the broad structure adheres to the structure of variables related to the job and organisation and those related to intention to stay / leave.

Part 1: Quantitative findings from study with NCHDs

This section presents the findings from the NCHDs' study and includes quantitative findings relating to the work and work context, the organisational context, and intention to stay in or leave their current job, organisation or medical profession.

For each of the questionnaire indexes in the survey:

- A brief description of the index is provided. Indexes are expressed as percentages: See Section 2 (Methodology) for more information on how the indexes were computed.
- A graph showing responses to individual items on the index is presented. (If more than 5% of respondents did not answer the question, this is noted below the graph.)
- A summary of subgroup differences is presented, highlighting statistically significant differences in index means between groups.
- All data underlying these descriptions, along with index reliabilities, are in the data compendium.
- The Appendix (Table A3) presents the intercorrelations between the indexes for readers who are interested in how these indexes are related to one another.

All analyses are weighted to provide nationally representative estimates, on the basis of job category and gender. The end of the chapter presents key themes emerging from the interview data of the NCHDs.

Issues relating to the job

This section presents the findings from the survey about:

- Engagement
- Autonomy
- Responsibility overload
- Impact
- Job satisfaction specific
- Job satisfaction global
- Burnout
- Effort-reward ratio.

Engagement

This index measures the extent to which doctors feel enthusiastic and inspired by their work.

Overall findings

The overall mean engagement score for NCHDs is 74%, indicating high overall engagement. For example, 76% of NCHDs agreed that they are proud of the work that they do.

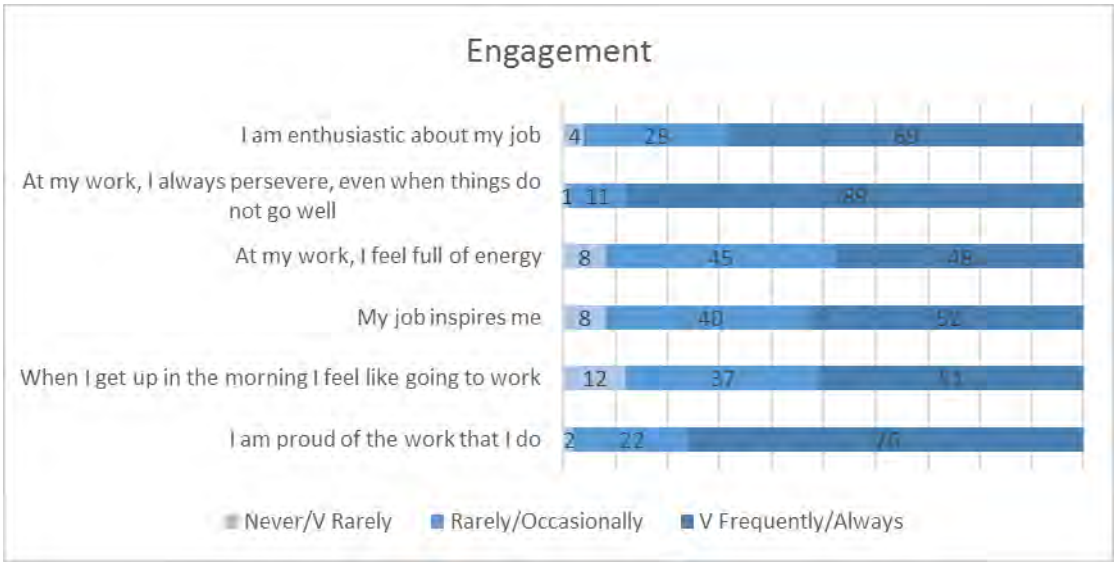


Figure 54: Engagement

Significant findings

- Engagement was significantly higher among NCHDs who obtained their initial qualification in another EU country (77%) than among NCHDs obtaining their initial qualification in the Republic of Ireland (71%) or a non-EU country (71%).
- Females (70.5%) had significantly lower engagement scores than males (75.5%).
- NCHDs working part-time had significantly lower engagement scores (70%) than those working full-time (74%).
- NCHDs who were not in training had significantly lower engagement scores (72%) than NCHDs in training (75%).
- NCHDs who intended to leave their current job in the next two years had significantly lower engagement scores (72%) than NCHDs who did not intend to leave (77%).
- Engagement scores did not differ significantly across NCHDs' age groups, geographic region, or sector (public, private or both public and private).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for employee engagement of 72%.

Autonomy

This index measures doctors' perceptions of freedom and independence in their day-to-day work.

Overall findings

The overall mean on the autonomy index for NCHDs is 40%, indicating moderate overall autonomy. For example, 26% of NCHDs agreed that they can decide on their own how to go about doing their work.

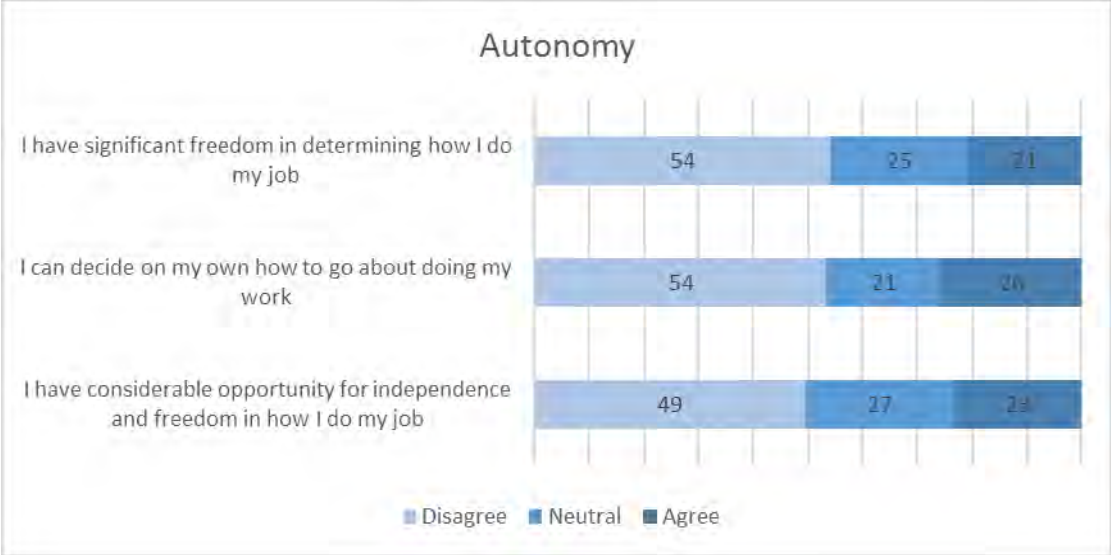


Figure 55: Autonomy

Significant findings

- Autonomy was significantly higher among NCHDs who obtained their initial qualification in a non-EU country (46%) than among NCHDs obtaining their initial qualification in the Republic of Ireland (38%) or a non-EU country (39%).
- NCHDs working part-time had significantly higher autonomy scores (45%) than those working full-time (40%).
- NCHDs who were in training had significantly lower autonomy scores (38%) than NCHDs not in training (42%).
- NCHDs who intended to leave their current job in the next two years had significantly lower autonomy scores (37%) than NCHD who did not intend to leave (46%).
- Autonomy scores did not differ significantly across NCHDs' age groups, gender, geographic region, or sector (public, private or both public and private).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for autonomy among civil servants of 61%.

Responsibility overload

This index measures the extent to which doctors feel a sense of responsibility overload in their job.

Overall findings

The NCHDs' mean responsibility overload score is 43%, indicating moderate overall responsibility overload. For example, 37% of NCHDs agreed that too much is expected of them in their job. Note that higher scores on this measure indicate a greater sense of overload.

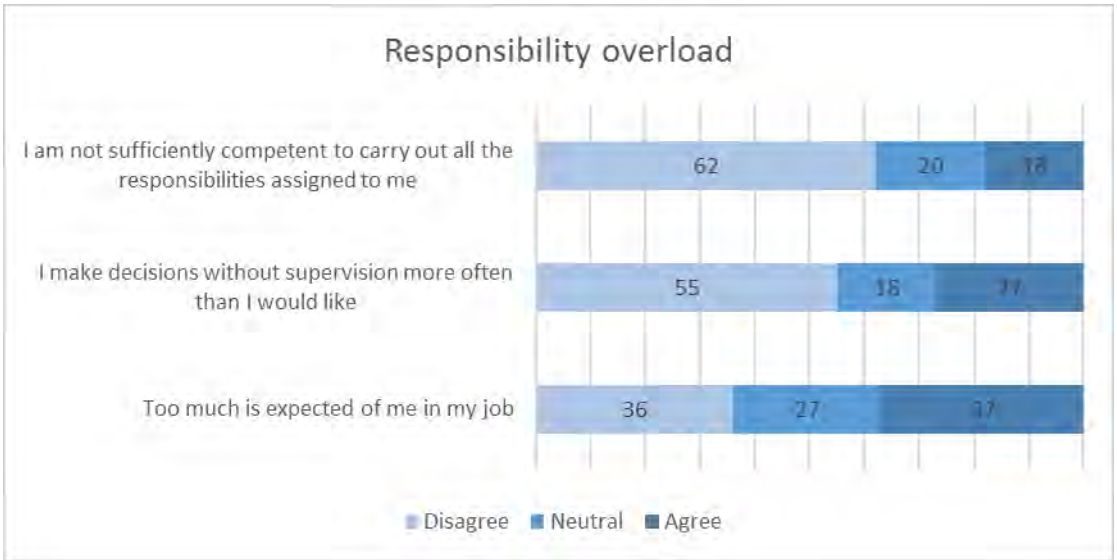


Figure 56: Responsibility overload

Significant findings

- Responsibility overload was significantly higher among NCHDs aged 30 or younger (50%) than among NCHDs aged 31-40 (44%), 41-50 (35%) or 51 or older (38%).
- NCHDs who obtained their initial qualification in Ireland had significantly higher responsibility overload scores (49%) than those obtaining their initial qualification in another EU country (37%) or a non-EU country (41%).
- NCHDs who were in training had significantly higher responsibility overload scores (47%) than NCHDs not in training (41%).
- Responsibility overload scores did not differ significantly across NCHDs' gender, geographic region, full- / part-time status, sector (public, private or both public and private), or intent to leave or stay in their current job over the next two years.

Impact

This index measures the extent to which doctors believe that their work has a significant impact on the lives of others.

Overall findings

The mean on the impact index for NCHDs is 83%, indicating high overall perception of impact. For example, 94% of NCHDs agreed that their work makes a positive difference in patients' or clients' lives.

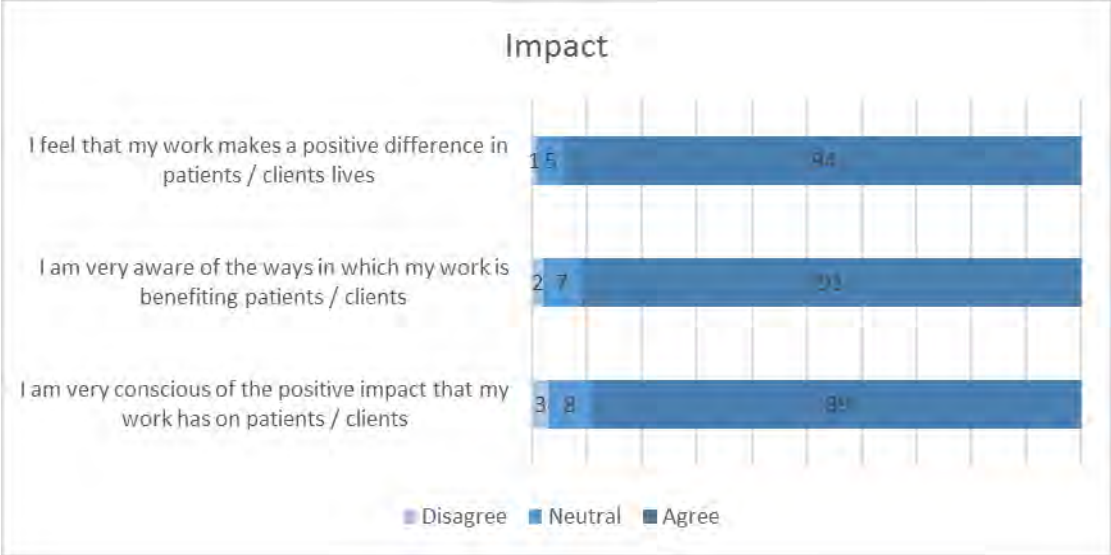


Figure 57: Impact

Significant findings

- Impact was positively related to age. NCHDs aged 50 or older had the highest mean impact score (91%), followed by those aged 41-50 (86%), 31-40 (83%), with the lowest impact score among NCHDs aged 30 or under (78%). The impact score of NCHDs aged 30 or under was significantly lower than the scores of NCHDs in the other three age groups.
- NCHDs who obtained their initial qualification in Ireland had significantly lower impact scores (79%) than those obtaining their initial qualification in a non-EU country (85%); NCHDs who obtained their qualification in another EU country had a mean impact score (83%) between the two other groups' values.
- Females had significantly lower impact scores (78%) than males (85%).
- NCHDs who were in training had significantly lower impact scores (80%) than NCHDs not in training (84%).
- Impact scores did not differ significantly across geographic region, full- / part-time status, sector (public, private or both public and private), or intent to leave or stay in current job over the next two years.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for Employee Impact of 70%.

Job satisfaction specific

This index measures doctors' level of satisfaction with specific aspects of their job (physical working conditions, flexibility of hours, physical demands, quality of care).

Overall findings

NCHDs had a mean on the job satisfaction specific index of 46%, indicating moderate levels of satisfaction with specific aspects of the job. There is some variation in responses to individual items. For example, 59% of NCHDs reported that they were satisfied with the quality of care given to patients / service users, while 22% were satisfied with the deployment of support staff.

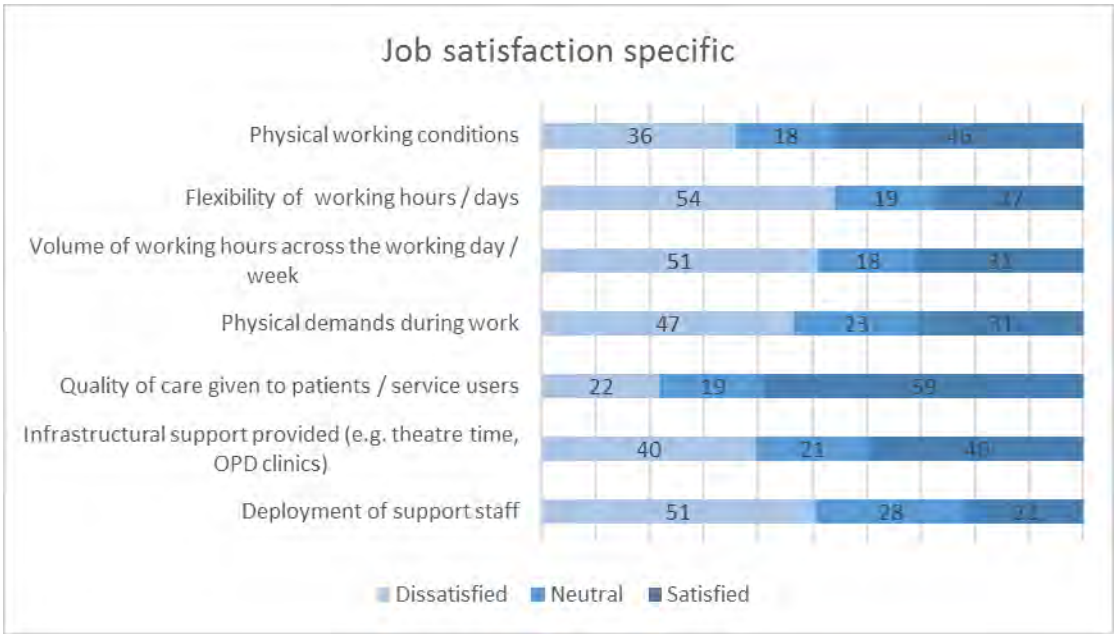


Figure 58: Job satisfaction specific

Significant findings

- Job satisfaction specific was positively related to age. NCHDs aged 50 or older had the highest job satisfaction specific score (62%), followed by those aged 41-50 (53%), 31-40 (45%), with the lowest impact score among NCHDs aged 30 or under (40%). The specific job satisfaction score of NCHDs aged 30 or under was significantly lower than the scores of NCHDs in the other three age groups.
- NCHDs who obtained their initial qualification in Ireland reported significantly lower job satisfaction specific scores (39%) than those obtaining their initial qualification in another EU country (52%) or non-EU country (51%).
- Females had significantly lower specific job satisfaction scores (42%) than males (48%).
- NCHDs who were in training had significantly lower specific job satisfaction scores (41%) than NCHDs not in training (50%).
- NCHDs who intended to stay in their current job for the next two years had significantly higher levels of specific job satisfaction (53%) than NCHDs who intended to leave their job in the next two years (42%).
- Specific job satisfaction levels did not differ significantly across geographic region, full- / part-time status, or sector (public, private or both public and private).

Job satisfaction global

This index measures doctors' general level of job satisfaction.

Overall findings

The global job satisfaction index mean for NCHDs is 58%, indicating moderate to high levels of overall job satisfaction. For example, 56% of NCHDs agreed that, all things considered, they were satisfied with their current job.

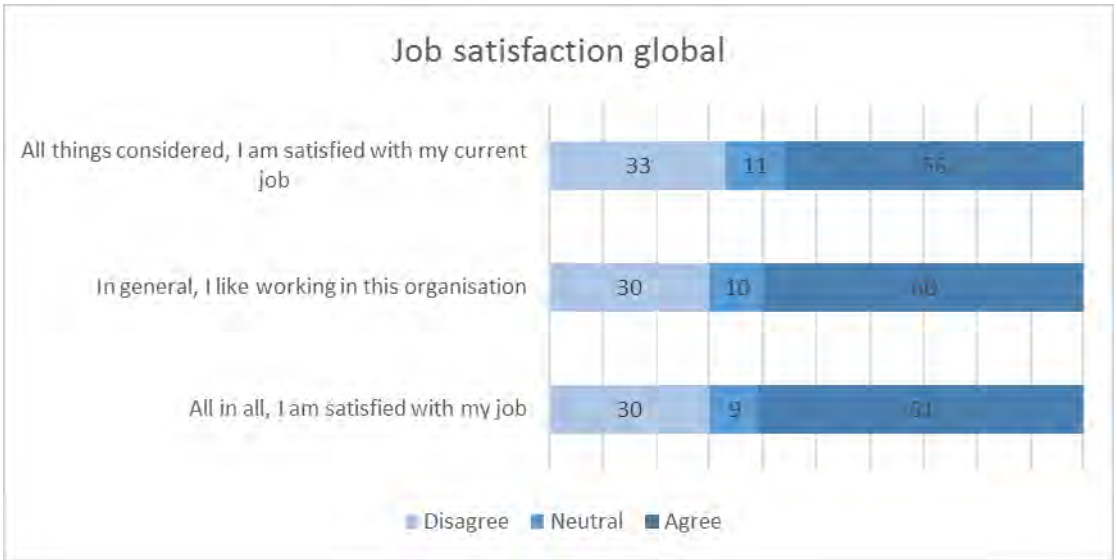


Figure 59: Job satisfaction global

Significant findings

- NCHDs aged 51 or older reported significantly higher global job satisfaction scores (72%) than NCHDs aged 30 or younger (55%).
- NCHDs who obtained their initial qualification in Ireland reported significantly lower global job satisfaction scores (51%) than those obtaining their initial qualification in another EU country (62%) or non-EU country (61%).
- NCHDs who were in training had significantly lower global job satisfaction scores (54%) than NCHDs not in training (61%).
- NCHDs who intended to stay in their current job for the next two years had significantly higher levels of global job satisfaction (68%) than NCHDs who intended to leave their job in the next two years (52%).
- Global job satisfaction levels did not differ significantly across gender, geographic region, full- / part-time status, or sector (public, private or both public and private).

Burnout

This index measures doctors' feelings of work-related burnout. Higher scores indicate higher levels of burnout.

Overall findings

NCHDs had a mean of 61% on the burnout index, indicating moderate to high levels of overall burnout. For example, 45% of NCHDs always of often felt exhausted in the morning at the thought of another day at work.

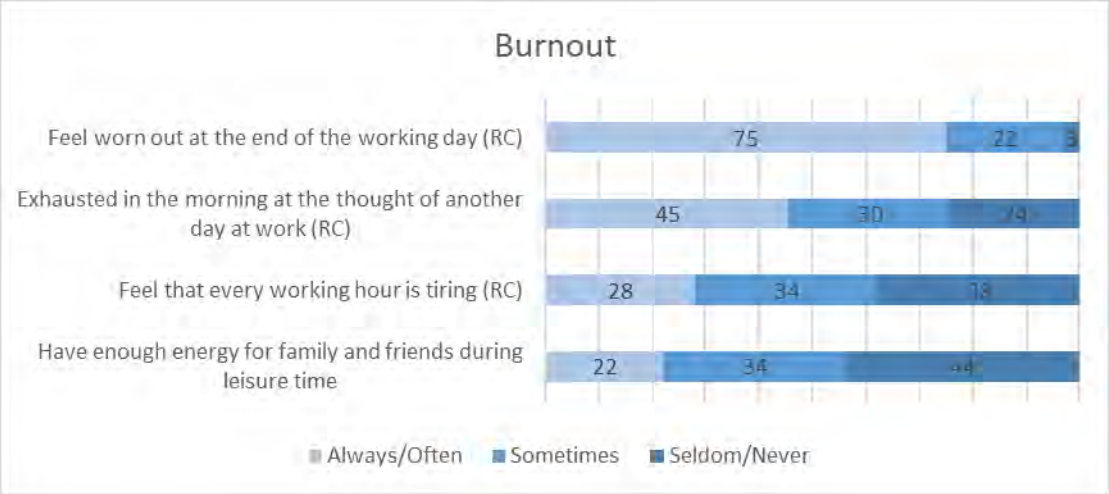


Figure 60: Job satisfaction global

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- NCHDs aged 30 or younger had significantly higher levels of burnout (65%) than those aged 31-40 (59%), 41-50 (56%) and 51 or older (47%).
- NCHDs who obtained their initial qualification in Ireland reported significantly higher burnout scores (64%) than those obtaining their initial qualification or a non-EU country (56%); there was no difference between NCHDs qualifying in Ireland and those qualifying in another EU country (59%).
- Females had significantly higher burnout scores (66%) than males (56%).
- NCHDs who were in training had significantly higher burnout scores (61%) than NCHDs not in training (58%).
- NCHDs who intended to stay in their current job for the next two years had significantly lower levels of burnout (55%) than NCHDs who intended to leave their job in the next two years (62%).
- Levels of burnout did not differ significantly across geographic region, full- / part-time status, or sector (public, private or both public and private).

Effort and reward

These indexes measure the extent to which doctors find reward in their work, and the amount of effort they put in to their work. In this report, the two indexes are combined to form the effort-reward ratio. Higher scores on this ratio mean that more effort is put in, relative to reward received, and vice versa.

An effort-reward ratio of 1 means that respondents reported putting the same amount of effort in as rewards experienced. A ratio greater than 1 indicates that respondents reported expending more effort than reward experienced, and a ratio of less than 1 indicates that respondents reported receiving more reward than effort expended. Therefore, higher ratios indicate more negative outcomes[12].

[12] There are seven effort items and three reward items. Therefore, effort-reward ratio = Effort/[2.333*Reward] (See http://www.uniklinik-

Overall findings

The first three items on the graph below measure effort, while the remaining seven measure reward. NCHDs reported moderate levels of effort. For example, 37% agreed that they have constant time pressure and a heavy workload. Their responses to the reward items varied. For example, 32% agreed that their job security is poor while only 2% agreed that, considering all their efforts and achievements, their salary / income is adequate. The mean effort-reward ratio for NCHDs is 1.68. Ratios over the value of 1 indicate more effort put in than reward received.

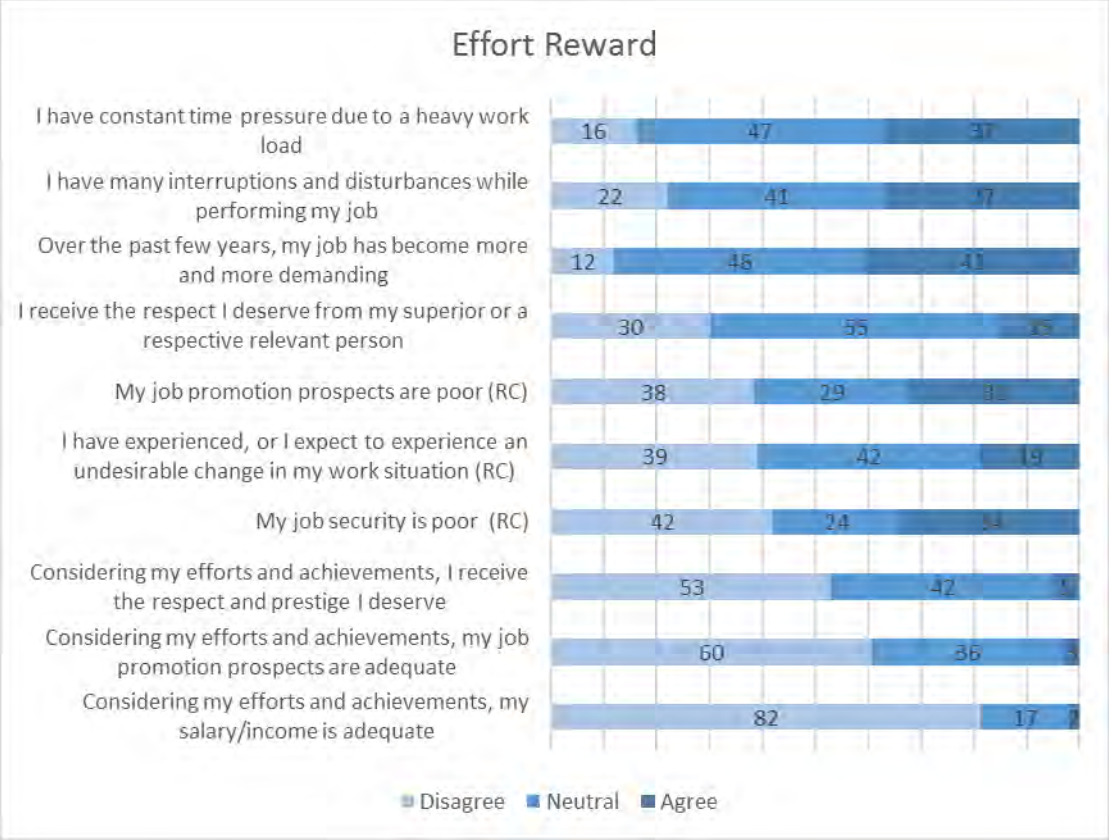


Figure 61: Effort reward

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- NCHDs working in private settings had a mean effort-reward ratio (1.06) that was significantly lower than that of those working in public (1.80) and both public and private settings (1.66).
- NCHDs who intended to leave their current job in the next two years had an effort-reward ratio (1.97) that was significantly higher than that of NCHDs who intended to stay (1.42).
- Effort-reward ratio did not differ significantly across age group, country of initial qualification, gender, geographic region, full- / part-time status or NCHD training status (in training / not in training).

duesseldorf.de/fileadmin/Datenpool/einrichtungen/institut_fuer_medizinische_soziologie_id54/ERI/PsychometricProperties.pdf)

Benchmark: The Royal College of Physicians national study of wellbeing of hospital doctors in Ireland reported the effort reward-ratio was 1.4.

Issues relating to the organisation

This section presents the findings from the survey about:

- Satisfaction with pay
- Paid and unpaid overtime / time in lieu and working hours
- Information sharing
- Organisational commitment
- Training opportunities
- Promotional opportunities
- Perceptions of co-workers
- Perceptions of manager
- Perceived quality of workplace
- Recruitment process (new recruits only)
- Job expectations (new recruits only)
- Intention to leave organisation
- Intention to leave medical profession.
-

Satisfaction with pay

This index measures the extent to which doctors are satisfied with their level of pay. NCHDs working in the private sector only (1.4%) were not asked these questions.

Overall findings

The mean for NCHDs on the satisfaction with pay index is 30%, indicating low overall satisfaction. For example, 76% of NCHDs disagreed that their pay adequately reflects their performance.

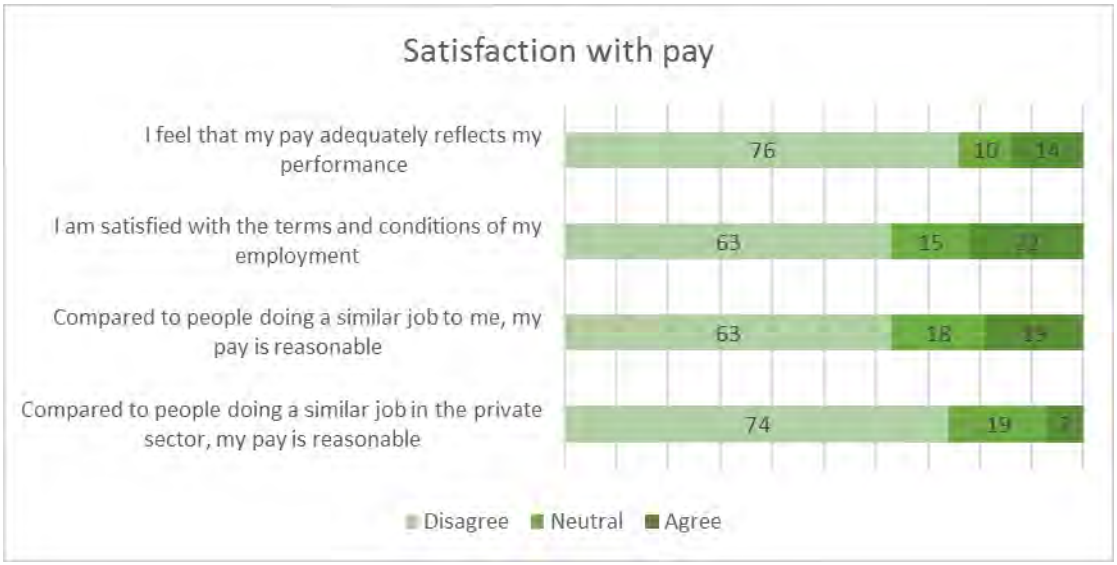


Figure 62: Satisfaction with pay

Significant findings

- NCHDs who obtained their initial qualification in Ireland reported significantly lower satisfaction with pay scores (25%) than those obtaining their initial qualification in another EU country (33%) or non-EU country (33%).
- Females had significantly lower satisfaction with pay scores (78%) than males (85%).
- NCHDs who were in training had significantly lower pay satisfaction scores (27%) than NCHDs not in training (32%).
- NCHDs who intended to stay in their current job for the next two years had significantly higher levels of satisfaction with pay scores (36%) than NCHDs who intended to leave their job in the next two years (27%).
- Satisfaction with pay levels did not differ significantly across age group, gender, geographic region, full- / part-time status, or sector (public, private or both public and private).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall scale mean for satisfaction with pay among civil servants of 46%.

Paid and unpaid overtime and working hours

In addition to satisfaction with pay, NCHDs were asked about the frequency with which they worked overtime with pay, without pay, and with time in lieu.

- It was common for NCHDs to work overtime with pay: 82% did this once a week or more often.
- About 48% of NCHDs worked overtime without pay once a fortnight or more often.
- It was less common for NCHDs to work overtime with time in lieu. About 76% indicated that they did this very rarely or never (Table 438).

Table 43: Frequency of overtime with pay, without pay, and with time in lieu: NCHDs

NCHDs	Very frequently (about twice a week or more often)	Frequently (about once a week)	Occasionally (about once a fortnight)	Rarely (about once a month)	Very rarely (about once every 3 months)	Never	Total
Overtime with pay	54.1	27.4	7.1	4.2	2.4	4.8	100.0
Overtime without pay	19.2	13.7	14.8	9.2	6.8	36.4	100.0
Overtime with time in lieu	3.9	4.7	7.7	8.1	8.7	66.8	100.0

- NCHDs also provided information on their working hours over the past four weeks (Table 44). Daytime work (8am-8pm) was most frequent, with 84% of NCHDs indicating that this was their usual work schedule.
- One-third (32%) of NCHDs had been on call in the past four weeks and a quarter (24%) had worked shifts.
- Between one-eighth and one-fifth of NCHDs had usually worked evenings, nights or weekends over the past four weeks.

Table 44: Working schedule over the past four weeks (daytime, evenings, nights, weekends, shifts, on call)

NCHDs	Usually (at least half of the days worked over the previous 4 weeks)	Sometimes (fewer than half of the days over the previous 4 weeks but at least one hour)	Never (on no occasion over the previous 4 weeks)	Total
Daytime past 4 weeks (8am-8pm)	83.9	12.4	3.7	100.0
Evening time past 4 weeks (finish 8pm-midnight)	15.9	61.2	22.9	100.0
Night time past 4 weeks (finish midnight-8am)	12.1	58.6	29.3	100.0
Saturday / Sunday past 4 weeks	19.2	71.8	9.0	100.0
Shifts past 4 weeks (usually changes in working schedule and unsociable hours)	23.5	42.7	33.8	100.0
On call past 4 weeks	32.2	53.6	14.2	100.0

Information sharing

This index measures doctors' perceptions of the extent to which information is shared and decisions are communicated.

Overall findings

NCHDs had an overall mean of 33% on the information sharing index, indicating low levels of information sharing. For example, 66% of NCHDs agreed that people do not have any say in decisions which affect their work.

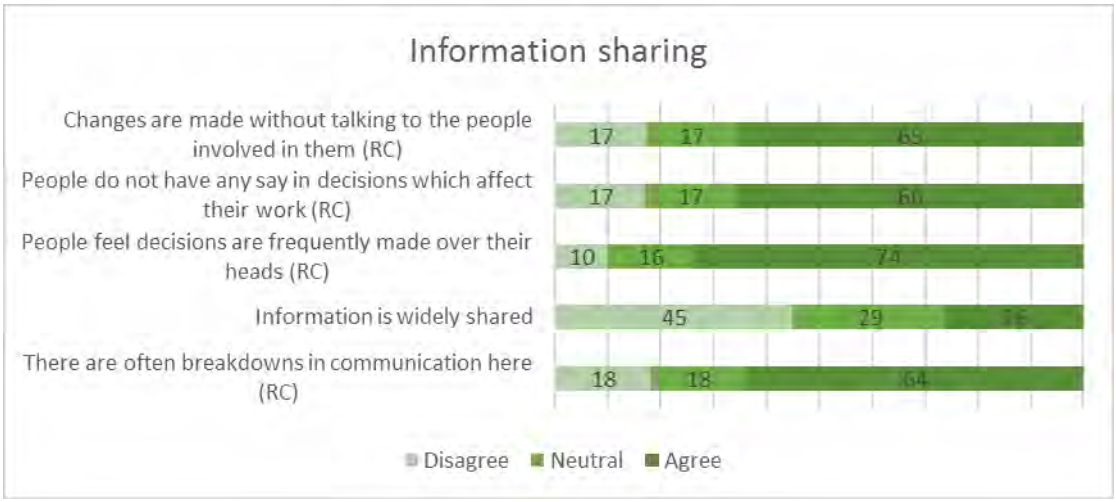


Figure 63: Information sharing

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa.

Significant findings

- NCHDs aged 30 or younger reported significantly lower levels of information sharing (29%) than those aged 41-50 (37%) and 51 or older (40%), and about the same level of information sharing as NCHDs aged 31-40 (33%).

- NCHDs who obtained their initial qualification in Ireland reported significantly lower levels of information sharing (25%) than those obtaining their initial qualification in another EU country (39%) or a non-EU country (38%).
- NCHDs working in private settings had a mean information score that was significantly higher than that of those working in public settings (32%) or both public and private settings (35%).
- NCHDs who were in training had significantly lower information sharing scores (28%) than NCHDs not in training (37%).
- NCHDs who intended to stay in their current job for the next two years reported significantly higher levels of information sharing (39%) than NCHDs who intended to leave (30%).
- Levels of information sharing did not differ significantly across gender, geographic region, or full- / part-time status.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for involvement climate among civil servants of 38%.

Organisational commitment

This index measures doctors' level of commitment and sense of belonging to their current organisation.

Overall findings

The overall mean for NCHDs on the organisational commitment index is 44%, indicating a moderate degree of commitment. For example, 44% of NCHDs disagreed that they do not feel a strong sense of belonging to their organisation.

Figure 64: Organisational commitment

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa. 7.6% of respondents did not answer this question.

Significant findings

- Organisational commitment scores were significantly higher among NCHDs aged 51 or more (65%) than those aged 30 or less (40%). Scores of NCHDs aged 31-40 (42%)

and 41-50 (47%) were not significantly different from those of the youngest age group.

- NCHDs who obtained their initial qualification in Ireland had an organisational commitment score (36%) that was significantly lower than for NCHDs who obtained their qualification in another EU county (44%) or non-EU country (50%).
- Females' organisational commitment scores (39%) were significantly lower than those of males (46%).
- NCHDs working in Connaught had a significantly higher organisational commitment score (52%) than those in the other three regions (Dublin, rest of Leinster / Cavan / Monaghan, Munster).
- NCHDs in training had a significantly lower organisational commitment score (40%) than NCHDs not in training (49%).
- NCHDs who intended to leave their current job in the next two years had an organisational commitment score (40%) that was significantly lower than that of NCHDs who intended to stay (49%).
- Organisational commitment scores did not differ significantly across full- / part-time status or setting.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall scale mean for commitment to the organisation among civil servants of 54%.

Training opportunities

This index measures doctors' perceptions of opportunities for professional training.

Overall findings

The overall mean on the training opportunities index is 39%, indicating moderate to low opportunities. For example, 30% of NCHDs agreed that the training opportunities that they needed to progress in their career were available to them.

Figure 65: Satisfaction with training opportunities

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa. 12.3% of respondents did not answer this question.

Significant findings

- The training opportunities score for NCHDs obtaining their initial qualification in a non-EU country (36%) was significantly lower than for NCHDs qualifying in Ireland (40%), and the score for NCHDs qualifying in another EU country (45%) did not differ significantly from that of NCHDs qualifying in Ireland.
- NCHDs in training had a significantly higher training opportunities score (41%) than NCHDs not in training (37%).
- NCHDs who intended to leave their current job in the next two years had a training opportunities score (34%) that was significantly lower than that of NCHDs who intended to stay (48%).
- Training opportunities scores did not differ significantly across age group, gender, geographic region, full- / part-time status or sector.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported a scale mean of 58% for items measuring learning.

Promotional opportunities

This index measures doctors' perceptions of opportunities for promotion.

Overall findings

The overall mean on the promotional opportunities index is 41%, indicating moderate opportunities. For example, 44% of NCHDs agreed that there was a link between how they perform and their promotion prospects.

Figure 66: Satisfaction with training opportunities

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa. 12.5% of respondents did not answer this question.

Significant findings

- The promotional opportunities score for NCHDs obtaining their initial qualification in a non-EU country (36%) was significantly lower than for NCHDs qualifying in Ireland

(44%), and the score for NCHDs qualifying in another EU country (45%) did not differ significantly from that of NCHDs qualifying in Ireland.

- NCHDs in training had a significantly higher promotional opportunities score (46%) than that of NCHDs not in training (38%).
- NCHDs who intended to leave their current job in the next two years had a promotional opportunities score (35%) that was significantly lower than that of NCHDs who intended to stay (51%).
- Promotional opportunities scores did not differ significantly across age group, gender, geographic region, full- / part-time status or sector.

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported a scale mean of 50% for items measuring promotional opportunities.

Perceptions of co-workers

This index measures doctors' perceptions of their colleagues.

Overall findings

The overall mean on the perceptions of co-workers index is 73%, indicating moderate to high positive perceptions. For example, 77% of NCHDs agreed that they are happy to work with their co-workers.

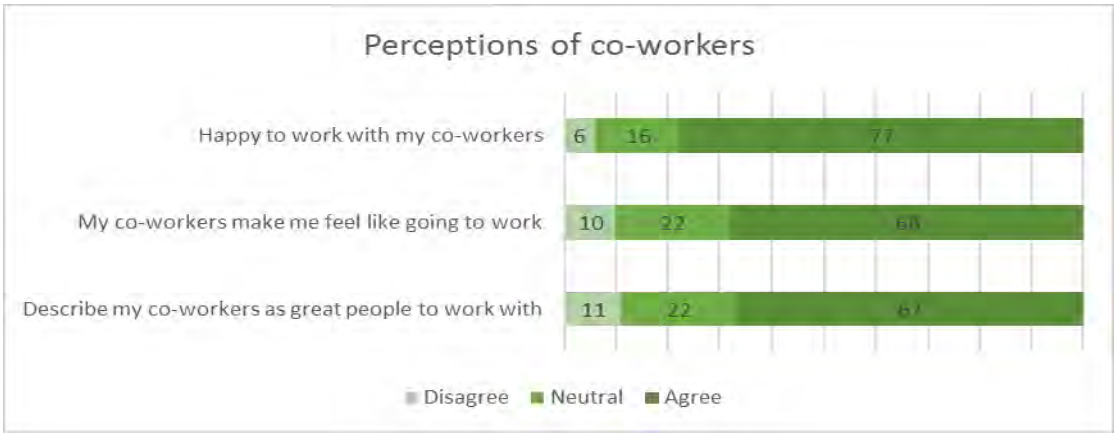


Figure 67: Satisfaction with co-workers
Note. 8.0% of respondents did not answer this question.

Significant findings

- NCHDs aged 30 or under had the highest perceptions of co-workers score (77%) but this score was significantly different only from that of NCHDs aged 31-40 (71%).
- NCHDs who obtained their initial qualification in a non-EU country had a perceptions of co-workers score (70%) that was significantly lower than that of NCHDs who qualified in Ireland (76%). The score of NCHDs who qualified in another EU country (72%) did not differ significantly from that of NCHDs qualifying in Ireland.
- Compared to Dublin (74%), NCHDs working in the rest of Leinster, Cavan and Monaghan had a significantly lower perceptions of co-workers score (68%). Scores in the other two regions (75% and 77% in Munster and Connaught and Donegal, respectively) did not differ from those of NCHDs based in Dublin.

- NCHDs who intended to leave their current job in the next two years had a perceptions of co-workers score (71%) significantly lower than that of those who intended to stay (78%).
- Perceptions of co-workers scores did not differ significantly across gender, full- / part-time status, sector or training status (NCHD in training / not in training).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported a similar index mean (72%), using a different scale for social support among civil servants.

Perceptions of manager

This index measures doctors' perceptions of their immediate managers.

Overall findings

The overall mean on the perceptions of co-workers index is 56%, indicating moderately positive perceptions. For example, 52% of NCHDs agreed that their manager gives them helpful feedback to improve their performance.

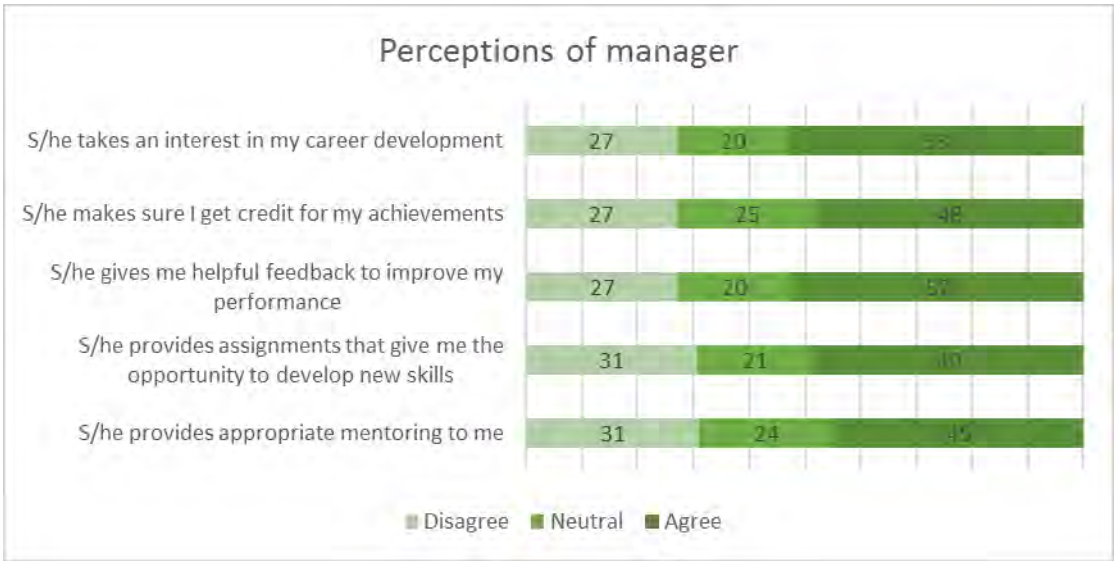


Figure 68: Satisfaction with manager

Note. 7.7% of respondents did not answer this question.

Significant findings

- NCHDs who obtained their initial qualification in a non-EU country had a perceptions manager score (52%) that was significantly lower than that of NCHDs who qualified in Ireland (60%) or another EU country (60%).
- NCHDs working full-time had a significantly higher perceptions of manager score (57%) than that of those working part-time (48%).
- NCHDs who intended to leave their current job in the next two years had a perceptions of manager score (52%) significantly lower than that of those who intended to stay (64%).
- Perceptions of manager scores did not differ significantly across age, gender, geographic region, sector or training status (NCHD in training / not in training).

Benchmark: The 2017 Irish Civil Service Employee Engagement Survey reported an overall index mean for manager support among civil servants of 61%.

Perceived quality of workplace

This index measures doctors' perceptions of characteristics of workplace that are relevant to high quality, safe health care.

Overall findings

The overall mean on the perceived quality of workplace index is 62%, indicating moderate to high positive perceptions. For example, 60% of NCHDs agreed that it nearly always meets its patients' or clients' care treatment goals.

Figure 69: Perceived quality of workplace
Note. 8.2% of respondents did not answer this question.

Significant findings

- NCHDs aged 30 or less had a perceived quality of workplace score (60%) significantly lower than that of NCHDs aged 41-50 (66%) or 51 or more (70%). The score of NCHDs aged 31-40 (62%) did not differ from that of the youngest age group.
- NCHDs who obtained their initial qualification in another EU country (69%) or a non-EU country (65%) had significantly higher perceived quality of workplace scores than those of NCHDs qualifying in Ireland (58%).
- NCHDs working in private settings had a perceived quality of workplace score (79%) that was significantly higher than that of those working in public settings (61%), while the score for NCHDs working in both public and private settings (65%) did not differ significantly from the public setting score.
- NCHDs in training had a score on this index (55%) that was significantly lower than that of NCHDs not in training (67%).

- NCHDs who intended to leave their current job in the next two years had a perceived quality of workplace score (60%) significantly lower than that of those who intended to stay (67%).
- Perceived quality of workplace scores did not differ significantly across age, gender, geographic region, or full- / part-time status.

Recruitment process

This index measures doctors' perceptions of the efficiency and fairness of the recruitment process. It was answered only by NCHDs who had been recruited in the previous two years (64%).

Overall findings

The overall mean score for NCHDs on the recruitment process index is 56%, indicating a moderate level of satisfaction. For example, 62% of NCHDs were satisfied with the interview process.

Figure 70: Satisfaction with recruitment process

Note. Percentages are based on respondents who were in their current job for two years or less (64.0% of all respondents).

Significant findings

- NCHDs aged 51 or more had a recruitment process score (71%) that was significantly higher than that of NCHDs aged 30 or less (55%). Scores of NCHDs aged 31-40 (55%) and 41-50 (59%) were similar to the scores for NCHDs in the youngest age group.
- NCHDs who obtained their initial qualification in Ireland had a mean recruitment process score (51%) that was significantly lower than that of those who obtained their qualification in another EU country (62%) or non-EU country (59%).
- NCHDs who were not in training had a significantly higher recruitment process score (58%) than that of NCHDs in training (52%).
- NCHDs who intended to leave their current job in the next two years had a recruitment process score (53%) that was significantly lower than that of NCHDs who intended to stay (60%).
- Recruitment process scores did not differ significantly across gender, geographic region, full- / part-time status or setting (public / private).

Job expectations

This index measures doctors' perceptions of the extent to which job expectations matched job experiences. It was answered only by NCHDs who had been recruited in the previous two years (64%).

Overall findings

NCHDs had a mean of 67% on the job expectations index, indicating a moderate to high-level match between job expectations and experiences. For example, 55% of NCHDs felt that the job met their original expectations.

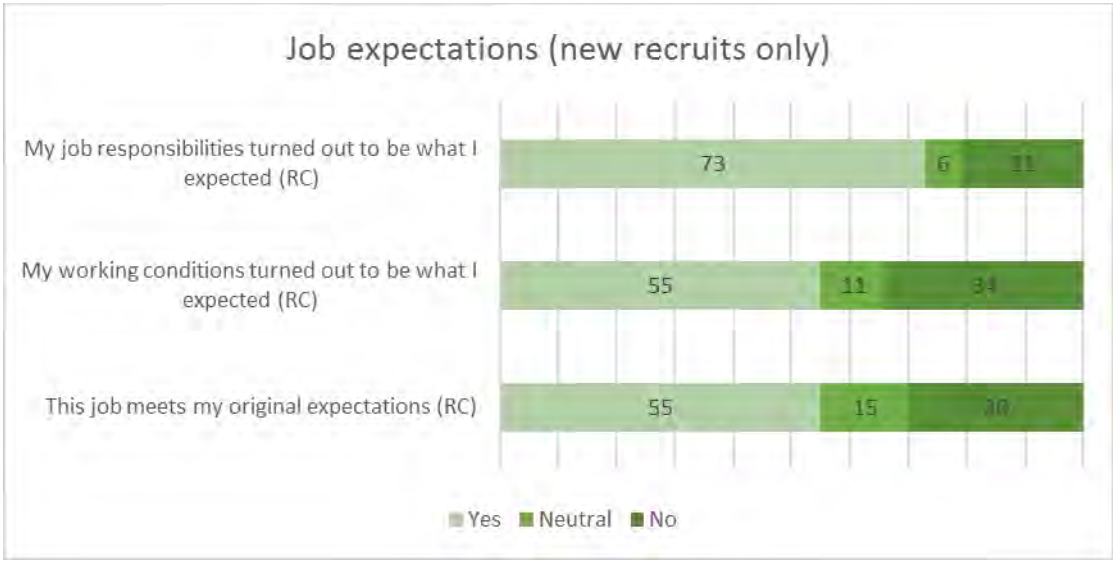


Figure 71: Job expectations and reality

Note. Items with "(RC)" have been reverse coded to produce the index, meaning that low values are recoded to high and vice versa. Percentages are based on respondents who were in their current job for two years or less (64.0% of all respondents).

Significant findings

- NCHDs working part-time had a significantly lower job expectations score (62%) than those working full-time (68%).
- NCHDs who intended to leave their current job in the next two years had a job expectations score (65%) that was significantly lower than that of NCHDs who intended to stay (72%).
- Job expectations scores did not differ significantly across age group, country of initial qualification, gender, geographic region, setting (public / private) or training status (NCHD in training / not in training).

Intentions of leaving the organisation and the medical profession

These two indexes measure the doctors' intent to leave their current organisation and the medical profession. They are constructed from two related questions, which are described together in this section.

Overall findings

The overall mean for NCHDs for the intent to leave the organisation index is 52%. This index comprises the first item in the first graph below and the first and second items in the second graph below. The mean for the likelihood of leaving the profession index is 39%. This index comprises the second item in the first graph below and the third and fourth items in the second graph. Higher scores on these indexes indicate a higher intention of leaving. Across all NCHDs, 43% indicated that they thought about leaving the organisation often or all of the time and 51% thought about leaving the medical profession often or all of the time (first graph). A quarter of NCHDs (26%) indicated that it was likely that they would leave their organisation within the next year, and 43% indicated that it was likely that they would leave the medical profession within the next year (second graph).

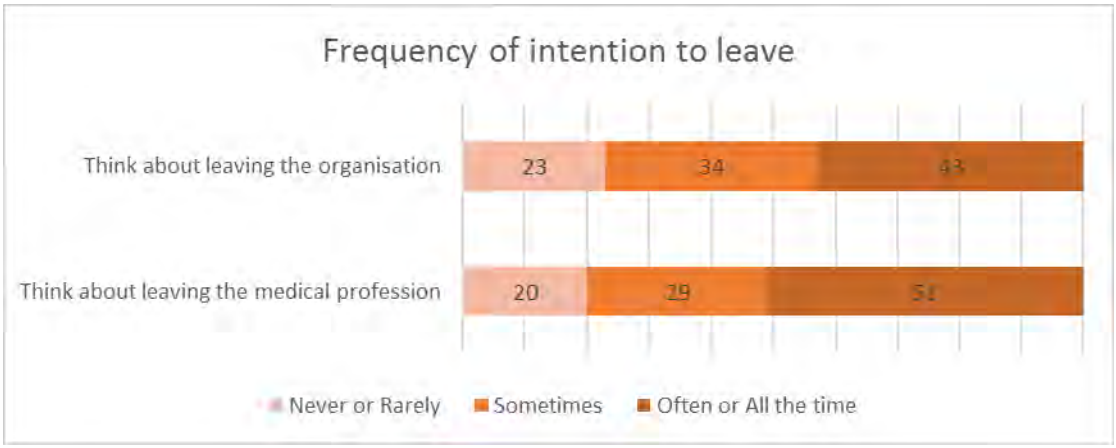


Figure 72: Intention to leave – frequency of thinking about it

Figure 73: Intention to leave - likelihood

Significant findings – leaving the organisation

- NCHDs aged 51 or older were significantly less likely to intend to leave their current organisation (46%) than those aged 30 or under (57%). There were no significant differences between the intention to leave organisation scores of NCHDs aged 31-40 (62%) and 41-50 (60%) and those aged 30 or younger.

- As would be expected, NCHDs who intended to leave their current job in the next two years had a score on this index (70%) that was significantly higher than that of those intending to stay (41%).
- Intention to leave the organisation scores did not differ significantly across country of initial qualification, gender, geographic region, full- / part-time status, sector, or training status (NCHD in training / not in training).

Significant findings – leaving the profession

- NCHDs aged 51 or older were significantly less likely to intend to leave the medical profession (34%) than those aged 30 or under (46%). There were no significant differences between the intention to leave profession scores of NCHDs aged 31-40 (47%) and 41-50 (42%) and those aged 30 or younger.
- NCHDs obtaining their initial qualification in a non-EU country had significantly lower intent to leave profession scores than those of NCHDs who qualified in Ireland (49%). The mean score on this index for NCHDs who qualified in another EU country (45%) did not differ significantly from that of those qualifying in Ireland.
- As one might expect, NCHDs who intended to leave their current job in the next two years had a score on this index (52%) that was significantly higher than that of those intending to stay (33%).
- Intention to leave the profession scores did not differ significantly across gender, geographic region, full- / part-time status, sector, or training status (NCHD in training / not in training).

Part 2: Findings from regression analyses with NCHDs

Overview

Six sets of multiple regression analyses were carried out. These examined three outcomes (intention to stay in or leave current job over the next two years; likelihood of leaving current organisation; and likelihood of leaving medical profession). A total of 30 explanatory variables (categorised into individual, employment and structural characteristics, and perceptions of job and of organisation) were included in the analyses. It should be noted that the total number of NCHDs (637) is not as big as those for nurses. This means that the statistical analyses are not as powerful as they could have been, had more doctors taken part in the survey.

The three outcomes have predictors in common, as well as predictors that are unique to each. In the regression models of NCHDs, training opportunities and promotional opportunities predicted all three outcomes. In contrast, level of burnout predicted likelihood of leaving the organisation and likelihood of leaving the medical profession, but not intent to stay in or leave current job over the next two years.

Most of the models indicated the presence of mediating influences, i.e. some characteristics explained the relationships between other characteristics and the outcomes. For example, the relationship between satisfaction with pay and intention to stay in or leave current job is mediated by training opportunities and satisfaction with specific aspects of the job in the model of NCHDs' intention to leave or stay in their current job.

As a set, the regression models of these three outcomes provide initial indications for policy formulation at both organisational and structural levels.

Key findings

The models indicate that the following characteristics are of key relevance in NCHDs' job and career intentions (i.e. are statistically significant in two or all three of the outcomes): opportunities for training and for promotion; age group; training status (NCHD in training / not in training); and level of burnout.

The alternative regression model of NCHDs' intention to leave the organisation provides further insight into the manner in which perceptions of the job and of the organisation are related to one another and, in turn, to intent to leave. This alternative model demonstrates the importance of global job satisfaction, organisational commitment and burnout (Table A5, A9). Additional analysis (Table A12) confirms that a range of perceptions measures, when considered jointly, all serve to 'drive' these three 'impact' measures:

- Perceived quality of workplace, impact, satisfaction with pay, effort-reward ratio, training opportunities, information sharing and perceptions of co-workers 'drive' global job satisfaction (with absolute values of partial correlations[13] ranging from .13 to .37)

[13] This is the correlation between an independent variable and the dependent variable after the linear effects of the other variables have been removed from both the independent variable and the dependent variable.

- Perceived quality of workplace, information sharing, impact and perceptions of co-workers 'drive' organisational commitment (with absolute values of partial correlations ranging from .13 to .24), and

- Responsibility overload, satisfaction with pay, effort-reward ratio, training opportunities and impact 'drive' burnout (with absolute values of partial correlations ranging from .13 to .26).

As a set, the regression models of these three outcomes may provide initial indications for policy formulation at both organisational and structural levels. In particular, they provide information on (i) groups in the population of NCHDs that are more likely to intend to leave and (ii) specific aspects of the work that could be the targets of policy (i.e. positive (negative) scales with low (high) overall means and significant relationships with intent to leave, or with significant relationships with the impact measures of global job satisfaction, organisational commitment, and/or burnout).

Intention to leave or stay in current job over the next two years

Three-fifths of NCHDs intended to leave their current job in the next two years. Of those intending to leave, a majority intended to leave Ireland and not return (36%) or leave Ireland but return in the next two to five years (22%).

NCHDs who intended to stay in their current job over the next two years were older and were in training. They also reported lower levels of responsibility overload, and higher specific job satisfaction, training opportunities and promotional opportunities.

In the initial model, satisfaction with pay was significantly associated with NCHDs' intention to leave / stay in their current job. However, satisfaction with pay is mediated by satisfaction with specific aspects of the job and by training opportunities. This means that the relationship between satisfaction with pay and intent to leave / stay in current job is accounted for by specific job satisfaction and training opportunities.

There were no significant differences in NCHDs' intent to leave / stay in their current job by sector, setting, geographical region, full- / part-time status, new-recruit status, gender, country of initial qualification, time taken to get to work, frequency of working overtime with and without compensation, frequency of working unsociable hours, and time spent on tasks not appropriate to the medical profession. Nor did a majority of the questionnaire indexes predict NCHDs' intention to leave or stay in current job (engagement, autonomy, impact, global job satisfaction, information sharing, perceptions of co-workers and of manager, burnout, effort-reward ratio, information sharing, organisational commitment, and perceived quality of workplace).

Respondents who indicated an intention to stay in their current job over the next two years (34.7% of all NCHDs) were asked to rate the relevance of a range of factors to this intention. Two of these factors – suitable working hours / days and personal or family reasons – were rated as highly relevant by over 40% of respondents.

Respondents who indicated an intention to leave their current job over the next two years (60.7% of all NCHDs) were asked to rate the relevance of a range of factors to this intention. The two factors with the most frequent rating of highly relevant were better job opportunities elsewhere (64%) and work better training opportunities elsewhere (69%). It should be noted that 71% of NCHDs were on fixed-term contracts.

Respondents who intended to leave their current job were asked what their career plans over the next two to five years were. Almost two-fifths of NCHDs who intended to leave their current job in the next two years intended to leave Ireland without planning to return, while 27% planned to leave Ireland but to one day return. One in six (17%) planned to stay in Ireland, while 18% were not sure of their plans.

Likelihood of leaving organisation

Likelihood of leaving the current organisation is significantly associated with training status: NCHDs in training were less likely to leave their current organisation. Six of the questionnaire indexes were also significantly associated with likelihood of leaving current organisation. Likelihood of leaving is lower among NCHDs who reported higher global job satisfaction, organisational commitment, training opportunities and promotional opportunities, and lower impact and burnout.

Satisfaction with pay and age were significant in the initial model but were not significant in the final model. The relationships between age and satisfaction with pay and likelihood of leaving organisation are both mediated by organisational commitment. In other words, differences between NCHDs of varying ages and with varying levels of satisfaction with pay are accounted for by differences in their levels of organisational commitment.

A majority of characteristics was not related to NCHDs' likelihood of leaving their current organisation. Among the individual, employment and structural characteristics, these were: sector; setting; geographical region; full- / part-time status; gender; new-recruit status; country of initial qualification; time taken to get to work; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; engagement; autonomy; responsibility overload; job satisfaction specific; information sharing; perceptions of co-workers and of manager; and perceived quality of workplace.

Likelihood of leaving the medical profession

Likelihood of leaving the medical profession is significantly associated with several individual, employment and structural characteristics. Younger NCHDs (30 or under) were more likely to express an intent to leave the profession. NCHDs working part-time were also more likely to express an intent to leave, while NCHDs who obtained their initial qualification in a non-EU country were less likely than NCHDs who obtained their initial qualification in the Republic of Ireland or another EU country to express an intent to leave the profession. Lower satisfaction with pay among NCHDs was also associated with a higher likelihood of intention to leave the medical profession. Four of the measures of perceptions of job and of organisation were significantly associated with likelihood of leaving the medical profession. Likelihood of leaving is higher among NCHDs who reported lower engagement, training opportunities and promotional opportunities, and higher burnout.

NCHD training status was significant in the initial model (i.e. NCHDs in training were less likely to leave the profession) but was not significant in the final model. The relationship between training status and likelihood of leaving the profession is mediated by both training and promotional opportunities. This means that differences between NCHDs in training and

not in training, in terms of their perceived training and promotional opportunities, explain the relationship between their training status and likelihood of leaving the profession.

Individual, employment and structural characteristics unrelated to NCHDs' intention to leave the medical profession were: sector; setting; geographical region; gender; new-recruit status; time taken to get to work; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; impact; autonomy; responsibility overload; job satisfaction specific; job satisfaction global; information sharing; effort-reward ratio; organisational commitment; perceptions of co-workers and of manager; and perceived quality of workplace.

Overview of regression models

This section presents the results of three sets of multiple regression models. These show the influence of a range of characteristics on three outcomes:

1. Intention to leave or stay in current job over the next two years
2. Likelihood of leaving current organisation
3. Likelihood of leaving medical profession.

Separate models are presented for NCHDs (n = 637) and consultants (n = 700; previous section). Doctors working in other job categories (e.g. public or community health, research, education) are not analysed separately, since the number, unfortunately (101), is too small for reliable analysis.

The advantage of multiple regression is that it allows the examination of multiple respondent characteristics simultaneously, thereby providing an indication of which are the most important in predicting the outcome. In this way, the results of regression models can be used to guide initial policy formulation. For example, differences in the factors influencing respondents' intentions to leave their current job and leave the medical profession may have different policy implications (e.g. at organisation level vs system level).

All analyses are weighted with a sampling weight, which provides nationally representative estimates on the basis of gender and job category (NCHD in training, NCHD not in training, hospital consultant, other consultant, community / public health, other).

Explanatory variables

For the models, the same set of explanatory variables was used. In line with the theoretical framework guiding the study, variables are categorised into two blocks: *individual, employment and structural characteristics* and *perceptions of job and of organisation*. All continuous variables (questionnaire indexes) have been re-scaled separately for NCHDs and consultants to have a mean of 0 and a standard deviation of 1. This facilitates interpretation since the model estimates show the expected change in the outcome for a one-unit change in explanatory variable.

Interpreting the regression models

To facilitate interpretation of the results, a summary of findings is presented alongside the more detailed regression results. The Methodology section provides a technical description of how the models were built.

For *logistic regression* (intent to stay vs intent to leave), each variable in the model is associated with an OR.

The example below shows ORs for age and global job satisfaction for NCHDs. Since age is split into categories (30 or less, 31-40, 41-50 and 51 or older), the model requires that one of these is selected as the *reference group.* Age 51 or older is the reference group, meaning that all other age groups are compared to it. The same logic applies to all characteristics that are measured as two or more categories.

The first row shows that respondents aged 30 or less are about 1.60 times more likely to express an intent to leave their current job, compared to respondents aged 51 or older, and, conversely, that respondents aged 30 or less are about three-fifths (OR = 0.623) more likely to express an intent to stay in their current job than respondents aged 51 or older. The odds are *adjusted* in the sense that these age-related differences hold after the other variables in the model have been accounted for.

In the lower part of the extract below, the OR for satisfaction with pay shows that respondents with a mean pay satisfaction score of +1 are about half as likely (OR = 0.496) to express an intent to leave their current job; or conversely, are about 2.02 times more likely to express an intent to stay in their current job than respondents with an average pay satisfaction score (score of 0), again, after the other variables in the model have been accounted for.

Examples of odds ratios: extract from regression model of leaving / staying in current job over the next two years (NCHDs)

Variable	Comparisons	Odds of leaving	Odds of staying
Age	Age 30 or less vs Age 51+	1.604	0.623
	Age 31 to 40 vs Age 51+	0.899	1.112
	Age 41 to 50 vs Age 51+	0.396	2.525
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		0.496	2.016

For *linear regression* (i.e. intent to leave organisation, intent to leave profession), the model results correspond to **the change in outcome associated with a one-unit change in each**. In the second example shown below, the first row shows that NCHDs aged 30 or younger have an expected score on the likelihood of leaving organisation index that is 0.09 points, or just under one-tenth of a standard deviation, higher than that of respondents aged 51 or older. The other age-group differences can be interpreted in a similar way.

The bottom part of the table below shows that for every one-unit increase in satisfaction with pay, likelihood of leaving the organisation decreases by one-tenth of a standard deviation (-.10 points).

Examples of linear regression results: extract from regression model of intent to leave profession (NCHDs)

Variable	Comparisons	Expected change in outcome
Age	Age 30 or less vs Age 51+	0.093
	Age 31 to 40 vs Age 51+	-0.010
	Age 41 to 50 vs Age 51+	0.002
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		-0.100

Intention to stay in or leave current job in the next two years

About three-fifths of NCHDs (60.7%) intended to leave their job in the next two years, while 34.7% intended to stay (4.6% did not respond to this question). Table 45 summarises the results from the logistic regression models of intent to stay in or leave current job in the next two years. Table 46 shows the detailed model output.

Of the 30 variables examined, a majority is not significantly predictive of intention to leave current job.

NCHDs who intended to stay in their current job over the next two years were older and were in training. They also reported lower levels of responsibility overload, and higher specific job satisfaction, training opportunities and promotional opportunities.

Conversely, NCHDs who intended to leave their current job in the next two years were younger and not in training. They reported higher levels of responsibility overload, and lower specific job satisfaction, training opportunities and promotional opportunities.

In the initial model, satisfaction with pay was significantly associated with NCHDs' intention to leave / stay in their current job. A one-unit (one standard deviation) increase in satisfaction with pay was associated with an OR for intent to stay of 1.68, for example. However, satisfaction with pay is mediated by satisfaction with specific aspects of the job and by training opportunities, i.e. it is not statistically significant in the presence of these two variables. In other words, the relationship between satisfaction with pay and intent to leave / stay in current job is accounted for by specific job satisfaction and training opportunities.

There were no significant differences in NCHDs' intent to leave / stay in their current job by sector, setting, geographical region, full- / part-time status, new-recruit status, gender, country of initial qualification, time taken to get to work, frequency of working overtime with and without compensation, frequency of working unsociable hours, and time spent on tasks not appropriate to the medical profession. Nor did a majority of the questionnaire indexes predict NCHDs' intention to leave or stay in current job (engagement, autonomy, impact, global job satisfaction, information sharing, perceptions of co-workers and of manager, burnout, effort-reward ratio, information sharing, organisational commitment, and perceived quality of workplace).

The pseudo r-square statistic gives an indication of the amount of variation in the outcomes (intent to stay or leave) that is accounted for by the explanatory variables. It is not intended as an absolute measure of explanatory power, but rather as a means to compare one model with another. In this case, the pseudo r-square for the final model (.282) is just over twice

the magnitude of that for the initial model (.120), meaning that the three perceptions of job / organisation characteristics double the amount of variance explained.

Table 45: Summary of multiple logistic regression models of NCHDs' intention to stay in or leave their current job in the next two years

Characteristics **unrelated** to intention to staying in or leaving current job	Characteristics **mediated** by other variables	Characteristics related to **intention to stay** in current job	Characteristics related to **intention to leave** current job
Individual, employment and structural characteristics			
• Sector (public / private) • Setting (hospital, community / other) • Geographical region • Full- / part-time status • New-recruit status • Gender • Country of initial qualification • Normal time taken to get to work • Frequency of overtime with compensation • Frequency of overtime without compensation • Working unsociable hours more often than not in past 4 weeks	• Satisfaction with pay (mediated by job satisfaction specific and training opportunities)	• Older respondents • NCHDs in training	• Younger respondents • NCHDs not in training
Perceptions of job and of organisation			
• Engagement • Autonomy • Impact • Job satisfaction (global) • Information sharing • Perceptions of co-workers • Perceptions of manager • Burnout • Effort-reward ratio • Information sharing • Organisational commitment • Perceived quality of workplace • Time spent performing tasks not appropriate to medical profession		• Lower responsibility overload • Higher specific job satisfaction • Higher training opportunities • Higher promotional opportunities	• Higher responsibility overload • Lower specific job satisfaction • Lower training opportunities • Lower promotional opportunities

Table 46: Odds ratios and significance tests for multiple logistic regression models of NCHDs' intention to stay in or leave their current job in the next two years

NCHDs		Model 1: individual, employment and structural characteristics only (pseudo r square = .120)				Model 2: Model 1 with perceptions of job and of organisation (pseudo r square = .282)			
		Odds of leaving	Odds of staying	chi-square	p	Odds of leaving	Odds of staying	chi-square	p
Individual, employment and structural characteristics									
Age	Age 30 or less vs Age 51+	1.604	0.623	19.444	<.001	1.572	0.636	11.479	.022
	Age 31 to 40 vs Age 51+	0.899	1.112			0.840	1.190		
	Age 41 to 50 vs Age 51+	0.396	2.525			0.588	1.701		
NCHD in training vs NCHD not in training		0.496	2.016	15.710	<.001	0.632	1.582	4.864	<.001
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		0.595	1.681	37.487	<.001				
Perceptions of job and of organisation									
Responsibility overload (mean=0, SD=1, higher scores indicate higher sense of overload)						0.766	1.305	6.726	.010
Job satisfaction specific (mean=0, SD=1, higher scores indicate higher satisfaction)						0.653	1.531	12.145	<.001
Training opportunities (mean=0, SD=1, higher scores indicate more opportunities)						0.551	1.815	23.327	.001
Promotional opportunities (mean=0, SD=1, higher scores indicate more opportunities)						0.685	1.460	10.573	<.001

Relevance of factors for staying in or leaving current job

Respondents who indicated an intention to stay in their current job over the next two years (34.7% of all NCHDs) were asked to rate the relevance of a range of factors to this intention. These are shown in Table 47. Two of these factors – suitable working hours / days (42%) and personal or family reasons (47%) – were rated as highly relevant by over 40% of respondents, while slightly fewer respondents indicated that patients or service users were easy to work with (23%) and convenient location (29%) were highly relevant. The remaining two factors (lack of available alternatives, too disruptive to leave), were rated as highly relevant by fewer than 20% of NCHDs intending to stay in in their current job. The four most highly rated factors (suitable working hours / days; patients / service users easy to work with; convenient location; personal reasons) indicate that, aside from the findings of the regression model, NCHDs are opting to stay in their current job for reasons of convenience or for personal reasons.

Table 47: Relevance of factors (those who intend to stay only): NCHDs

Relevance of Factors (those who intend to stay only) (NCHDs only)	Not at all relevant	Not very relevant	Neither relevant nor irrelevant	Somewhat relevant	Highly relevant	Total
Suitable working hours / days	9.4	7.1	8.9	32.9	41.7	100.0
Patients / service users are easy to work with	6.5	13.5	17.9	39.0	23.2	100.0
Lack of available alternatives	8.7	14.2	22.1	36.2	18.9	100.0
Too disruptive to leave	8.5	16.3	20.2	38.3	16.7	100.0
Convenient location	9.3	10.0	12.8	38.9	29.0	100.0
Personal or family reasons	6.2	6.8	11.9	27.9	47.2	100.0

Note. Percentages are based on respondents who indicated intent to stay in their current job over the next two years (34.7% of all respondents).

Respondents who indicated an intention to leave their current job over the next two years (60.7% of all NCHDs) were asked to rate the relevance of a range of factors to this intention. These are shown in Table 48. The two factors with the most frequent rating of highly relevant are better job opportunities elsewhere (64%) and work better training opportunities elsewhere (69%). These ratings are consistent with the results of the logistic regression model, in that the training and promotional opportunities indexes were statistically significantly related to intention to stay / leave. In addition, between 24% and 29% felt that working hours or days were not suitable; that the work environment was too demanding; that there was better mentoring or supervision elsewhere; and that they were coming to the end of a training programme, contract, or were retiring. Respondents' ratings of mentoring / supervision tie in with the regression results (i.e. training opportunities was in the final regression model) and the ratings regarding the demandingness of the work environment are consistent with the fact that responsibility overload was in the final regression model. The suitability of working hours / days is related to some elements of the specific job satisfaction index (which is in the final model). The 27% of NCHDs indicating that they were coming to the end of a training programme, contract, or were retiring underlines the fact that the work contracts for many respondents were not permanent: 71.4% of NCHDs indicated that their work contracts were fixed term.

Table 48: Relevance of factors (those who intend to leave only): NCHDs

Relevance of Factors (those who intend to leave only) (NCHDs only)	Not at all relevant	Not very relevant	Neither relevant nor irrelevant	Somewhat relevant	Highly relevant	Total
Working hours / days not suitable	12.2	21.5	13.0	29.7	23.6	100.0
Work environment is too demanding	10.3	15.8	13.7	31.6	28.6	100.0
Staffing levels are a problem	7.0	10.0	7.9	27.1	48.0	100.0
Patients / service users are difficult to work with	38.2	27.2	16.9	12.3	5.5	100.0
Better mentoring / supervision elsewhere	8.6	14.1	13.1	34.5	29.7	100.0
Better job opportunities for me elsewhere	2.6	3.1	5.2	25.4	63.7	100.0
Better training opportunities for me elsewhere	3.2	2.6	4.7	20.2	69.2	100.0
Location of my workplace is inconvenient	27.9	24.7	23.3	12.0	12.0	100.0
Personal reasons	27.6	18.3	18.4	20.9	14.8	100.0
Coming to the end of a contract / training programme / retiring	25.7	12.3	12.8	21.2	27.8	100.0

Note. Percentages are based on respondents who indicated intent to leave their current job over the next two years (60.7% of all respondents).

Respondents who intended to leave their current job were asked what their career plans over the next two to five years were. Almost two-fifths of NCHDs who intended to leave their current job in the next two years (38.5%) intended to leave Ireland without planning to return, while 27% planned to leave Ireland but to one day return. One in six (17%) planned to stay in Ireland, and a similar proportion (18%) were not sure of their plans over the next two to five years (Table 49).

Table 49: Career plans over the next 2-5 years (those who intend to leave only): NCHDs

Career plans over the next 2-5 years (those intending to leave current job only)	Percent (NCHDs)
Stay in Ireland	16.8
Leave Ireland for work or training opportunities, with a plan to return to Ireland in the next two to five years	26.7
Leave Ireland for work or training opportunities, without a plan to return to Ireland	38.5
Not sure	18.0
Total	100.0

Note. Percentages are based on respondents who indicated intent to leave their current job over the next two years (60.7% of all respondents).

Likelihood of leaving the organisation

Table 50 summarises the results from the linear regression models of NCHDs' likelihood of leaving the organisation in which they are currently working. Table 51 shows the more detailed model output. The results show that likelihood of leaving the current organisation is significantly associated with training status: NCHDs in training were less likely to leave their current organisation. Six of the questionnaire indexes were also significantly associated with likelihood of leaving current organisation. Likelihood of leaving is lower among NCHDs who reported higher global job satisfaction, organisational commitment, training opportunities and promotional opportunities, and lower impact and burnout.

Satisfaction with pay and age were significant in the initial model but were not significant in the final model. Further analysis (not shown here) indicated that the relationships between age and satisfaction with pay and likelihood of leaving organisation are both mediated by organisational commitment. In other words, differences between NCHDs of varying ages and with varying levels of satisfaction with pay are accounted for by differences in their levels of organisational commitment.

A majority of characteristics was not related to NCHDs' likelihood of leaving their current organisation. Among the individual, employment and structural characteristics these were: sector; setting; geographical region; full- / part-time status; gender; new-recruit status; country of initial qualification; time taken to get to work; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; engagement; autonomy; responsibility overload; job satisfaction specific; information sharing; perceptions of co-workers and of manager; and perceived quality of workplace.

The final model explains 42% of the variation in NCHDs' likelihood of leaving the organisation, while the initial model, which included only individual, employment and structural characteristics, explains 15% of the variation.

Table 50: Summary of multiple linear regression models of NCHDs' likelihood of leaving the organisation

Characteristics **unrelated** to likelihood of leaving current organisation	Characteristics **mediated** by other variables	Characteristics **related** to likelihood of leaving current organisation
Individual, employment and structural characteristics		
• Sector (public / private) • Setting (hospital, community / other) • Geographical region • Full- / part-time status • New-recruit status • Gender • Country of initial qualification • Normal time taken to get to work • Frequency of overtime with compensation • Frequency of overtime without compensation • Working unsociable hours more often than not in past 4 weeks	• Satisfaction with pay (mediated by organisational commitment) • Age (mediated by organisational commitment)	• NCHDs not in training
Perceptions of job and of organisation		
• Engagement • Autonomy • Responsibility overload • Job satisfaction specific • Information sharing • Effort-reward ratio • Perceptions of co-workers • Perceptions of manager • Perceived quality of workplace • Time spent performing tasks not appropriate to medical profession		• Higher impact • Lower global job satisfaction • Higher burnout • Lower organisational commitment • Lower training opportunities • Lower promotional opportunities

Table 51: Parameter estimates and significance tests for multiple linear regression models of NCHDs' likelihood of leaving the organisation

NCHDs		Model 1: individual, employment and structural characteristics only (r square = .152)			Model 2: Model 1 with perceptions of job and of organisation (r square = .418)		
		Expected change in outcome	F or t	P	Expected change in outcome	F or t	p
Individual, employment and structural characteristics							
Age	Age 30 or less vs Age 51+	0.117	5.301	<.001			
	Age 31 to 40 vs Age 51+	0.051					
	Age 41 to 50 vs Age 51+	-0.096					
NCHD in training vs NCHD not in training		-0.116	-3.203	.001	-0.100	-3.307	.002
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		-0.369	-10.549	<.001			
Perceptions of job and of organisation							
Impact (mean=0, SD=1, higher scores indicate higher sense of impact)					0.106	3.331	.001
Job satisfaction global (mean=0, SD=1, higher scores indicate higher satisfaction)					-0.300	-7.083	<.001
Burnout (mean=0, SD=1, higher scores indicate higher level of burnout)					0.094	2.614	.009
Organisational commitment (mean=0, SD=1, higher scores indicate higher commitment)					-0.140	-3.609	<.001
Training opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.205	-5.099	<.001
Promotional opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.142	-3.838	<.001

Likelihood of leaving the medical profession

Table 52 summarises the results from the linear regression models of NCHDs' likelihood of leaving the medical profession.[14] Table 53 shows the more detailed model output.

The results show that likelihood of leaving the medical profession is significantly associated with several individual, employment and structural characteristics. Younger NCHDs were more likely to express an intent to leave the profession. NCHDs working part-time were also more likely to express an intent to leave, while NCHDs who obtained their initial qualification in a non-EU country were less likely than NCHDs who obtained their initial qualification in the Republic of Ireland or another EU country to express an intent to leave. Lower satisfaction with pay among NCHDs was also associated with a higher likelihood of intention to leave the medical profession. Four of the measures of perceptions of job and of organisation were significantly associated with likelihood of leaving the medical profession. Likelihood of leaving was higher among NCHDs who reported lower engagement, training opportunities and promotional opportunities, and higher burnout.

NCHD training status was significant in the initial model (i.e. NCHDs in training were less likely to leave the profession) but was not significant in the final model. Further analysis (not shown here) indicated that the relationship between training status and likelihood of leaving the profession is mediated by both training and promotional opportunities. This means that differences between NCHDs in training and not in training, in terms of their perceived training and promotional opportunities, explain the relationship between their training status and likelihood of leaving the profession.

Individual, employment and structural characteristics unrelated to NCHDs' intention to leave the medical profession were: sector; setting; geographical region; gender; new-recruit status; time taken to get to work; frequency of overtime with and without compensation; and frequency of working unsociable hours.

Aspects of perceptions of job and of organisation that were unrelated to likelihood of leaving the organisation were: time spent performing tasks not appropriate to the medical profession; impact; autonomy; responsibility overload; job satisfaction specific; job satisfaction global; information sharing; effort-reward ratio; organisational commitment; perceptions of co-workers and of manager; and perceived quality of workplace.

The final model explains 33% of the variation in NCHDs' likelihood of leaving the organisation, while the initial model, which included only individual, employment and structural characteristics, explains 14% of the variation.

[14] The scale reliability for NCHDs (.582; see Methodology section) is low, meaning that the covariance between items is not as high as desired. Nonetheless, this outcome is analysed in order to allow comparisons between NCHDs and consultants.

Table 52: Summary of multiple linear regression models of NCHDs' likelihood of leaving the medical profession

Characteristics **unrelated** to likelihood of leaving profession	Characteristics **mediated** by other variables	Characteristics **related** to likelihood of leaving profession
Individual, employment and structural characteristics		
• Sector (public / private) • Setting (hospital, community / other) • Geographical region • New-recruit status • Gender • Normal time taken to get to work • Frequency of overtime with compensation • Frequency of overtime without compensation • Working unsociable hours more often than not in past 4 weeks	• NCHD in training / not in training (mediated by both training and promotional opportunities)	• Younger NCHDs (aged 30 or younger) • Working part-time • Qualified in RoI or another EU country (rather than in another non-EU country) • Lower satisfaction with pay
Perceptions of job and of organisation		
• Impact • Autonomy • Responsibility overload • Job satisfaction specific • Job satisfaction global • Information sharing • Effort-reward ratio • Organisational commitment • Perceptions of co-workers • Perceptions of manager • Perceived quality of workplace • Time spent performing tasks not appropriate to medical profession		• Lower engagement • Higher burnout • Lower training opportunities • Lower promotional opportunities

Table 53: Parameter estimates and significance tests for multiple linear regression models of NCHDs' likelihood of leaving the medical profession

NCHDs		Model 1: individual, employment and structural characteristics only (r square = .135)			Model 2: Model 1 with perceptions of job and of organisation (r square = .327)		
		Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Individual, employment and structural characteristics							
Age	Age 30 or less vs Age 51+	0.075	4.225	.002	0.093	3.199	.013
	Age 31 to 40 vs Age 51+	-0.026			-0.010		
	Age 41 to 50 vs Age 51+	-0.080			0.002		
NCHD in training vs NCHD not in training		-0.104	-2.445	.015			
Part-time vs Full-time		0.101	2.843	.005	0.090	2.701	.007
Country of qualification	Other EU country vs RoI	-0.042	3.378	.018	-0.013	3.934	.008
	Other non-EU country vs RoI	-0.111			-0.078		
Satisfaction with pay (mean=0, SD=1, higher scores indicate higher satisfaction)		-0.320	-8.997	<.001	-0.100	-2.646	.008
Perceptions of job and of organisation							
Engagement (mean=0, SD=1, higher scores indicate higher engagement)					-0.133	-3.302	.001
Burnout (mean=0, SD=1, higher scores indicate higher level of burnout)					0.232	5.466	<.001
Training opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.185	-4.252	<.001
Promotional opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.117	-2.873	.004

Part 3: Findings from interviews with NCHDs

Overview

This section focuses on key issues arising for NCHDs and both the rewarding and challenging aspects of the role are presented.

Rewarding aspects and attraction to the job

NCHDs were asked what attracted them to the job they were in and three main reasons were identified. These were:

- Being able to make a difference
- Having pride in their work and doing something worthwhile
- Opportunities for further career development.

Being able to make a difference

In response to the question "*What attracted you to the job?",* many doctors spoke about being able to make a difference to people's lives and comments such as "*the patient contact*", *"you get to help most patients you meet", "making patients better", "seeing people get better who are really sick"* were made. This was highlighted as contributing to high satisfaction levels, particularly when it is acknowledged by patients. One doctor noted:

> *I suppose when patient satisfaction, when people say you know, "You've made a big difference."*

Another individual in the group agreed with this, saying:

> *Particularly when you feel like you've made a difference or made a connection with someone else. Yeah.*

One participant spoke about other family members who were doctors and of their influence on their own decision to become one. This person said:

> *So, I felt like they made a big change in what they were doing. And it was kind of seen as, you know, a good thing to do and you got a lot of satisfaction out of doing it and things like that. That would be it for me.*

Pride in their work

Feeling proud of the work they do was also highlighted as one of the main reasons for engaging in medicine. One person noted:

> *There's a sense of pride. You work very hard for something and then you get to where you are, and you feel like you are making a difference in the end. Like just pride in the job you do day to day ... It's not always there, but like when you are able to feel pride in the job that you're doing day to day, that's very rewarding.*

Another doctor said:

> *I don't think we place enough value on what we do offer. And it's something I would consider quite a lot, and I think that's probably what keeps me in it.*

Another participant noted:

I think our biggest benefit is that we have a really high concentration of really highly qualified healthcare doctors and nurses. We can make the most of that and I think that what we need to start doing, rather than looking to the UK and the States and Australia all the time, is look more at what Ireland is good at and what we can be a world's first.

Opportunities for development

One participant noted that in his current job there were opportunities for continuous education and promotion. This doctor went on to explain that in his current job, he was able to get lots of very good experience, because there were a limited number of hospitals providing that type of service. Another non-Irish national doctor spoke about the differences between Ireland and his country of origin. He said:

First of all, I like the fact that we can practise real medicine, you know? The full extent of the medicine that you don't get to practise back home. The highest form of learning basically, that's what I find most rewarding. The people, you know, they teach you and you learn a lot. There's a good environment over here of working, I think. That's most rewarding to me … So over here I think that the responsibility to reward ratio is very good, I think.

Other reasons for being attracted to the job

A small number of other reasons were also highlighted. One individual, for example, highlighted the area of work she undertook noting that the *"case mix"* was what attracted her to the job. She noted: *"There's always something interesting coming in through the door."* Another doctor said: *"It's a nice place, a quiet, nice place."*

Challenges arising for NCHDs

Three main issues were identified by NCHDs (Figure 74) and these are discussed below.

Figure 74: Issues arising for NCHDs

Training

Training and continuous professional development is an integral part of being an NCHD and a number of participants drew attention to this. One doctor said:

Because it doesn't matter how much you earn or where you are living or what your living circumstances are, where your family is, but in the end, for every doctor, I think what matters the most is training, because in the end you want to reach a point in your career where you don't have to strive anymore.

Many participants in interviews highlighted challenges arising in respect of training, however. A number of key issues were referred to, as follows:

- Extensive training period undertaken by NCHDs

- Training schemes
- Personal cost of additional training.

Overview of extensive training period undertaken by NCHDs

It is clear that the training doctors undertake is extensive, goes on for several years after they complete their undergraduate degree, and, *"If you think about NCHDs, they're doing training the most part [all that time]."* Specifically, it was noted that:

> *We do med school, and then we do internship [1 year]. You have to do your internship to get onto the general register and then you can go onto an SHO [Senior House Officer]. So, you could basically apply for a training scheme like I did for [name of speciality] and then you could do those on a basic specialist training [BST] scheme – usually two years, or three years, and after that you get a certificate that allows you then to apply for higher specialist training [HST].*

It was explained that when you go onto HST, you do usually "*four years, four-and-a-half years, then you finish that, and you do a fellowship*". It was noted that historically people have gone abroad to do a fellowship, to make them more competitive, so when they come back for consultancy they interview well, and they get the job.

It was also suggested that in the UK, the training is of a similar duration to that in Ireland, but that in the UK there is not a requirement to engage in a competitive process between BSTs and HSTs, and the pathway is mapped out at the beginning. One person noted:

> *In the UK, if you get in year one, then you run through to year seven. In Ireland, if you get in year one, you have to apply at the end of year three to continue on to year four. So, there's still a step, a competitive step. So, yeah, you can sometimes be forced to exit the scheme here.*

It was also highlighted, however, that the UK is not as attractive a place as it used to.

Training schemes

A number of NCHDs made comments about the quality of the training in Ireland and it was suggested that:

> *The quality of training is hugely important and there has been an argument made that we're over-training and that we have over-qualified people that are over-fit for … And that means [it is] harder to retain them, but actually that's historically how Ireland has done things, so that the quality of consulting here is incredible … the patient's best interest is to have world-class health care. That's the patient's best interest.*

Another doctor noted:

> *In terms of training, training's really excellent in terms of teams and working with the doctors here and everybody in the team really, not just the doctors, everybody's really helpful. Everybody really does their best to make the boat float, I suppose.*

This was also supported by another doctor, who said:

> *The training standard is amazing. So, I think that's very important to NCHDs as well, that they know that they're on a training scheme that actually does have a fantastic international reputation, for the most part.*

In general, however, participants highlighted challenges in respect of training and these differed, depending on whether the doctor was, or was not, on a training scheme.

In terms of continuous professional development, however, it was noted that there is little standardisation, and in some cases, one doctor may be funded and released to go on training, but a colleague will not, so that it is *"pot luck if you get to go".*

Exclusion from training schemes

It was highlighted that some NCHDs get on a training scheme and some do not. This was problematic, because if a job is not linked with a training scheme:

> *You do the same job, but you don't get the training recognition, and you're not linked in with the college as much.*

In contrast, those on a training scheme are able to get on "*quite a defined pathway in terms of sitting exams*". Those who are not on a training scheme are required to register on "*The Professional Competency Scheme each year*". It was also pointed out that of 6,400 NCHDs, about 2,000 are not on a training scheme. It was suggested that the main reason for this is the high numbers of "*foreign medical graduates*" in the system, who may be ineligible because their initial qualification or because their additional training is not recognised in the Irish system. They are therefore disqualified from applying for a training scheme. One person noted that "*even the worst EU candidate will still come above*" candidates from outside the EU. One doctor commented:

> *That's a huge bone of contention with that community, because they see themselves as quite experienced, and they do have that level. But even if they didn't, that once they're in the system, and working and assured they should be able to avail of it.*

Another non-EU participant highlighted the uncertainty around not being on a training scheme, noting that it would be preferable, even if it took longer, to get on a scheme:

> *Even if you do all those health programs and courses that you are meant to do, even after two to three years of work, you might not get into a training [scheme]. That's the uncertain part … If we are giving a structure that's okay, even if it's more time-consuming than the Irish national or the EU doctor, we don't mind … if there's a structure present so we know that we just have to follow the structure. [If] we know that an opportunity has been provided for us, you can at least know you can pursue that goal and the rest depends on the merit of the person themselves.*

Another doctor, also from a non-EU country, echoed this this, noting that while:

> *Things are okay … there must be a kind of competition, there must be an exam … and if I'm eligible and I fulfil the criteria [I should be able to get on the training scheme].*

It was also noted that not being able to get on a training scheme led to a sense of unfairness. One non-Irish national doctor said:

> *They [brought] in some amendment that the "foreigners" are coming from other countries, just to limit them from getting this training scheme. But the problem is sometimes you feel a kind of insecurity complex that the people who are quite junior to you … They can access the training scheme, but you are stuck.*

Despite ongoing training being a requirement for NCHDs, it was noted by a doctor who was on a training scheme that, in practice, those who are not on a scheme do not get the same support. This doctor said:

> *If you look at the non-scheme trainee, what they will do is, they will register with [training body] to do that competency scheme. But in practice, it's not the same, and then on the ground, often consultants do not see it as the same, so getting leave to go on training, or even the emphasis being that you should be going on training, I think is a little bit lacking. And that's anecdotal, but quite widespread.*

It was also noted that those doctors who are not on a training scheme are often in the same job "*long-term*" for a number of years, but are given the same opportunities for getting experience, or are valued in the same way.

One doctor who was not on a training scheme noted that there was a difference between:

> *The compulsory courses that need to be done and resources available to us to pursue those requirements easily … It's sort of a paradox because if you get in the training, it becomes easier to get more courses and then it gets easier for you to progress in your career, although it's more important for those people who haven't gone into training to do those courses, to get into training to improve their CV and stuff like that.*

Inclusion on training schemes

While recognising that it was preferable to be on a training scheme, many issues were raised about it. However, the GP training scheme, which is regionalised, was identified as working well, as noted here:

> *The GP scheme, it is regionalised … Mostly you know where you're going. In my scheme, I knew where I was going for four years. It's all within [less than 2.5 hours' distance from name of place] … and excellent support.*

Many doctors, however, spoke about challenges they had, particularly in respect of the requirement for rotation to different locations and hospitals.

Disruption to personal life

The nature of training programmes means that doctors rotate to different settings and locations, and many participants gave examples of multiple changes in location for work over the period of their training scheme. One person reported working in *"five different hospitals every three months"* and of *"living in five different cities [in Ireland] in five different years*". This person also noted:

> *You know, it depends on the scheme. You might be lucky and get your job and years together, or you might be jostled around, and that involves [moving] ... It's okay maybe if you're not married and don't have a family and don't have kids in school.*

In general, the lack of regionalised training was identified as *"a massive problem"* and the disruption caused by having to move regularly was identified as particularly problematic. It was noted that "*there are hospitals that are more favourable from a training perspective, over others. And particularly, some peripheral hospitals,*" and it was also noted that some specialities allowed participants to *"stay in one place",* which was preferable.

Others drew attention to the UK situation, where it was suggested that:

> *You're guaranteed that your peripheral placements will be within, say, a radius of 50 kms from your primary hospital, so that at least you can set up some sort of geographic base, if you want to.*

Another doctor drew attention to the unusual nature of their lifestyle saying:

> *I don't think it's normal for people who are like, in their 30s, to be living in four different cities in the space of four years ... Or even, five different cities in five years … Like, if you're trying to have a family, or ... you know, any relationships. Or, even [joining] a gym.*

The impact on the family was highlighted as particularly problematic. One person said:

> *Mothers are pulled away from fathers. Mothers, fathers, away from babies. There's no flexibility here. You're moving or you're out.*

This is supported by the following observations, which were made at a focus group discussion:

Female 1:	*You're packing every six months or a year.*
Female 2:	*It's really disruptive. It is.*
Male speaker:	*Living out of a suitcase.*
Female 2:	*If you have kids in school, it's actually completely impossible.*
Interviewer:	*And what would happen then if you had kids in school?*
Male speaker:	*Commute.*
Female 2:	*And you have to choose … Or, you give up family and babies, so you can be in one area.*

Another interviewee gave the following example:

> *There was a woman, who was working in my hospital, who had a newborn baby, and she was told that she should go to at least the UK, and her husband couldn't leave, 'cause he couldn't quit his job, and it was suggested to her that maybe she should go to the UK for five days a week and visit her baby on the weekends.*

It was also highlighted that:

> *There's an expectation in some specialities that you will have to go abroad at some part of your training to do a fellowship … to be competitive for a consultant job … if you wanted one back in Ireland.*

Another example given related to the challenges for the psychological development of children in having to constantly move. One instance was given of where their "*eldest child had had to change school four times … the change of friends, the change … It's massive … Even buying uniforms four times."* Another doctor noted: *"You don't have time really to put down roots and to make changes."*

Impact on professional life

While being on a training programme was regarded as positive, two issues were highlighted. First, it was noted that induction into new locations was reported to be "*quite poor and varies from site to site, so you start off on the wrong foot … You often don't know where things are, how to get things done."* It was further noted:

So, that's very frustrating … the fact that handover hasn't been properly addressed, that you can walk into a hospital never having spoken to any member of any team and be expected to start working directly.

Another participant noted that it was difficult to develop relationships with consultants when the rotation is for a short period only, saying that:

Often, you'll change consultants within that year. So, we rotate quite a lot. The trainees are unhappy, because they go to a site where there's a reg [registrar], who's been there for two years with the same team, with the same consultants. They'll see it that the consultant kind of is trying to keep that reg [registrar] happy, because that's a long-term person.

Lack of flexibility

While it was suggested that training bodies could allow for some changes, it was noted that this was often only given *"due to compassionate grounds … but, outside of that, rarely".* Others spoke of a lack of flexibility, where doctors on the same training scheme in two different hospitals located a long way from each other were not allowed, by the training body, to switch with each other, *"even though, really, those hospitals are very similar,"* and there were very strong family reasons to swap for both doctors. Another person noted that "*staying more than one year sometimes is not allowed in one facility … you can't do two years in the same place. But, if you're just swapping for one year, it is okay*".

It was also suggested that the employment legislation requiring employees who had been working in a particular job for more than three years was a barrier, because:

If you stay in a hospital for three years or more, you're entitled to like a permanent contract in that hospital … which, again, if someone wants to be there, and they're happy enough to be there as a reg, then leave them be, let them stay within that hospital.

While it was recognised that a more flexible approach to training is being implemented in Ireland as a result of the McCraith Report, it was also highlighted that implementation is slow and is likely to take some time. Nevertheless, it was strongly proposed that "*If we have better flexible training, then we'd retain more."* This was particularly highlighted in terms of *"female trainees, who do choose to have children",* who *"find it difficult in terms of reintegrating into the workforce".* There was some criticism of training bodies which, it was suggested, are "*nameless organisations*" and "*they'll tell you, like we gave you that job, end of story, not my problem. I think it's administration".* It was also suggested that:

Part of the concern from a NCHD perspective is then, that I won't be taken as seriously, that I will be deprived of opportunities, that I won't be seen as a serious candidate. That's definitely true.

This was supported by another doctor, who noted:

There are more NCHDs who would like to have the option of less than full-time or text-book training. And, particularly if they have families or if they have, if they're caring for someone, or if they have extracurricular activities, they'd like to be able to work week on week off, or three days on two days off and we don't have enough posts created.

This person went on to say

And I know a few people, who've fallen off those schemes. It's often that there's ... It's sort of seen as this way, or no way. [There's] very little wiggle room in between.

Promotion

In general, it was suggested that *"people wouldn't be happy being a reg [registrar] forever*", not least because of the core responsibility that goes with it and the level of on-call work. As a consequence, opportunities for promotion were highlighted as an important issue for NCHDs. One participant, however, did suggest that not all doctors want to achieve consultant level, saying:

There's gonna be people that are quite happy just … driving towards having a middle level. Because people don't want the responsibility of getting sued. And, because the medical legal limitations of being a consultant.

Opportunities for promotion were highlighted as an important issue for NCHDs, and the importance of training was noted. One doctor said:

So, I'm more than happy to train for 15 years if it means that I will have a good job at the end of it, with good working conditions. And, you not working down the mines – so it's all relative. Every job I've had is very enjoyable in ways … And, if you could remove some of the more challenging pieces and make it more similar to, particularly to the UK.

It was also noted that those doctors who are not on training programmes cannot be consultants. The following observations were made at a focus group discussion:

Speaker 1: *And doctors who can't be consultants. Because they're not allowed in training programmes. So, they're non-nationals, and then EU doctors. So, they want to train, but they can't. Yeah.*
Speaker 2: *Yeah. So that's the problem.*
Speaker 1: *Yeah. They can't progress.*

Alternatives to consultant posts

Some alternatives to being a consultant were identified, and at one focus group interview, a discussion took place about "*service grade doctors",* which is a level available in the UK. It was described as:

Somewhere in between a reg [registrar]and a consultant, that you will have some level of autonomy and responsibility, but you wouldn't have the same salary and the same scope of practice.

One person disagreed with this approach, suggesting it was *"another sub-level"* and was not a solution for doctors who had undertaken a high level of training. Further, it was suggested that it would still be necessary:

To create consultancy posts for people who have worked X amount to get to that place.

The following quote from an NCHD highlighted some research on the service grade doctor:

If you look at that service grade job, which does exist in the UK and NHS, they are the most unhappy group of individuals out of the whole medical cohort … 'Cause they've been plateaued … 'Cause they've been basically "ceilinged". And, they can't get through to the next level … Which nobody wants to do, 'cause we're all naturally very driven.

However, it was also suggested that this grade was helpful in providing a *"temporary measure for doctors having kids, or whatever it was, whether kids were quite young, or they were just after maternity leave".*

One doctor highlighted a similar type possibility in one specialist area in Ireland, noting:

And [there are] different pathways now, where we're kind of seeing more jobs that are sort of in between, if you will. Now in saying that, we're still not perfect at it, and we still don't have a very clear ... I think we don't have a very clear path on how that looks across the board.

Clear pathways for promotion

Two issues were raised in respect of planning for promotions. First, it was suggested that it would be better if NCHDs had a clear pathway from NCHD to consultant, with one participant noting:

Yeah, well I think it's just an example of if you did have a clear pathway that was communicated back to trainees, so they knew where the opportunities were coming from.

It was suggested this would ensure that the system would support training in the areas where there currently are, or where there are likely to be, shortages. One doctor noted:

It would also mean that we were tailoring a system to what we need as patients. If you know we need general paediatricians, then you feed that back to trainees, that [there are] going to be general paediatrics posts. That's what they will train for … But, we don't have that being fed back thoroughly. So, when you have a lot of people doing some specialty where there's no need for them to actually ... [There are] no jobs.

In other countries, it was noted, that when doctors signed up to do the training:

That hospital kind of says to them, when they finish their training, we have a consultant job for you … So, they go in. If you they get in, they know they're there for about maybe eight years …

It was also suggested that while the doctors may need to rotate out of the hospital for a year or two, knowing they will be coming back to their *"parent hospital"*:

gives people that sense of, kind of, community that at least they're within a hospital. They know people.

Only a small number of participants identified issues in respect of the recruitment process, and these generally related to delays in the process. One person noted:

changes in the recruitment process for consultants, which meant that this pre-funding is required, preapproval as well is required. It's delayed the process and it means that it can be slightly more problematic getting people into roles.

Another person supported this, noting that:

Hospitals are now required to get pre-funding for consultancy posts, and [name of person] was trying to get one job created, and she is still not out of the hospital network, so it hasn't even got to the agency for approval yet. And so that's a dramatically slow amount of time.

Work load

A number of doctors drew attention to their workload and there were three main elements to this (Figure 75)

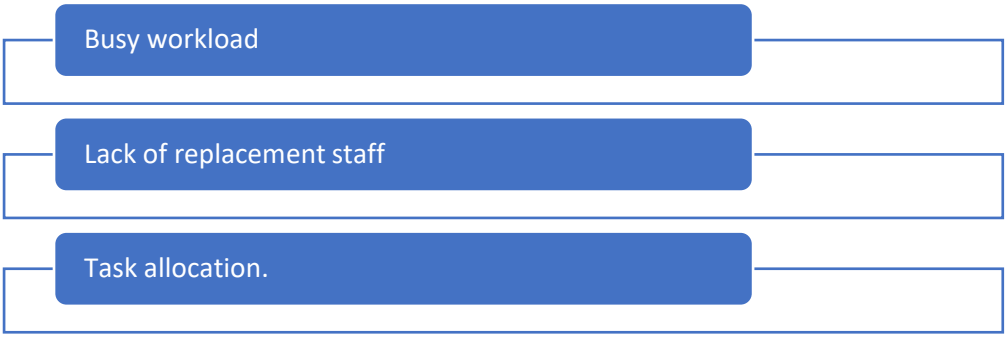


Figure 75: Workload issues

Busy workload

The workload was identified as challenging for a small number of doctors, with one doctor noting:

Just the workload. Just the stress of having an awful lot to do in a very limited amount of time.

This was supported by another doctor, who said:

Well I suppose the most challenging part of my job really is the workload … I mean, in the hospital or in the outpatient setting, [there are] always a lot of patients, there's work overload, there's a lot of paperwork, and that can be overwhelming at times … Yes, like sometimes, to be honest with you, I normally finish at 5:00, sometimes I have to stay until 7:00. I'm not being paid for it or anything, but I feel like there's an obligation for me to complete my job and not leave it behind, you know what I mean?

Time pressures resulting in longer working days were also raised by another participant, who said:

Time pressure would be the main one [challenge]. So not enough time to do the tasks that are required … and in terms of managing that, I guess we just come in earlier and go home later.

Negative impacts were identified in respect of patients and other services, and these were highlighted as follows:

But sometimes you might not see them until 4:00 in the day, at which point, in terms of scans and blood tests and kind of other [services], like multidisciplinary team, it's too late to do anything. So, it's kind of a waste of a day for the patient who's been sitting there for the day and they haven't gotten anything done.

Whereas, if you saw them first thing in the morning, then you have booked them for a scan, or rang other team member, or some other blood tests.

One doctor linked these challenges with burnout, noting:

I think part of the reason you get disgruntled and burnt out, is because you come in early every day, and you leave late every day. You never, ever do your 9 to 5 or you never ever leave early. You're always putting in that little bit more, and you're always chipping away, and chipping away.

On-call requirement

A small number of doctors spoke about the requirement to be on call and it was noted that:

You'll do a full 24-hour shift, then you'll go home, and you could be on a 1 in 4 [meaning on call for one night in every four nights]. And that's fine when you're starting off, but you find the longer people go, the less enthusiastic they are about doing that … some people just accept it as part of life, because consultants do on call. The biggest difference between consultancy call and trainee call is[that] as a trainee, you are always in the hospital, no matter what.

Another doctor spoke about a hospital where:

We worked 70 hours a week, and that was just normal. 'Cause you'd be there in emergency … and then you're on call every second weekend.

Lack of replacement cover

Lack of cover was identified as an issue by several doctors. One participant said:

And just things like, small things, like if you need to take a sick day, there's nobody to cover your role, and yet [you] often get told [by] HR to sort it out yourself, either to get someone to cover it or come in yourself f… Whereas abroad, they'd have somebody, one person rostered for the month, who would cover any sick leave, that type of thing.

This situation was also highlighted by others, who noted that sometimes the responsibility to provide cover is left to the doctors. One doctor said:

So, some hospitals will give them [doctors] the responsibility, but then if two people go off sick, they'll say, "Well, you have to fill the gaps yourself." They will provide locum cover. That means that suddenly somebody's on a 1 in 3 on call. That's hugely draining and can lead to burnout definitely.

The scheduling of cover by HR, however, was also highlighted as problematic. One person noted:

I've seen that, where HR take responsibilities for the rota, they don't take into account NCHD requests. So, I know somebody, for example, who was put on call the day of her wedding, and somebody else who they scheduled, actually people who didn't work in the hospital, somebody was on maternity leave, and then again, they just told the trainee, "Well, you have to figure it out." It's not that I don't think the trainees should be responsible, I just think there needs to be nice, clear consistency.

One doctor spoke of an initiative in one hospital where they are *"trying to get a reserve, intern, HO and reg [registrar] for [names of two specialities]. So, if someone's sick, it's not like a big crisis."*

Another spoke of the situation in New Zealand, where:

> *They have relief doctors, so if someone is out sick, or if someone is on holidays, someone comes in to replace you automatically. So, the team doesn't suffer. Patient care is minimally affected, or not affected at all. And you won't feel like you're letting your team down if you're sick. Or if you're genuinely sick, you can't go into work that day, whereas, I think a lot of people in Ireland feel like a lot of doctors go to work when they're sick and shouldn't.*

A small number of doctors drew attention to the increases in *"paperwork"* and *"documentation"*, which often necessitated working late, although it was also suggested that in general, doctors were not very good at documenting the really important risks and challenges they were having.

Lack of an IT and documentation infrastructure

Attention was also drawn to the lack of an IT infrastructure within many hospitals and, where they were in place, they differed according to the location. Different systems in different locations are particularly problematic for doctors who are rotating on a regular basis. The following iteration took place at a focus group:

Female 1:	*Like, if you want to get a [name of speciality] consultation you write a little note for [name of speciality], and then you have to go to [name of speciality] ward and then find the box that's somewhere in the ward, and then you put it in the box, but then you need to call the reg [registrar] as well, in case the box goes missing or the letter goes missing … But you have to physically walk around the hospital, depositing all these consultation notes everywhere.*
Female 2:	*It's the same at [another hospital], we still do that. We don't have an online system, so everything is on form, and the interns spends a lot of their time wandering around the wards, looking for the right box to put the form in. And then there's no electronic record of it, what's even been approved*.

Another doctor spoke about seeing patients at an outpatient (OPD) clinic in one hospital and, due to the way in which the charts are filed, the doctor at OPD does not have access to them. It was highlighted that if:

> *They forget their CD or aren't given one, you have to re-x-ray that patient, expose them to more radiation … They're angry that they got x-rayed yesterday.*

Task allocation

One doctor said:

> *Like, I'm doing a job that basically is a nursing job. I don't mean that as dismissive to nursing, but if you looked, there was an agreement for co-transfer tasks.*

This doctor went on to say:

It's in the interns and it's the SHO. They're the people, who just feel like, "I went through six years of medical school. I've done all this, and my day-to-day job is a huge amount of admin, and a huge amount of tasks that aren't really medical tasks, if you put it like that." And, I think there's a certain sort of, "Well, that's the way it's always been and people need to cut their teeth in that." You know?

The impact of this was also highlighted as creating *"a tension, particularly between nurse and doctors over who should do what when, how, why".* It was suggested that the situation is exacerbated by the doctor's job description which, it was suggested, *"tends to be quite broad".* This doctor noted:

So, certainly when I was an intern, I was doing things that a porter would be doing or a worker could be doing, or a nurse would be doing elsewhere … and the lack of clarity of the roles is important.

Another doctor noted:

When I came back to Ireland, I was still carrying x-rays around as part of my job, you know. So, it takes €20 an hour, or whatever it was, to carry x-rays. So, those sorts of things were very frustrating. Not having enough people to assist in clinics, dictating an urgent letter, and it wasn't written to a, it wasn't typed for months, so having to unwrite a letter.

This doctor also suggested that:

It goes both ways. So, you have senior clinicians who are doing tasks that really should be for junior clinicians or other staff members. And then you have junior clinicians who are staffing services that really should be consultant led or have a senior clinician.

Some comparisons were also made with the private sector. One doctor, who had worked in a private hospital, said:

But you go in, and everything's organised. The nurses do far more in actuality. Like I said, I'm just speaking quite bluntly, but things will be set up, ready to run, so that you're going in, and you're literally ... the best utilisation of your time as a medic. And I suppose if you think about health systems in general, why are we paying doctors to do really basic tasks that can be done by a physician's assistant, or somebody else that could essentially cost less?

Pay

A number of issues were highlighted in respect of pay, including the overall amount paid and the costs NCHDs have to pay out in order to practise as doctors.

Amount paid

While one doctor noted "*I think we get paid very well. I think we get paid very well*", in general, others did not agree with this and a number of doctors suggested that, given the work they undertake, they are underpaid, However, this tended not to be the biggest issue, as highlighted below:

I think that is the second thing, pay, comparably and relative to cost of living … when you factor in for the cost of living, I think arguably you could say we're underpaid for all we do.

Another doctor noted:

I know we are working towards a one-tier system, but actually, I think you have to respect that the income that people get actually isn't enough.

One participant, who had previously worked in a different career, said:

We can barely support ourselves. But I think, there's a big misapprehension in terms of financial pay. So, for me, I made much more in [name of service area] then I ever made in medicine. And I have worked exceptionally hard in medicine.

The introduction of the graduate medicine programme has meant that an increasing proportion of NCHDs are older:

They can be married, but they're often in that process of getting married, looking at having a family, and they're often carrying huge debt from college, because they can amass €100 grand each in debt to complete that as a graduate ... so trying to raise a family, actually financially, it can be challenging.

One person drew attention to the fact that GP registrars are not paid at the specialist rate *"which they should be"*.

Others highlighted the possibility of different pay, depending on the location, although it was recognised that there is a need to incentivise doctors to work in more rural areas, where there may not be the same opportunities. One person noted:

If you're in a big city, you should be paid more. Then again, if you're being sent to [name of rural town], you have to incentivise that somehow.

Doctors were also reluctant to be seen to be looking for more money. One doctor noted:

We're not really asking just for like more money, spending: this is to pay for our exams and courses.

Another doctor noted:

We rarely strike over, like, money issues. We try to go for more, like, safety, and time, and shift issues. I think we're traditionally reluctant to complain because it'll be seen as, "Oh, like the doctors are looking for more money."

Inefficient administrative structures to support pay

Many problems were identified in respect of the administrative processes around pay. It was noted the limited information available on payslips makes it difficult to know the hours being paid for. The most frustration with the administrative structures around pay, however, arises from the lack of standardisation of the administrative processes. Several doctors highlighted, and gave examples of, difficulties arising for them as a result of this, with one doctor noting:

It's not standardised. In one hospital, it's done one way, and then an hour up the road in another hospital it's a different payment network, and there is another way, and if you move from one to the other, you might as well be moving like from Ireland to the UK kind of thing: in terms of your finances they're totally separate.

This is particularly problematic in the context of rotations, where individual doctors are moving posts regularly and as a result may be on emergency tax on an ongoing basis. One doctor explained:

So, they don't keep any of your details, or tax details, and if you move one to the other it takes eight weeks or two months, I guess, to get up and running again in terms of your emergency tax, pay and pension and all that.

The implications of this were identified as very problematic as highlighted in the following observations which were made at one focus group:

Female 2:	*You're emergency taxed, when you move from hospital to hospital.*
Interviewer:	*Is that a big issue?*
Female 3:	*Every time you're moving, every six months ... I'm working, I was going on a holiday. I had to get a loan from my boyfriend, 'cause we were going on holiday, and my last pay didn't come through properly, and then my first pay wasn't for another month. It's kind of pathetic, when you're a grown adult having to get a loan, because –*
Male 1:	*It's pretty pathetic. It's pathetic.*

Others in the focus group highlighted other additional costs arising, particularly in January, when new rotations commence, including "*deposit and first month's rent on the new accommodation"*, *"exam fees which are €750"*, and *"indemnity, in addition to paying for 'our training', which were not tax allowable, either".* One doctor noted:

Our exams cost thousands. I paid five grand for exams in a year, and also I paid five grand for a master's, and I had double rent and I had emergency tax.

It was highlighted that interns *"are very vulnerable. And that's their formative year",* and that the process is "*just cruel, and it's exhausting"*. One doctor spoke about his intern year, noting:

And I remember being not paid, underpaid, just hours plucked … it was, you kind of deal with it with most of your colleagues. But it was when HR started to just, "We're not paying you. We're just forcing things on you." And it was at the end of that year that I was like, I'm not gonna work here again.

One person noted that while working as an NCHD, they may work in both HSE and voluntary settings, which all have separate payment systems. While it was suggested that there would be some progress on this, it was also highlighted that this could take "*about four and a half years and that's the HSE agencies only. It'll take another year or two after that, before it is available for the voluntary hospitals and organisations."*

Additional costs associated with practising as an NCHD

There are a number of costs met by NCHDs that are necessary for them to continue in practice. These costs include:

- Training and education costs
- Costs associated with rotations particularly having to move around to different parts of the country
- Payment of Medical Council registration fees
- Costs for non-national doctors associated with getting visas.

Individuals are required to pay for a visa each time a contract is renewed and, in the case of NCHDs who are on rotations, this can happen on a few times a year, which can be very

expensive. This is highlighted in the following discussion, which took place at one focus group:

Female 1:	*So [there are] people in this country who are on three-month rolling contracts, and they're paying €400 of visa fees every three months.*
Male 1:	*And if you have family, multiply by the family.*

Cost of training

The cost of training was highlighted as problem and many doctors drew attention to this, noting that in order to be competitive for consultant posts, "*Trainees will invest a huge amount … and will do a huge amount of extra training."* Many NCHDs we spoke to in the course of undertaking this research had gained one or even two master's degrees and one individual was in the process of undertaking a third master's programme. It was highlighted that:

> *There shouldn't really be a requirement for master's, but it is in the scoring system for some of the HSEs. Not all of them. But as long as that's there, people will do it, because they know they'll get points for it … But that could be 13 grand of your own money.*

Others highlighted the "*huge amounts of courses, conferences, and they're not covered by the HSEs",* despite the fact that these courses are *"required as part of your job in terms of critical care and things like advanced cardiac life support",* which are needed for most medical and surgical jobs in this country. While it was noted that some cost (about €450) was reimbursed for some people, courses cost more than that (usually €600). It was also noted that in some cases, "*They'd find pharmaceutical companies to fund it [as otherwise], they wouldn't be able to go and couldn't afford it."*

Delays in reimbursement for courses

A number of doctors drew attention to the differences between the Irish situation and elsewhere, where in addition to getting a full refund ("*like in New Zealand all your training, their courses are paid for"*) you are not required to be "*waiting three months to be reimbursed either".* One person said:

> *Like, we went to a conference in [name of month] and we were told all the expenses would be covered, and six to seven months [later], I still haven't gotten the money back … You know, so it breeds apathy.*

One participant compared the situation about education with that of nurses, noting:

> *I'm very passionate about this. Refund all of the course values that we have to cover … We get €450 back for courses. I spent over a grand going to the UK to do my memberships, which are a requirement. And I got €450 back. And the message that sends when nursing courses are covered, is straight away, you've got injustice.*

This was followed by another interviewee, who said, "*And that's why we're all so disgruntled.*"

Not being paid for time worked

There were several comments about the lack of remuneration for hours worked. One doctor said:

Some hospitals are not paying people for the hours that they worked ... They literally don't pay.

This contention was supported by several others. It was noted that there is unpaid "*rostered overtime*", resulting in doctors having to stay in the hospital "*outside of hours, and you're not getting paid for it".* Others named hospitals where there appears to be an overt decision "*not to pay interns after 5pm",* despite knowing that it is not possible for the interns to get their work done before that time. It was suggested that "*No other job would you do work, and not be paid for it."* It was also suggested that by not paying their interns, the HSE is sending out a message "*that it doesn't care about its trainees".* This doctor also noted:

And we see every other specialty in terms of nursing overtime, they get paid, and there's no question … or they hand over, and they do get to leave.

This issue was also linked with the requirement to complete substantial documentation, some of which, it was suggested, breached data protection legislation, in order to get paid for additional hours. The following took place at one focus group:

Female 2:	*And add it. Like, if you didn't put down in writing, was taking care of [type of] patient with [specific intervention] …. You have to actually tell them what you were doing. Which is such –*
Female 1:	*There's one hospital where you actually have to put in the patient identifier, which is a complete breach.*
Female 2:	*That's [name of hospital]. I did that in [name of hospital].*
Female 3:	*Complete breach of patient protection. But there's more than one hospital that has that … And you get called. So, like, at the end of every year, all the [specialist area], and they will get letters from HR to say, "But we haven't paid you X amount, 'cause we don't believe you've actually been there." And you're like, "No, I'm just here for the …" Of course, I was there for a reason.*

One doctor suggested that this approach was a deliberate attempt to save money, noting:

Well it's not for the sake of it. I mean, they'll know they'll save money by not paying me. That's why they do it. You know, it's because we're a vulnerable group. They know we're a bit apathetic. They know 9 times out of 10 that if they get to be waiting for four months, that people will forget about it. That we're always moving. That we have other things on our mind … so like there's a logic to it, and that's really what gets me. It's not that people don't know. It's that they deliberately, like ... and it becomes blatantly apparent that they don't want to know. Or there is a deliberateness to what they're doing, and that's what really irks me.

Relationships with others

As noted earlier, many doctors highlighted the satisfaction they received from helping their patients. Other relationships were also highlighted, specifically the relationship with the medical team and the HSE.

Relationship within the medical team

Some participants highlighted the impact of their consultant and team members on their

work. One doctor, in response to the question *"Why do you stay in your job?",* said:

> *The reason, to be honest with you, my consultants are really, really good. The team I'm working with are really nice people as well, to work with. So, it's a team effort. Everybody makes everybody's life easy, I suppose.*

This was supported by others: *"It's a very good place to work. I would say the team are really nice people to work in."*

Some doctors noted, however, that being so closely aligned with a consultant or mentor "*has benefits and negatives",* and that *"it's very consultant-dependent whether you will be supported or not".* This was supported by another doctor, who suggested that sometimes you might "*click with*" one mentor better than another, as follows:

> *You might meet a really good mentor and when your job switches, then you're like, across the country and you don't see them again, you know, and it's kind of challenging … Just whoever you click with.*

Another participant highlighted the power relationships and hierarchy within medicine and noted:

> *And you're very vulnerable to the whims of your consultant. Particularly in the smaller specialties, because the consultants who are overseeing you or supervising you. They are quite likely to have to write your reference. They may be the one reading the reference for either your credit training or for a consultant post. And they're quite likely to have an influence on the interview panel. So, I think the hierarchy is very rigid and quite intimidating.*

Relationships with colleagues

Having good colleagues was highlighted as very important, with some participants emphasising the difficulties faced by doctors, which, it was noted *"might be shocking or very difficult to understand for somebody not in medicine … and only a colleague would understand".* It was noted that *"It's important to have relationships with people within departments that you work in."* This was also highlighted by another participant, who spoke about why she liked the environment she worked in. This doctor said:

> *I think the management is pretty good. I think the colleagues are really respectful, and I think the environment is really professional as well. Sometimes there is ... there are some difficulties with the staff shortages and stuff like that, but I think that's a given … but other than that, I think everyone's really helpful, everyone's really positive. I find it's a really friendly environment over here. All the paramedics, all the nurses, all the seniors and the juniors as well.*

A small number of doctors highlighted challenges – "*Sometimes how we talk to one another, how much we don't support one another"* – and this was linked with being overworked. Another doctor noted that:

> *Every issue can be solved with communication. You know, some things take time, but whether it's morale, or hierarchy, or errors and you know 90 plus percent of that is communication.*

Relationship with the organisation

A number of participants highlighted a difficult relationship with the organisation, ranging from the corporate HSE to their local situation. One doctor compared the situation in Ireland with that of the NHS, noting:

> *If you look at the NHS, most trainees will be up, lobbying "Save our NHS" with their signs. You see them in the market, "Save our NHS." And it's our NHS, whereas here, most trainees won't identify the HSE as their employer. They'll identify the training scheme, or the hospital … People don't feel like they're part of an organisation per se.*

A number of NCHDs spoke of not feeling valued, with one doctor noting "*We're seen as an expense, rather than an investment,"* and another noting "*It's those interactions with the patients that make us feel valued."* This doctor went on to say:

> *But I think the system is, as of late, it's felt like it's devalued the NCHD. There's a change in terms of how we're treated or maybe interactions are with the policies, and the hierarchy within the hospital, and hospital management … that value that maybe previously was held has changed … you're really not respected for the role.*

This was echoed by another NCHD, who highlighted the following change as a way of encouraging doctors to stay. He said:

> *Nothing to do with pay. Make them feel valued … make nurses, doctors feel valued … Include them in decision-making … because I think it presently feels like a lot of decisions are made by people very far removed from the actual day-to-day practice on the floor.*

Intent to stay / leave

Many doctors drew attention to the balancing of reasons for staying or leaving and in general, those who spoke about leaving did so in the context of moving to another country. Doctors also spoke about "*taking] everything into consideration, you look at the whole picture*", thus highlighting the multifactorial nature of decision-making in this area. This section considers issues relating to attracting people into medicine, retaining them in Ireland, and attracting them back when they do leave.

Attracting people into medicine

Many doctors highlighted challenges for doctors in the Irish healthcare system and in response to *the* question *"What you would say to somebody else to encourage somebody to go into medicine?",* the following discussion took place:

Speaker 1:	*Run a mile [laughs] … You'd have to be mad to do it.*
Speaker 2:	*I would tell people not to do it.*
Speaker 1:	*Yeah, yeah.*
Speaker 2:	*Like, that is the feeling about, like, most of my peers would tell people not to do it.*
Interviewer:	*Okay.*
Speaker 2:	*If you were back doing your CAO don't do medicine. You can make money easier.*

The first speaker, however, went on to say:

> *I wouldn't change it. Like, I look back at when I was that age and I wouldn't change it. Like, I would still do it. But it is ... I think postgraduate people are mad to go back into it. And getting the loans, and then just putting themselves in a really difficult situation … But I think a lot of my peers would say don't do it.*

These sentiments were also expressed by others and in another focus group, in response to the same question, and it was suggested "*You'll have your eyes extremely open, and even the hours, like, physically … the emotional stress … and particularly if you have started a family."*

Another doctor however, highlighted the positive aspect of medicine noting:

> *I'd say it's very challenging ... like if you wanted a job that'll really challenge you, that's a good thing … you're challenged in your communication skills, you're challenged academically, you learn clinical skills, you learn management skills, communication skills, you're challenged every year you go through in your training.*

Retaining doctors in Ireland

While a number of different reasons were given for people staying, there was some agreement that family and personal circumstances were the most important. Almost all the individuals who responded to a specific question of why they would stay drew attention to the family. One participant, who had been offered a training programme and a fellowship in a very renowned hospital in the US, did not take it up, "*mostly for family reasons".* This doctor said:

> *I think the number one reason that we're able to retain people is for social reasons, for family reasons. And often because they have children here.*

This was linked with the long training programmes and this doctor said:

> *If you keep someone in this thing [training] long enough, they'll have their kids and buy their house here, so they're much less likely than to pull up stakes and move to the UK or … You know you're much less likely to move once you get in to your mid-30s.*

Others spoke about not leaving because they had "*a family". "I have a wife and I have kids," "My wife is Irish so that's why I chose to come to Ireland,*" and about *"your circumstances".* One doctor who had been abroad said "*But then it's the ties that bring you back really."* This was particularly highlighted in the context of doctors moving abroad for a period of time to undertake training. One doctor said:

> *Like you don't, if you have a family don't want them halfway across the world. Or, do you know – if you're married to somebody who's not a doctor. Or not even if you're married, but like, you have ties to here and it's just hard to try and plan for that if you are expected to go away, and then come back.*

Better training and promotional opportunities in other countries

As highlighted earlier, there was much agreement that both training and promotion were central to practising as a doctor. In that regard, it was suggested that there is a *"bimodal distribution"* in respect of doctors leaving Ireland *"that's after internship and at fellowship"*. In this study, a number of doctors highlighted their intention to leave for the purpose of enhancing their training and promotional opportunities.

It was suggested that most of those who leave Ireland after their internship come back and that:

> *There's this sense of kind of having broader life experiences maybe. So that's something we see that actually kind of almost planned for.*

Examples were given, however, of doctors who had gone but decided to stay there. One doctor spoke of having gone to Australia with medical friends and while she came back, the others decided to stay there, *"because they thought the training was much better"*. Another participant who thought about going abroad after the intern year said: *"I think if I could make the decision again, I would probably have [gone] abroad in the first instance*." One doctor suggested: *"You are technically being pushed out."* This was also the case with the following doctor, who had already been abroad. He noted:

> *So, I considered going to the States because the training is much shorter there, and I probably would have a lot more opportunities there, so that was the first time … And then since I've come home [from the UK], I have considered it several times because, partly because of working conditions, and partly because of inflexibility within the training system.*

In the context of promotions in other countries, it was noted that there is much more certainty and "*They're getting offered jobs straightaway where they are, so often they'll go into a fellowship, and the centre that they're in will offer them a consultancy post, or an attending post straightaway."* This compares with the Irish situation, where it was suggested that in some specialities there are many more NCHDs than consultant posts, resulting in very poor promotional opportunities for those doctors.

Impact of training and promotion on non-Irish national doctors

It was noted that in Ireland, our "*dependency on foreign medical graduates is one of the highest in the world and … and they're plugging a hole in service for us, but we're not really keeping them happy either*". This was exemplified by participants in this study and attention was particularly drawn to the lack of promotional opportunities available to those who are not on a formal training scheme. One doctor said:

> *I want to live. I want to basically live with my wife [who] is a doctor. She has got [a] fellowship in [country of origin] but she cannot get entry into this training scheme. So definitely, in the long term, I have to think about her. Leaving this country, because I will be stuck with my future prospects. I cannot be on the specialist register ever. So, I have to work as a NCHD for all of my life. You know, I have to work as locum. I don't want to be a locum after getting a degree from [name of country]. I want to be a part of the Irish system. I want to live in this country. I have [number of] children. They really like this country.*

Another doctor highlighted the uncertainty at the end of the training period, noting, *"If you could get a consultancy post ... people would be more than happy to stay,"* while another participant said*:*

> *The next six months I'm staying and then after that I am planning on going to UK maybe … I'll get a job immediately, not a problem in the UK. It's a big country … I will be a "consultant" in the UK after one or two years. Here, I would have less chance! ... there is no parity for the overseas doctor. In the UK there is clarity … Things are very clear. Here things are complicated, you know?*

Better financial incentives elsewhere

It was suggested that opportunities for higher levels of pay are greater in settings other than the HSE. In particular, it was suggested that "*the private [pay] is definitely more. I would say probably by 15, 20% more".* It was also noted that those doctors doing locum cover are better paid and it was suggested this was an incentive not to take up a post in the HSE. Examples were given of friends and colleagues who had emigrated "*pretty much for the money*". Others highlighted additional perks available in other locations, such as, "*Your*

medical costs are paid for, all your training, their courses are paid for. You get a free lunch" and "You felt like they actually wanted you to be there."

One doctor highlighted the incentives of working outside the country noting:

> *If you want to keep doctors working in Ireland, and then we do have a huge shortage of doctors and nurses as well in Ireland … because a lot of people leave because of the money … When you look at countries like New Zealand, you look at Australia, when you look at Canada, [there are] a lot of incentives, such as travel expenses, such as locating expenses, such as salary being reasonably good for the amount of work that's actually being done.*

A small number of doctors highlighted the fact that "*the working conditions are better abroad", "you're given more freedom to work in subspecialty areas of your choice",* and doctors are listened to more. One doctor gave the following example from Canada:

> *So, doctors that were working were on call really frequently … the doctors were [going to] burn out. So, they just decide they're [going to] do call on the weekends … so in order to prevent those doctors from leaving, they changed the whole on-call system to make sure that they didn't run out … that would never happen here.*

In terms of attracting doctors back to Ireland, however, it was strongly suggested that the incentives were not there, and in particular, *"the consultancy contract isn't as attractive anymore, definitely".*

Countries specifically highlighted as offering positive work experiences were New Zealand, Australia and Canada. One participant asked, "*We're in a developed country, so why is it that we can't compete [with] somewhere like New Zealand or Australia?*" It was also noted that some countries operate "*aggressive recruitment drives, where they'll say, 'We'll pay this, and we'll pay that'",* and it was suggested that while the doctors' initial intent might be to stay only a short time, after a while they decide to stay there: *"Now I'm settled and moved the kids here."*

Summary of issues arising for NCHDs

In summary, this section has presented the findings from the thematic analysis of interviews with NCHDs. The three main reasons why NCHDs are attracted to medicine include being able to make a difference to people's lives; being proud of the work they do; and having opportunities for further development. A number of issues relating to the work and lives of doctors were highlighted throughout the interviews and these relate to the requirement for them to continue their training for many years; promotional opportunities; their workload; pay and remuneration; and relationships with others. These issues are now presented, and the section concludes with a summary of issues identified by NCHDs as directly impacting on their decisions to stay or leave.

NCHDs described undertaking an extensive training period that commences with an internship following their undergraduate degree and continues through basic specialist training, higher specialist training and a fellowship, after which they become eligible for a consultant post. Consequently, issues relating to training and promotion are central to both negative and positive aspects of their work.

About two-thirds of NCHDs are on a formal training programme and, while this is preferable to not being on one, a number of key difficulties were raised. These include a requirement to rotate which, due to a lack of regionalisation, can result in significant disruption to their personal lives. Given the lengthy period of training, many doctors have family and other commitments and this requirement to move to different parts of the country was identified as negatively impacting on their partners and children. While some recent improvements arising from the implementation of the McCraith Report were noted, it was also suggested that there is a lack of flexibility around the training programmes, and a number of examples were given. The ongoing requirement to move was also highlighted as having a negative impact on the professional life of doctors, particularly in building relationships with individual consultants they may be working with and other staff working in hospitals.

It was suggested that doctors who are not on a training scheme are more likely to be non-Irish national doctors and, while they are required to undertake continuous professional development, they do not have the same opportunities for getting experience or promotion as those on training schemes. This was highlighted as problematic.

The uncertainty around promotion and the limited opportunities were also noted to be challenging, and it was suggested that there is a need for clear pathways to be mapped out. This, it was suggested, is not only in the interests of NCHDs but also in the interests of ensuring that sufficient number of doctors are on training pathways that can meet the greatest need within the health services. Some debate took place at focus groups about alternatives to consultant posts, such as the service level post in the UK, which was described as a level between registrar and consultant.

A number of doctors spoke about having a very busy workload, which is compounded by the on-call requirements and the lack of replacement cover. Issues were also raised about a lack of an IT infrastructure which, it was highlighted, is wasteful of doctors' time, but also has implications for patient care and safety. Some doctors spoke about doing many tasks that could be done by others, particularly nurses, or that should be done by other more senior doctors.

Issues around pay also emerged and, while the amount paid was highlighted by some as being insufficient, most of the commentary around this issue related to frustration with the administrative structures in place. Challenges are compounded by the requirement of doctors to rotate regularly, which results in significant costs, but also in their being on emergency tax and out of pocket for extended periods of time. This has a real and negative impact on their lives. Additional costs associated with practising as a doctor were also highlighted and these included the cost of training, only some of which is reimbursed by the HSE, and the cost of registering with the Medical Council. Many doctors spoke about having paid significant amount of money to do courses, including a master's, so that they would be more competitive in applying for promotional positions. Others highlighted that they were not always paid for time worked and, while it was suggested that some rostered time is unpaid, it was also suggested that the recoupment process for being paid for additional hours worked is unnecessarily complex.

A small number of doctors spoke about their relationships with the medical team and it was noted that the consultant plays a very important role in these relationships. Relationships with colleagues were also highlighted and, in general, these were deemed to be positive. It was suggested that in comparison with doctors in the NHS, there is not a strong sense of organisational commitment to the HSE or even, sometimes, to the hospital where they work.

One of the main reasons why doctors stay in Ireland is their family and personal circumstances, and many spoke of the need to consider their partners and children in any decisions they make. It was suggested that doctors leave Ireland at two points in their career: first, following their internship, and later, in their specialist training, to gain experience, training and fellowship opportunities. It was also noted, however, that many of these doctors do not come back and this is particularly the case where family members travel with them. The pull of other countries was also highlighted, in terms of doctors being better paid, better treated, and more valued.

Conclusions: study with non-consultant hospital doctors

The Irish Medical Council register was used to provide the population of NCHDs to survey and, in total, 637 responses were received. Note that although the sample of respondents is broadly representative of the population of NCHDs, the number of respondents was lower than desired. A total of 38 NCHDs also participated in interviews (8 individually and 30 in three focus groups). Results indicate that three-fifths of NCHDs intended to leave their job in the next two years. Of these, 38.5% intended to leave Ireland without a plan to return. Conclusions presented below highlight factors that may be influencing NCHDs' job and career intentions.

Conclusions: positive aspects of the work and the organisation

NCHDs perceive their work to have a significant impact on the lives of others, are highly engaged in their work, and have positive views of their co-workers.

Three main reasons why NCHDs are attracted to doing this job were identified in the qualitative interview data. These are, being able to make a difference, having pride in their work, doing something worthwhile, and having opportunities for further career development.

These findings are reflected in the quantitative data: the impact index had the highest mean score (83%) of all indexes included in the study. More than three-quarters of respondents (76%) reported they were very frequently or always proud of the work they do. NCHDs also reported high satisfaction levels with their co-workers (mean score on co-worker satisfaction index 73%) and being engaged in their work (mean score on engagement index 74%).

Conclusions: training and promotion opportunities

NCHDs' overall scores on the training index (39%) and the promotion index (41%) were low. The interviews with NCHDs highlighted several issues with training: lengthy training period, requirement to rotate and therefore re-locate, and inequities in training posts across NCHDs from inside and outside of the EU. Interviewees commented that the inequities in training give rise to inequities in promotion. The lack of clear promotional or career pathways in Ireland was highlighted as an issue specific to this group and this may be exerting a direct influence on their intentions to leave: 43% of NCHDs intending to leave their job in the next two years indicated that better opportunities elsewhere was a highly relevant factor.

The mean score on the training index was 39%, indicating low satisfaction among NCHDs with this important facet of their working lives. For example, 78% of NCHDs disagreed that they received sufficient funding from my employers to undertake the training they need;

while 55% agreed that accessing the training that they needed caused significant disruption to their home or family life.

Similarly, the mean score on the promotion index was low (41%). For example, 81% of NCHDs agreed that there is too much uncertainty around securing consultant posts in Ireland after training; 56% disagreed that they had all the opportunities that they needed for promotion.

Interviewees drew attention to the very lengthy training period. This is exacerbated by the system of formal training schemes, where there is a requirement to rotate and this, coupled with a lack of regionalisation and flexibility, means that many NCHDs in training are required to move location on a regular basis. This has a negative impact on their lives and the lives of their families.

NCHDs also commented on those who are not on a training scheme, mainly doctors who are non-Irish nationals. It was noted that when NCHDs from outside the EU are required to change employers, they must apply and pay for a new working visa for themselves as well as their family, and this can be costly. These doctors are not given the same opportunities for education and their promotion prospects were worse as a result.

Interviewees emphasised that are no clear promotion pathways for NCHDs in Ireland and this creates much uncertainty for their futures. Of the NCHDs intending to leave, 43% indicated that there were better opportunities for them elsewhere, suggesting that the promotional structures in the Irish system are a direct influence on NCHDs' intention to leave their job.

Conclusions: pay

Overall level of satisfaction with pay was low (index mean of 30%). Three main reasons underpin this dissatisfaction. First, the administrative structures for pay are highly problematic where the rotated nature of the training scheme requires frequent changes in employers. Second, although ongoing professional development is a requirement, the cost of attending such training is not reimbursed. Third, unpaid overtime is relatively frequent among NCHDs.

NCHDs reported low overall levels of satisfaction with pay (mean index score 30%) with, for example, 63% disagreeing that, compared to others doing a similar job to them, their pay was reasonable.

One of the biggest issues raised in the interviews with NCHDs relates to the administrative structures for pay, and many examples were given of inefficiencies and challenges arising as a result in administrative structures and processes. This is particular problematic in the context of the requirement to change locations and employers while rotating through their training programme.

Another issue arising in the interviews in respect of pay relates to the cost of undertaking the additional training required to progress in their careers (e.g. a Masters degree) which is not reimbursed. This is a particular problem for those NCHDs who are not on a training scheme: it is a requirement that they undertake training, yet the cost of the training is not reimbursed.

Overtime without pay was also mentioned in the interviews. NCHDs drew attention to the fact that they often having to stay after a shift finished due to patient care requirements but that they were not being paid for the additional hours worked. The survey showed that 48% of NCHDs worked overtime without pay at least once a fortnight.

Conclusions: workload, responsibility and burnout

NCHDs reported relatively high levels of burnout (index mean 59%), and 27% reported that they made decisions without supervision more often than they would like. Interviewees also commented on their sense of burnout and responsibility overload and identified lack of IT infrastructure and additional pressure arising from staff being on leave as compounding these difficulties. 44% of NCHDs indicating an intent to leave their current job in the next two years cited problematic staffing levels as highly relevant to their intention to leave.

NCHDs reported a higher level of burnout (index mean of 59%) than consultants (index mean of 51%) with, for example, 75% of NCHDs reported always or often feeling worn out by the end of the working day. The responsibility overload index mean for NCHDs (43%) was lower than the burnout index, but again higher than that of consultants (index mean of 30%). For example, 27% of NCHDs agreed that they made decisions without supervision more often than they would like.

Interviews with NCHDs confirmed these quantitative findings whereby the level of responsibility NCHDs are required to take on, as well as their having to do tasks that could (or should) be done by others, were both highlighted as problematic from a workload point of view.

NCHDs felt that these challenges are compounded by a lack of an IT and other support infrastructure. They noted that replacement for staff who were on leave (sick, annual or other) created an additional pressure, adding to their sense of burnout. The fact that problematic staffing levels were rated by 44% of NCHDs as highly relevant to their intention to leave their current job in the next two years suggests that this is exerting a direct influence on their job intentions.

Conclusions: joint influence on job and career intentions

A total of 30 individual, employment, structural and perceptual / attitudinal characteristics were examined simultaneously in multiple regression models to establish which were the most important predictors of three outcomes – intent to stay or leave current job, organisation or medical profession.

The results of these regression models indicate that the following are of key importance in understanding NCHDs' job and career intentions:

- *opportunities for training and for promotion;*
- *age group;*
- *training status (NCHD in training / not in training); and*
- *level of burnout.*

An implication of these results is that certain groups in the population of NCHDs are more likely to intend to leave their job, organisation or profession, and that these groups may benefit from targeted policy intervention.

Further analysis that focused on perceptions of the job and the organisation confirmed the importance of global job satisfaction, organisational commitment and burnout in predicting NCHDs' job intentions and showed that different aspects of the work and the organisation underpin or drive these three elements.

- Global job satisfaction is driven by perceived quality of workplace, impact, satisfaction with pay, effort-reward ratio, training opportunities, information sharing and perceptions of co-workers.
- Organisational commitment is driven by perceived quality of workplace, information sharing, impact and perceptions of co-workers
- Burnout is driven by responsibility overload, satisfaction with pay, effort-reward ratio, training opportunities and impact.

An implication of this is that efforts to improve drivers of global job satisfaction, organisational commitment and burnout may lead to improvements in these three important aspects of work, which in turn may impact on NCHDs' job and career intentions.

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Appendix

Additional analyses

A1. Intercorrelations between indexes for nurses, consultants and NCHDs

Table A1. Intercorrelations between indexes: nurses

	Engage't	Auto-nomy	Resp O'load	Impact	Sat Pay	Job Sat Spec	Job Sat Glob	Burnout	Info Sharing	Effort Reward Ratio	Recruit Proc	Job Expect	Org Comm	Train & Prom Opp	Perc Co-work	Perc Mana-ger	Int Leave Org
Autonomy	.445**																
Responsibility overload	-.263**	-.193**															
Impact	.410**	.195**	-.079**														
Satisfaction with pay	.284**	.296**	-.202**	.013													
Job satisfaction specific	.492**	.481**	-.393**	.164**	.486**												
Job satisfaction global	.641**	.486**	-.328**	.243**	.454**	.668**											
Burnout	-.538**	-.399**	.406**	-.144**	-.452**	-.668**	-.614**										
Information sharing	.315**	.354**	-.242**	.099**	.348**	.457**	.427**	-.384**									
Effort-reward ratio*	-.353**	-.356**	.301**	-.027	-.415**	-.531**	-.509**	.507**	-.471**								
Recruitment process (new recruits only)	.349**	.306**	-.234**	.135**	.337**	.434**	.424**	-.361**	.402**	-.454**							
Job expectations (new recruits only)	.412**	.364**	-.394**	.124**	.378**	.527**	.528**	-.453**	.362**	-.482**	.404**						
Organisational commitment	.467**	.381**	-.163**	.209**	.308**	.382**	.548**	-.338**	.397**	-.399**	.374**	.324**					
Training and promotion opportunities	.382**	.374**	-.214**	.144**	.337**	.448**	.486**	-.358**	.456**	-.518**	.504**	.442**	.460**				
Perceptions of co-workers	.233**	.143**	-.080**	.132**	.075**	.165**	.225**	-.157**	.120**	-.152**	.221**	.211**	.221**	.158**			
Perceptions of manager	.304**	.292**	-.171**	.096**	.236**	.365**	.408**	-.303**	.396**	-.368**	.414**	.391**	.372**	.498**	.259**		
Intention to leave organisation	-.427**	-.336**	.268**	-.116**	-.341**	-.474**	-.586**	.483**	-.308**	.396**	-.345**	-.431**	-.494**	-.386**	-.153**	-.317**	
Intention to leave profession	-.465**	-.274**	.229**	-.173**	-.299**	-.391**	-.499**	.453**	-.264**	.334**	-.334**	-.356**	-.383**	-.319**	-.144**	-.237**	.621**

** p < .01

Scales shaded in grey: highe scores indicate a more negative outcome. For all others, higher scores indicate a more positive outcome.

Note. Negative correlations indicate that a higher score on one scale is related to a lower score on the other, and vice versa.

Guide to interpreting the magnitude of the correlations: between ± 0.50 and ± 1 = strong; ± 0.30 and ± 0.49 = moderate; below + .29 = weak.

Table A2. Intercorrelations between indexes: consultants

	Engage	Auton	Resp O'Load	Impact	Sat with pay	Job sat specific	Job sat global	Burnout	Info sharing	Effort-reward ratio	Rec'ment process (new recruits only)	Job exp (new recruits only)	Org commit	Train opp	Prom opp	Perc co-workers	Perc manager	Perc qual workpl	Int to leave org
Autonomy	.334**																		
Responsibility overload	-.392**	-.390**																	
Impact	.467**	.166**	-.276**																
Satisfaction with pay	.173**	.289**	-.140**	-.033															
Job satisfaction specific	.483**	.510**	-.413**	.239**	.452**														
Job satisfaction global	.620**	.486**	-.387**	.226**	.478**	.694**													
Burnout	-.538**	-.411**	.445**	-.205**	-.292**	-.584**	-.557**												
Information sharing	.341**	.361**	-.230**	.120**	.361**	.510**	.508**	-.344**											
Effort-reward ratio	-.286**	-.343**	.276**	-.083*	-.353**	-.449**	-.464**	.393**	-.386**										
Recruitment process (new recruits only)	.348**	.396**	-.326**	.233*	.387**	.558**	.473**	-.248**	.476**	-.302**									
Job expectations (new recruits only)	.513**	.509**	-.597**	.262**	.476**	.711**	.733**	-.408**	.459**	-.415**	.553**								
Organisational commitment	.476**	.336**	-.242**	.221**	.361**	.454**	.632**	-.371**	.498**	-.383**	.444**	.537**							
Training opportunities																			
Promotion opportunities																			
Perceptions of co-workers	.373**	.250**	-.294**	.148**	.147**	.278**	.346**	-.290**	.210**	-.225**	.375**	.342**	.360**						
Perceptions of manager	.349**	.333**	-.163**	.116**	.250**	.424**	.428**	-.287**	.472**	-.338**	.438**	.413**	.495**			.360**			
Perceived quality of workplace	.395**	.372**	-.321**	.253**	.297**	.633**	.551**	-.427**	.421**	-.352**	.421**	.503**	.514**			.287**	.381**		
Intention to leave organisation	-.334**	-.408**	.301**	-.153**	-.367**	-.398**	-.557**	.409**	-.310**	.432**	-.282**	-.355**	-.508**			-.264**	-.321**	-.346**	
Intention to leave profession	-.314**	-.324**	.295**	-.146**	-.323**	-.315**	-.451**	.421**	-.232**	.385**	-.133	-.188	-.404**			-.266**	-.210**	-.270**	.756**

* p < .05; ** p < .01

Scales shaded in grey: higher scores indicate a more negative outcome. For all others, higher scores indicate a more positive outcome.

Consultants did not respond to questions about training opportunities and promotion opportunities.

Note. Negative correlations indicate that a higher score on one scale is related to a lower score on the other, and vice versa.

Guide to interpreting the magnitude of the correlations: between ± 0.50 and ± 1 = strong; ± 0.30 and ± 0.49 = moderate; below ± .29 = weak.

Table A3. Intercorrelations between indexes: NCHDs

	Engage	Auton	Resp O'Load	Impact	Sat with pay	Job sat specific	Job sat global	Burnout	Info sharing	Effort-reward ratio	Rec'ment process (new recruits only)	Job exp (new recruits only)	Org commit	Train opp	Prom opp	Perc co-workers	Perc manager	Perc qual workpl	Int to leave org
Autonomy	.256**																		
Responsibility overload	-.218**	-.143**																	
Impact	.502**	.099**	-.137**																
Satisfaction with pay	.186**	.254**	-.229**	-.026															
Job satisfaction specific	.403**	.359**	-.446**	.240**	.478**														
Job satisfaction global	.585**	.364**	-.337**	.284**	.433**	.668**													
Burnout	-.532**	-.302**	.356**	-.172**	-.363**	-.583**	-.529**												
Information sharing	.317**	.342**	-.337**	.170**	.394**	.513**	.480**	-.331**											
Effort-reward ratio	-.285**	-.354**	.265**	-.019	-.459**	-.451**	-.482**	.424**	-.432**										
Recruitment process (new recruits only)	.329**	.339**	-.231**	.212**	.466**	.531**	.506**	-.368**	.479**	-.437**									
Job expectations (new recruits only)	.450**	.269**	-.237**	.198**	.333**	.496**	.565**	-.312**	.421**	-.372**	.422**								
Organisational commitment	.461**	.294**	-.251**	.304**	.308**	.488**	.569**	-.381**	.444**	-.287**	.407**	.300**							
Training opportunities	.314**	.387**	-.252**	.153**	.372**	.463**	.503**	-.412**	.373**	-.514**	.479**	.281**	.359**						
Promotion opportunities	.215**	.225**	-.101**	.061	.288**	.315**	.361**	-.255**	.301**	-.473**	.410**	.256**	.256**	.564**					
Perceptions of co-workers	.273**	.270**	-.104**	.142**	.138**	.221**	.337**	-.225**	.161**	-.237**	.226**	.324**	.279**	.297**	.179**				
Perceptions of manager	.326**	.325**	-.243**	.143**	.267**	.369**	.440**	-.323**	.271**	-.393**	.415**	.375**	.319**	.510**	.385**	.362**			
Perceived quality of workplace	.350**	.301**	-.333**	.268**	.343**	.609**	.607**	-.325**	.466**	-.296**	.405**	.427**	.466**	.353**	.285**	.254**	.360**		
Intention to leave organisation	-.325**	-.253**	.214**	-.060	-.348**	-.416**	-.535**	.403**	-.290**	.420**	-.302**	-.328**	-.404**	-.518**	-.435**	-.248**	-.347**	-.344**	
Intention to leave profession	-.384**	-.160**	.248**	-.125**	-.324**	-.380**	-.454**	.458**	-.273**	.327**	-.268**	-.319**	-.380**	-.419**	-.303**	-.201**	-.235**	-.279**	.673**

* p < .05; ** p < .01

Scales shaded in grey: higher scores indicate a more negative outcome. For all others, higher scores indicate a more positive outcome.

Note. Negative correlations indicate that a higher score on one scale is related to a lower score on the other, and vice versa.

Guide to interpreting the magnitude of the correlations: between ± 0.50 and ± 1 = strong; ± 0.30 and ± 0.49 = moderate; below ± .29 = weak.

A2. An alternative way of examining intention to leave

There are a number of ways to construct the regression models for this (or any) study. Part 2 in Sections 4, 5 and 6 of this report has examined three intention to leave measures in such a way as to provide information on:

(i) the extent to which these intentions vary across important demographic, employment and structural characteristics
(ii) the extent to which perceptions of the job and of the organisation explain variations in intentions.

An alternative way to examine the issue is to consider demographic, employment and structural characteristics as 'control' variables (since in some senses these are 'givens') and to split the perceptions of job and of organisation characteristics in a manner that is similar to that described in the 2017 Civil Service Employee Engagement Survey (CSEES) report (pp. 60-61, pp. 73-74), i.e. as 'drivers' and 'outcomes'. Examples of drivers in that study include leadership, competence and organisational support, while the outcomes examined were engagement, organisational commitment, wellbeing, and coping with change.

The key difference between the CSEES study and the present study is that the key outcomes in the present study are measures of intention to leave job, organisation and profession, with measures that would be termed in the CSEES report as 'outcomes' are explanatory variables. Therefore, to avoid confusion, we refer to intention to leave as outcome, and outcomes as described in the CSEES report are termed impacts here. Drivers as described in the CSEES study are termed perceptions in the present analysis.

It is important to note that both ways of analysing the data are 'correct' (and indeed there are other ways to analyse the datasets). This alternative method provides *less* information about variations across demographic, employment and structural characteristics, but has the benefit of a theoretical distinction between perceptions and impacts. The implication of this is that identifying those perceptions that are related to the impacts (which in turn are related to the outcome) provides a means of enabling policy focus on relevant perceptions. The models presented in the main body of the report provide policy-relevant information about which groups of employees (e.g. younger, specific grades) and which employment and structural features (e.g. amount of overtime, sector) need to be the focus of policy efforts.

The tables in this appendix show a re-analysis of the intention to leave the organisation measure for each of the three groups in this study (nurses/midwives, Consultants and NCHDs).

Variables have been re-organised into 'controls' (which comprise a subset of the individual, employment and structural characteristics variables shown in Tables 11 and 12); perceptions; and impacts. The control variables have been selected on the basis of (i) being relatively 'fixed' in nature and (ii) tending to show significant associations with the other variables considered.

The 'control' part of the model was 'fixed' by testing which of these variables was significantly related to the outcome (model 1). In model 2, perceptions measures were analysed using forward regression and in the presence of the control variables. Following this, the model 2 component, perceptions, was 'fixed' and model 3 assessed the significance of impacts, again using forward regression. The variables in model 2 that lose statistical

significance in the presence of the impact measures may be interpreted as drivers of those impacts.

In all models, impact measures of organisational commitment, global job satisfaction and burnout are significantly associated with intention to leave the organisation. In order to 'unpack' this finding further, we examined which among the perceptions measures were most strongly associated with each of these impacts using forward regression. The results of this analysis are shown at the end of this Appendix.

- Table A4 lists the variables included in the models of nurses/midwives, Consultants, and NCHDs that are shown in Tables A3-A6.
- Table A5 lists, in summary form, the variables that are significant predictors of intention to leave the organisation in each of the four models. Asterisks denote variables in common between these models and the ones presented in the main body of the report.
- Table A6, an alternative regression model for nurses' intention to leave organisation, can be compared to Tables 23 and 24 in Part 2 of the main body of the report.
- Table A7 is the new model that examines intention to leave organisation among newly-recruited nurses only. Newly-recruited Consultants and NCHDs were not examined separately because the overall sample sizes for these groups (as noted in Section 2 of this report). Instead, new recruit status is included as a control variable in the models of Consultants and NCHDs.
- Table A8, an alternative regression model for Consultants' intention to leave organisation, can be compared to Tables 23 and 24 in Part 2 of the main body of the report.
- Table A9, an alternative regression model for NCHDs' intention to leave organisation, can be compared to Tables 23 and 24 in Part 2 of the main body of the report.
- Table A10 shows the analysis of the three impact measures in order to identify which perceptions measures are driving this outcome among nurses. For example, the table shows that effort-reward ratio, autonomy and satisfaction with pay are the three strongest 'drivers' of global job satisfaction among nurses. The r-square statistic is cumulative, meaning that it represents the variation in the outcome explained by the measure that it is listed against, *plus* all measures preceding it in the table. The partial correlation coefficient is also provided. This is a measure of the relationship between each measure in the model and the outcome (i.e. global job satisfaction, organisational commitment or burnout), *after* accounting for the presence of the other measures in the model.
- Table A11 shows the analysis of the three impact measures in order to identify which perceptions measures are driving this outcome among consultants. Again, the r-square statistic is cumulative. Partial correlation coefficients are also provided.
- Table A12 shows the analysis of the three impact measures in order to identify which perceptions measures are driving this outcome among NCHDs. Once again, the r-square statistic is cumulative, and partial correlations coefficients are provided.

Table A4. List of variables used in constructing the models shown in Tables A6-A9

Nurses	**Consultants**	**NCHDs**
Controls	*Controls*	*Controls*
Age group	Sector	Age group
Country of initial qualification	Full-/part-time	NCHD in training/not in training

Region	New recruit (past 2 years)	Full-/part-time
Grade	Gender	New recruit (past 2 years)
Full/part time		Gender
Sector		
Perceptions	*Perceptions*	*Perceptions*
Satisfaction with pay	Satisfaction with pay	Satisfaction with pay
Autonomy	Autonomy	Autonomy
Responsibility overload	Responsibility overload	Responsibility overload
Impact	Impact	Impact
Effort-reward ratio	Effort-reward ratio	Effort-reward ratio
Information sharing	Information sharing	Information sharing
Training and promotional opportunities	Perceptions of co-workers	Perceptions of co-workers
Perceptions of co-workers	Perceptions of manager	Perceptions of manager
Perceptions of manager	Perceived quality of workplace	Perceived quality of workplace
Perceptions of recruitment process*		Training opportunities
Job expectations*		Promotion opportunities
Impacts	*Impacts*	*Impacts*
Engagement	Engagement	Engagement
Job satisfaction specific	Job satisfaction specific	Job satisfaction specific
Job satisfaction global	Job satisfaction global	Job satisfaction global
Burnout	Burnout	Burnout
Organisational commitment	Organisational commitment	Organisational commitment

Table A5. Summary of alternative models of intention to leave organisation: nurses, Consultants and NCHDs, plus new model of intention to leave for subset of nurses who are new recruits

Nurses		Consultants	NCHDs
All	**New recruits only**		
Controls			
Age group*	Age group	Gender*	Age
Grade*		New recruit status*	
Perceptions			
Responsibility overload*	Job expectations	Effort-reward ratio*	Training opportunities*
Effort-reward ratio		Autonomy*	Promotion opportunities*
Training and promotion opportunities*			
Perceptions of manager*			
Impacts			
Global job satisfaction*	Global job satisfaction	Global job satisfaction*	Global job satisfaction*
Burnout*	Burnout	Burnout*	Burnout*
Organisational commitment*	Organisational commitment	Organisational commitment*	Organisational commitment*
Perceptions in Model 2 but not in Model 3 (i.e. may be considered drivers of impacts)			
Autonomy	Effort-reward ratio	Satisfaction with pay*	Effort-reward ratio
Satisfaction with pay*	Training and promotion opportunities	Perceptions of manager	Perceived quality of workplace
Perceptions of co-workers	Satisfaction with pay	Perceived quality of workplace	Satisfaction with pay
	Responsibility overload	Responsibility overload	Perceptions of co-workers
	Perceptions of co-workers		

Notes.
Variables marked with an asterisk were also statistically significant in the models presented in the main body of the report.
The column shaded in grey is a new model of newly-recruited nurses only so cannot be compared to the models presented in the main body of the report.
Models for newly-recruited Consultants and NCHDs were not carried out due to the small overall sample sizes; instead, new recruit status was included as a control variable.

Table A6. Alternative models of nurses' likelihood of leaving the organisation

		Model 1: Controls (r square = .085)			Model 2: Model 1 with perceptions (r square = .343)			Model 3: Model 2 with impacts (r square = .442)		
		Expected change in outcome	F or t	p	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Controls										
Age	Age 30 or less vs Age 51+	0.192	13.124	< .001	0.123	12.053	<.001	0.184	16.107	<.001
	Age 31 to 40 vs Age 51+	0.116			0.033			0.085		
	Age 41 to 50 vs Age 51+	0.052			0.004			0.033		
Grade	Director/Assistant Director vs Staff Nurse	-0.084	11.128	< .001	-0.015	45.303	<.001	0.021	53.799	<.001
	Manager vs Staff Nurse	-0.167			-0.069			0.025		
	Specialist vs Staff Nurse	-0.122			-0.052			-0.009		
	Public Health Nurse vs Staff Nurse	-0.108			-0.036			-0.044		
	Student vs Staff Nurse	-0.006			0.009			0.015		
	Other Grade vs Staff Nurse	-0.014			0.016			0.030		
Perceptions										
Effort-reward ratio (mean=1.71, SD=0.81, higher scores indicate more effort and less reward)					0.152	8.198	<.001	0.039	2.278	.023
Training and promotion opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.149	-7.935	<.001	-0.054	-3.098	.002
Autonomy (mean=0, SD=1, higher scores indicate more autonomy)					-0.105	-6.233	<.001	0.022	1.419	.156
Satisfaction with pay (mean=0, SD=1, higher scores indicate more satisfaction)					-0.162	-5.407	<.001	0.005	0.325	.746
Responsibility overload (mean=0, SD=1, higher scores indicate higher sense of overload)					0.115	7.455	<.001	0.041	2.829	.005
Perceptions of co-workers (mean=0, SD=1, higher scores indicate more positive perceptions)					-0.044	-2.921	.004	0.014	1.001	.317

Table A6. Alternative models of nurses' likelihood of leaving the organisation (continued)

	Model 1: Controls (r square = .085)			Model 2: Model 1 with perceptions (r square = .343)			Model 3: Model 2 with impacts (r square = .442)		
	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Perceptions of manager (mean=0, SD=1, higher scores indicate more positive perceptions)				-0.102	-5.872	.015	-0.034	-2.166	.030
Impacts									
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)							-0.303	-15.844	<.001
Organisational commitment (mean=0, SD=1, higher scores indicate more commitment)							-0.221	-13.650	<.001
Burnout (mean=0, SD=1, higher scores indicate higher levels of burnout)							0.136	7.581	<.001

Table A7. New models of nurses' likelihood of leaving the organisation: new recruits only

		Model 1: Controls (r square = .085)			Model 2: Model 1 with perceptions (r square = .356)			Model 3: Model 2 with impacts (r square = .492)		
		Expected change in outcome	F or t	p	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Controls										
Age	Age 30 or less vs Age 51+	0.192	13.914	<.001	0.131	6.246	<.001	0.136	7.072	<.001
	Age 31 to 40 vs Age 51+	0.116			0.037			0.043		
	Age 41 to 50 vs Age 51+	0.052			0.007			0.017		
Grade	Director/Assistant Director vs Staff Nurse	-0.084	10.369	<.001	-0.018	2.590	.017	-0.004	0.964	.449
	Manager vs Staff Nurse	-0.167			-0.080			-0.025		
	Specialist vs Staff Nurse	-0.122			-0.059			-0.039		
	Public Health Nurse vs Staff Nurse	-0.108			-0.040			-0.018		
	Student vs Staff Nurse	-0.006			0.008			0.007		
	Other Grade vs Staff Nurse	-0.014			0.012			0.025		
Perceptions										
Effort-reward ratio (mean=1.71, SD=0.81, higher scores indicate more effort and less reward)					0.157	4.769	< .001	0.028	0.926	.355
Job expectations (mean=0, SD=1, higher scores indicate better match between job expectations and experiences)					-0.148	-4.774	< .001	-0.082	-2.900	.004
Training and promotion opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.178	-5.805	< .001	-0.047	-1.724	.085
Satisfaction with pay (mean=0, SD=1, higher scores indicate more satisfaction)					-0.147	-4.904	< .001	-0.040	-1.422	.155
Responsibility overload (mean=0, SD=1, higher scores indicate higher sense of overload)					0.088	3.165	.002	0.030	1.196	.232

Table A7. New models of nurses' likelihood of leaving the organisation: new recruits only (continued)

	Model 1: Controls (r square = .085)			Model 2: Model 1 with perceptions (r square = .356)			Model 3: Model 2 with impacts (r square = .492)		
	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Perceptions of co-workers (mean=0, SD=1, higher scores indicate more positive perceptions)				-0.077	-2.975	.004	0.002	0.066	.947
Impacts									
Organisational commitment (mean=0, SD=1, higher scores indicate more commitment)							-0.281	-9.914	<.001
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)							-0.243	-7.167	<.001
Burnout (mean=0, SD=1, higher scores indicate higher levels of burnout)							0.131	4.130	<.001

Table A8. Alternative models of Consultants' likelihood of leaving the organisation

	Model 1: Controls (r square = .039)			Model 2: Model 1 with perceptions (r square = .346)			Model 3: Model 2 with impacts (r square = .436)		
	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Controls									
Private or both Public and Private settings vs Public setting	-0.134	-3.174	.002	-0.080	-2.198	.028	-0.039	-1.121	.263
New recruit (past 2 years) vs Not new recruit	0.136	3.24	.001	0.145	3.949	<.001	0.172	4.973	<.001
Female v Male	-0.098	-2.319	.021	-0.136	-3.701	<.001	-0.136	-3.935	<.001
Perceptions									
Effort-reward ratio (mean=1.56, SD=1, higher scores indicate more effort and less reward)				0.221	5.159	<.001	0.148	3.602	<.001
Autonomy (mean=0, SD=1, higher scores indicate more autonomy)				-0.148	-3.562	<.001	-0.102	-2.577	.010
Satisfaction with pay (mean=0, SD=1, higher scores indicate more satisfaction)				-0.161	-4.163	<.001	-0.073	-1.896	.059
Perceptions of manager (mean=0, SD=1, higher scores indicate more positive perceptions)				-0.133	-3.216	.001	-0.055	-1.313	.190
Perceived quality of workplace (mean=0, SD=1, higher scores indicate more positive perceptions)				-0.101	-2.391	.017	0.034	0.800	.424
Responsibility overload (mean=0, SD=1, higher scores indicate higher sense of overload)				0.095	2.385	.017	0.025	0.628	.530
Impacts									
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)							-0.237	-4.335	<.001
Organisational commitment (mean=0, SD=1, higher scores indicate more commitment)							-0.245	-5.268	<.001
Burnout (mean=0, SD=1, higher scores indicate higher levels of burnout)							0.099	2.282	.023

Table A9. Alternative models of NCHDs' likelihood of leaving the organisation

		Model 1: Controls (r square = .039)			Model 2: Model 1 with perceptions (r square = .349)			Model 3: Model 2 with impacts (r square = .397)		
		Expected change in outcome	F or t	p	Expected change in outcome	F or t	p	Expected change in outcome	F or t	p
Controls										
Age	Age 30 or less-Age 51+	0.101	4.540	.001	0.072	2.308	.035	0.221	2.424	.047
	Age 31 to 40-Age 51+	0.046			0.049			0.186		
	Age 41 to 50-Age 51+	-0.098			-0.060			-0.015		
Perceptions										
Training opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.264	-6.189	<.001	-0.200	-4.735	<.001
Effort-reward ratio (mean=1.76, SD=0.96, higher scores indicate more effort and less reward)					0.109	2.615	.009	0.038	0.893	.372
Promotion opportunities (mean=0, SD=1, higher scores indicate more opportunities)					-0.158	-3.883	<.001	-0.161	-4.056	<.001
Perceived quality of workplace (mean=0, SD=1, higher scores indicate more positive perceptions)					-0.099	-2.741	.006	0.029	0.711	.477
Satisfaction with pay (mean=0, SD=1, higher scores indicate more satisfaction)					-0.110	-2.914	.004	-0.050	-1.307	.192
Perceptions of co-workers (mean=0, SD=1, higher scores indicate more positive perceptions)					-0.080	-2.334	.020	-0.022	-0.641	.522
Impacts										
Global job satisfaction (mean=0, SD=1, higher scores indicate higher satisfaction)								-0.238	-4.768	<.001
Burnout (mean=0, SD=1, higher scores indicate higher levels of burnout)								0.087	2.249	.025
Organisational commitment (mean=0, SD=1, higher scores indicate more commitment)								-0.085	-2.113	.035

Table A10. Analysis of relative contributions of perceptions measures in explaining variation in impacts (global job satisfaction, organisational commitment, burnout): nurses

Global job satisfaction			Organisational commitment			Burnout		
Index	*R square (cumulative nested models)**	*Partial correlation coefficient***	*Index*	*R square (cumulative nested models)*	*Partial correlation coefficient*	*Index*	*R square (cumulative nested models)*	*Partial correlation coefficient*
Effort-reward ratio	.260	-.183	Training and promotion opportunities	.214	.181	Effort-reward ratio	.257	.252
Autonomy	.361	.237	Autonomy	.263	.146	Responsibility overload	.330	.277
Satisfaction with pay	.407	.248	Information sharing	.288	.114	Satisfaction with pay	.385	-.253
Impact	.440	.199	Perceptions of co-workers	.304	.115	Autonomy	.410	-.160
Perceptions of manager	.464	.120	Effort-reward ratio	.313	-.099	Impact	.416	-.089
Responsibility overload	.481	-.169	Impact	.323	.130	Perceptions of manager	.418	-.043
Training and promotion opportunities	.490	.123	Perceptions of manager	.329	.093	Information sharing	.420	-.052
Perceptions of co-workers	.494	.095	Satisfaction with pay	.334	.088	Perceptions of co-workers	.421	-.046
Information sharing	.496	.061	Responsibility overload	**NS**	**NS**	Training and promotion opportunities	**NS**	**NS**

*The r-square statistic is cumulative, i.e. denotes variance explained in the outcome for each measure on the list *as well as* all measures preceding it.

**This is the correlation between an independent variable and the dependent variable after the linear effects of the other variables have been removed from both the independent variable and the dependent variable.

Table A11. Analysis of relative contributions of perceptions measures in explaining variation in impacts (global job satisfaction, organisational commitment, burnout): consultants

Global job satisfaction			Organisational commitment			Burnout		
Index	*R square (cumulative nested models)**	*Partial correlation coefficient***	*Index*	*R square (cumulative nested models)*	*Partial correlation coefficient*	*Index*	*R square (cumulative nested models)*	*Partial correlation coefficient*
Perceived quality of workplace	.317	.282	Perceived quality of workplace	.255	.244	Responsibility overload	.198	.271
Satisfaction with pay	.414	.284	Perceptions of manager	.354	.202	Perceived quality of workplace	.287	-.167
Information sharing	.472	.206	Information sharing	.394	.208	Effort-reward ratio	.330	.153
Autonomy	.508	.164	Perceptions of co-workers	.412	.156	Information sharing	.347	-.125
Perceptions of co-workers	.527	.130	Satisfaction with pay	.422	.128	Satisfaction with pay	.354	-.105
Effort-reward ratio	.540	-.147	Impact	.430	.127	Perceptions of co-workers	.359	-.090
Responsibility overload	.549	-.131	Effort-reward ratio	.437	-.113	Autonomy	.363	-.090
Impact	.552	.093	Autonomy	**NS**	**NS**	Impact	**NS**	**NS**
Perceptions of manager	.555	.087	Responsibility overload	**NS**	**NS**	Perceptions of manager	**NS**	**NS**

*The r-square statistic is cumulative, i.e. denotes variance explained in the outcome for each measure on the list *as well as* all measures preceding it.

**This is the correlation between an independent variable and the dependent variable after the linear effects of the other variables have been removed from both the independent variable and the dependent variable.

Table A12. Analysis of relative contributions of perceptions measures in explaining variation in impacts (global job satisfaction, organisational commitment, burnout): NCHDs

Global job satisfaction			Organisational commitment			Burnout		
Index	*R square (cumulative nested models)**	*Partial correlation coefficient***	*Index*	*R square (cumulative nested models)*	*Partial correlation coefficient*	*Index*	*R square (cumulative nested models)*	*Partial correlation coefficient*
Perceived quality of workplace	.365	.368	Perceived quality of workplace	.218	.235	Effort-reward ratio	.177	.154
Effort-reward ratio	.475	-.185	Information sharing	.277	.203	Responsibility overload	.254	.258
Training opportunities	.509	.145	Impact	.302	.190	Satisfaction with pay	.296	-.215
Impact	.527	.203	Perceptions of co-workers	.317	.125	Training opportunities	.317	-.137
Satisfaction with pay	.547	.188	Satisfaction with pay	.326	.095	Impact	.328	-.126
Perceptions of co-workers	.557	.130	Training opportunities	.330	.092	Autonomy	.332	-.089
Information sharing	.563	.134	Autonomy	**NS**	**NS**	Information sharing	**NS**	**NS**
Perceptions of manager	.568	.106	Responsibility overload	**NS**	**NS**	Perceptions of co-workers	**NS**	**NS**
Autonomy	**NS**	**NS**	Effort-reward ratio	**NS**	**NS**	Perceptions of manager	**NS**	**NS**
Responsibility overload	**NS**	**NS**	Perceptions of manager	**NS**	**NS**	Perceived quality of workplace	**NS**	**NS**
Promotion opportunities	**NS**	**NS**	Promotion opportunities	**NS**	**NS**	Promotion opportunities	**NS**	**NS**

*The r-square statistic is cumulative, i.e. denotes variance explained in the outcome for each measure on the list *as well as* all measures preceding it.

**This is the correlation between an independent variable and the dependent variable after the linear effects of the other variables have been removed from both the independent variable and the dependent variable.