

A review of health worker migration: Investigating which solution best encourages junior doctors to stay in the Irish healthcare system. A case study of Beaumont Hospital.

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Abstract

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Health worker migration is a major concern globally and for the Irish healthcare system. The steady migration of Irish doctors continues due to the current working conditions, poor training, lack of career paths etc; and the lack of retention initiatives being implemented. Therefore, the objective of this study is to investigate which solution(s) will encourage junior doctors to stay in the Irish healthcare system and if this solution impacts on the overall decision of junior doctors to stay in Ireland. This study examines global health worker migration and its effects on the Irish healthcare system. Concepts relating to employee retention and the relevant motivational theories are discussed along with the concerns within the Irish healthcare system that are currently enhancing the migration of junior doctors, all of which gave rise to the development of the proposed solutions within this study. This mixed-method study used convenience sampling to get responses from junior doctors from one Irish hospital, Beaumont Hospital. A survey was distributed online and hardcopy using a four-point Likert scale from which junior doctors' interest was rated off, free text qualitative comment boxes, open ended and close ended questions were also used. Statistical Package for Social sciences (SPSS) analysed the quantitative data and qualitative themes were identified. The result of this study revealed that 'A guarantee of a consultant post in Ireland' was identified as being the solution that best encourages junior doctors to stay in the Irish healthcare system, although it has no statistical significance in the overall junior doctors' decision to stay in Ireland. A qualitative theme of career progression accompanied it of which management must recognise and satisfy to encourage junior doctor retention in Ireland.

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1 CHAPTER ONE: INTRODUCTION

1.1 *Background and Context*

A major concern, for the Irish healthcare system and more tellingly, for patients in Irish hospitals, is the steady migration of Irish trained doctors seeking work abroad. Globally, many countries are trying to manage the medical migration crisis by implementing local human resources retention strategies to reach their optimal level of healthcare workers, and to ensure retention. However, in Irelands case, despite several implementations in the last few years by the National Doctors Training and Planning (NDTP), the problematic tradition of migration among junior doctors still remains (Humphries *et al.*, 2017; van de Klundert *et al.*, 2018).

Despite there being 7,317 Non-Consultant Hospital Doctors (NCHD's) on average in the system (Medical Council, 2019), the Irish healthcare system still faces the predominant challenge of a shortage of nationally trained doctors. This issue is mainly due to the migration of our own Irish trained doctors pursuing better positions in high-income countries like Australia, Canada, New Zealand, among others, thus heightening Irelands reliance on foreign trained doctors to fill these jobs (Humphries, *et al.*, 2018).

As discussed in Gouda's (2015) study, there are apparent reasons for migration among Irish trained medical students including the associated better working conditions, career opportunities and lifestyle; and as well as this, rather than accepting the current terms of the Irish healthcare system; junior doctors are opting to leave and potentially stay abroad with the risk of no return.

In previous years when 'circular migration' was reliable, medical graduates left their home country to gain experience abroad and then return, however this willingness to return is no longer fulfilled by the new generation of doctors (Clarke *et al.*, 2017). Recognised in a study by Humphries *et al.* (2018), this new generation

of doctors require change, with the majority already having a desire to travel, and a wish for better career opportunities, others wanting a break from the current working conditions in Ireland, plus the opportunity for self-development by working abroad, among other reasons for migration.

According to Gouda *et al.* (2015), study, over a third of Irish medical students had planned on leaving Ireland after their Intern year with the intention of practicing medicine abroad. The continued loss of graduates will be detrimental on the Irish healthcare system; therefore, it is vital to ensure efforts are made to retain junior doctors. With this in mind, this study will investigate the best solution(s) which best encourages junior doctors to stay in Ireland.

This study examines global health worker migration and its effects on the Irish healthcare system. Concepts relating to employee retention and the relevant motivational theories are discussed along with the concerns within the Irish healthcare system that are currently enhancing the migration of junior doctors, all of which gave rise to the development of the proposed solutions within this study. It will then investigate which possible solution(s) will encourage junior doctors to stay in Ireland and more so, it is aimed at identifying which solution best impacts their decision to stay in Ireland.

This study approaches the research questions through a mixed-method approach, using an online and hardcopy survey as the primary data collection instrument. Quantitative data will be analysed using the Statistical Package for Social sciences (SPSS) and theme categories for qualitative data. A four-point Likert scale, open ended, close ended questions and free text qualitative opportunities will be used to collect data. A convenience sampling technique will be used in order to get responses from the junior doctors.

1.2 Research

A review of health worker migration: Investigating which solution best encourages junior doctors to stay in the Irish healthcare system. A case study of Beaumont Hospital.

1.3 Research Objectives

The objectives of this research are to:

1. Investigate the reasons that influence junior doctors' decision to stay or leave the Irish healthcare system
2. Investigate what would encourage junior doctors to stay in the Irish healthcare system
3. Investigate the best possible solution(s) that will encourage junior doctors to stay in the Irish healthcare system

1.4 Purpose of the Study

This study will examine what would encourage junior doctors to stay in the Irish healthcare system. The focus of this study will be on the reasons behind this migration of junior doctors and what might encourage them to stay in the Irish healthcare system and seek to identify the best solution(s) to encourage the retention of junior doctors in the Irish healthcare system.

This study aims to help the National Doctors Training and Planning (NDTP), and other areas of the Irish healthcare system, to adopt and put in place this solution as an effective retention initiative for junior doctors.

1.5 Research Structure

This study is divided into seven chapters. The first chapter is the introduction which outlines the objectives and the purpose for this research study. The second chapter is the literature review which will discuss literature on global health

worker migration, the Irish healthcare system, the extent of medical workforce migration in Ireland, the main effects of global migration on the Irish healthcare system, the concepts of employee retention and the relevant motivational theories. The concerns within the Irish healthcare system that are currently enhancing the migration of junior doctors in Ireland are discussed and the continued failure to retain Irish trained doctors while also suggesting possible solutions to encourage junior doctors to stay in Ireland. Chapter three outlines the research title and the research objectives. Chapter four discusses the research methodology used, the data collection method and the data analysis approach for this study, while also including a justification as to why the chosen methods were the most appropriate for this study. Chapter five is the results. Chapter six discusses the research findings and finally chapter seven is the conclusion and the recommendations.

2 CHAPTER TWO: LITERATURE REVIEW

2.1 *Introduction*

This first section is the literature review introduction. The second section will explore literature in the area of global health worker migration and the approaches of the World Health Organisation's management of health worker retention. The third section outlines the Irish healthcare system and medical workforce progression in Ireland. The fourth section outlines the extent of medical workforce migration in Ireland. The fifth section outlines the main effects of global migration on the Irish healthcare system. The sixth section outlines the concepts of employee turnover and employee. The seventh section outlines Job satisfaction and job dissatisfaction in terms of employee retention. The eighth section examines the relevant motivational theories. The ninth section outlines the concerns within the Irish healthcare system that are currently enhancing the migration of junior doctors in Ireland and finally, the tenth section outlines the failure to retain Irish trained doctors while also suggesting possible solutions to encourage junior doctors to stay in Ireland.

2.2 *Global health worker migration*

Doctors carry a highly valuable professional qualification, and as a result are competing globally (Marchal *et al.*, 2003). According to Eastwood *et al.* (2005) this competition feeds the movement of the 'Medical Carousel'. This can be described best as where doctors are mobile in their search for the best training, the best working conditions, the best salaries, and the best standard of living. This mobility of health workers has risen steadily in recent years (Merçay, 2014).

Humphries *et al.* (2015) have expanded upon the typology of health worker mobility previously developed by Buchan *et al.* (2008) and applied their model to the experiences of non-European Union migrant doctors in Ireland with a view to understanding health worker migration internationally. Humphries *et al.* (2014), indicated that health worker migration is influenced by endogenous factors to the health system e.g. better working conditions, and exogenous factors to the health system e.g. family, while findings also arose from Humphries *et al.* (2015) indicating that there is some fluidity between the different categories of migrants due to the changing motivations of migrant health workers i.e. livelihood, backpacker, family, career oriented, undocumented, returned, commuter, safety and security migrants. Health worker migration comes in different forms; inward and outward migration, circular migration, onward migration and return migration. The latter, return migration can be seen in countries actively recruiting from overseas, such as the United Kingdom or Ireland (Taylor *et al.*, 2015).

The World Health Organisation (WHO) (2006) defined health workforce as 'all people engaged in the promotion, protection or improvement of the health of the population'. The approaches of the WHO's management of health workers gave light to the development of the Global Strategy on Human Resources for Health project from 2016 to 2030 (World Health Organization, 2016).

In response to the shortage of 4.3 million doctors predicted worldwide by 2020 (Scheffler *et al.*, 2008), the Global Strategy on Human Resources for Health

consisting of both the World Health Organisation (WHO) and the Global Health Workforce Alliance (GHWA), recognise the need for and importance of effective Human Resources for Health (HRH) Planning (World Health Organization, 2016).

The World Health Organisation (2006), set about enforcing targets by 2030 of 'self-sufficiency' in training and retention locally by ensuring there is an ample supply of doctors to meet the health systems demands, and a reduction of foreign trained doctors emphasising the need recruitment and retention strategies of the medical workforce for a health system to operate successfully, while delivering a high standard of care (Humphries *et al.*, 2017).

2.3 The Irish healthcare system and medical workforce progression in Ireland

The Irish healthcare system consists of a two-tier model, consisting of public and private healthcare. Even today, in 2019, the Irish healthcare system still feels the effects of the impact of the austerity-related health cutbacks of 2008 (Burke *et al.*, 2014). This, along with a growing and ageing population has put increased pressures on the Irish healthcare system to have to manage 'to do more with less'(Thomas *et al.*, 2014).

According to Connell (2014), who generated the idea that the economic downturn of 2008 has brought about a new carousel of doctors from developed countries, who are in search of higher salaries due to having become accustomed to them during the Celtic tiger and this has led to the generational differences between trainee doctors and consultants in the Irish healthcare system today.

The medical training structure (Medical Council, 2019) for Non-Consultant Hospital Doctors (NCHD's) in the Irish healthcare system consists of Interns, Senior House Officers (SHO's), being Junior doctors and the Registrar and Specialist Registrar (SPR) are more senior doctors, all of whom work under the supervision of a Consultant. The internship provides medical graduates an opportunity to experience patient care in a range of healthcare settings under a supervised and supportive learning environment. The next stage is a Senior House Officer, this is the initial stage of postgraduate training which lasts approx. 2 years with the opportunity to advance onto Registrar level and then Specialist Registrar (SPR). Both stages entitle them to gain access onto the Higher Specialist Training (HST) scheme. Having completed enough training, experience and patient exposure allows them eligibility to apply for a hospital Consultant position.

All doctors practising medicine in Ireland are required to be registered with the Irish Medical Council, and failure to complete this process can result in a doctor's name being removed from the register (Medical Council, 2019).

2.4 *The extent of medical workforce migration in Ireland*

Ireland has a long tradition of medical migration however national data on doctor migration is of a major concern. The only indicator of migration data on intent is issued by the Medical Council of Ireland via verifications, whom for example, issued 1881 verifications in 2015 (Humphries *et al.*, 2018).

The rate of migration from Ireland between 2012 and 2015, consisted of 8% of doctors aged 25 to 34 years and 6.5% of doctors aged 35 to 44 years leaving the medical council register, on an annual basis. Approximately 20% of NCHD trainees, in a sample, left Ireland within two years of completing the survey i.e. from 2014 to 2016; and a further 20% of trainees, surveyed in 2016, planned to leave after completing their training (Brugha, et al. 2013).

While most research in the past focused on the idea of 'Brain drain' i.e. the migration flow from less developed to developed countries, Ireland now needs to identify with other high-income countries, who are challenged by these retention and recruitment demands, and in attention to this, Ireland as a country, needs to listen to the opinions of its own Irish trained doctors to determine the best way forward in this 21st century healthcare dilemma (NDTP and HSE, 2016; Imrie, 2014).

A staggering 60% of the 2013 -2014 cohort of interns left Ireland (Ennis-O'Connor, 2014). Although there is the option of completing a full Intern year abroad, followed by postgraduate training elsewhere, most medical graduates from medical schools in Ireland proceed into their Internship year in Irish hospitals, but somehow, Ireland still fails to hold onto them, letting them go to the popular destination countries like Australia, UK, Canada, New Zealand and the USA, with the prospect of never returning to Ireland (Humphries *et al.*, 2018). The continued loss of graduates will be detrimental on the Irish healthcare system and it is vital to ensure efforts are made to retain junior doctors.

Ireland is similar to Austria, with one of the highest numbers of medical graduates, sees 30% of its graduates emigrating (Scharer and Freitag, 2015). Research from Austria, and Ireland cite low salaries, poor career progression and long working hours as reasons for high levels of doctor migration (Humphries *et al.*, 2015).

Gouda *et al.*, (2017) study focused mainly on medical students, stating that 88% of Irish medical students intended on migrating and the latest Medical Council (2019) report, stated that 42.6% of graduates of Irish medical schools made a voluntary withdrawal from the Irish medical council registrar, suggesting that half of those who intended on migrating did leave.

Irish interns are also a globally minded group, with the Medical Council (2019), register expecting that over one in five interns will leave the register as they feel that they can make more money abroad. The majority of respondent doctors leaving the Intern Division of the register wished to leave to travel and work in Australia for one to two years with a plan to return (Medical Council, 2019). Similar to McDermott's *et al.* study in 2015, Australia is still the preferred destination for Irish doctors in general, along with the United Kingdom and Canada (Medical Council, 2019).

2.5 *The main effects of global migration on the Irish healthcare system*

The global context is particularly relevant for Ireland, as research has indicated that doctors migrate from Ireland mainly due to the difficult working conditions, including the long working hours and uncertain career progression opportunities. These reasons cited by Irish doctors who had left consisted of dissatisfaction with career opportunities, career progression, training, salary and adds to her studies showing that personal factors are one of the reasons of migration (*Humphries, et al., 2015*).

The 'Working Together for Health: A National Strategic Framework for Health and Social Care Workforce Planning' which is influenced by the WHO's global targets, aligns Ireland with international workforce planning issues, in particular supply and retention issues (Medical Council, 2019).

Unfortunately, the recent increase of Irish trained doctors has made no impact on the 'self-sufficiency' objective as the high levels of migration remain (Campbell, 2015; *Humphries et al., 2017*). This investment in training will be lost if the medical students continue to migrate after their graduation or Intern year (*Suciu et al., 2017*). The public may not be aware of this, as there is a continuing upward trend of medical students graduating in Ireland, along with the increased number of foreign trained doctors, therefore disguising the level of migration still going on (*Humphries et al., 2015*).

Ireland's current and continuing reliance on foreign trained doctors is out of sync with the above-mentioned 'self-sufficiency' objectives, and many studies have shown that this type of recruitment is unsustainable (World Health Organization, 2006). Ireland's heavy dependence on internationally trained doctors to staff the health system is a direct consequence of Ireland's failure to retain its own doctors (*Humphries, et al., 2015*). Recruitment and then retention of this highly educated pool of doctors with an Irish medical qualification is proving challenging, but it is crucial in producing a sustainable, self-sufficient workforce in the future.

Adhering to both the reduction of international recruitment and ensuring the adequate supply of Irish trained doctors for 'self-sufficiency' are significant demands that the Irish healthcare system is facing. Ireland is in a similar place to the UK, another high-income country, who do not have the ability to meet the 2030 WHO objective as a result of their current reliance on an international workforce for adequate delivery of care (Davda, *et al.*, 2018).

If Ireland is to achieve a fully functional healthcare system by 2030, a WHO target, it needs to train and retain its own doctors. Not only does Ireland have to train and retain its own doctors by 2030, the WHO has set an aligning objective to halve its reliance on foreign trained doctors.

2.6 Employee Turnover and Employee Retention

Campion and Maertz, (1998) recommend that turnover and retention should be addressed as key factors when investigating staff shortages.

Employee turnover is a process of disengagement from work and can ultimately take from a week to years to manifest in an employee (Branham, 2012) and leads to an employee leaving the organisation. Griffeth *et al.*, (2000), established three forms an employee can exit an organisation; voluntary or involuntary turnover, due to job dissatisfaction, avoidable or unavoidable turnover, in which either the employee or organisations part, and finally functional or dysfunctional turnover, being when a high performing employee leaves an organisation impacting negatively on the company's performance (Dey, 2009).

Voluntary turnover can be seen within the Irish healthcare system by the Specialist Registrars (SPR's) leaving for fellowships abroad to progress onto Consultant level, thereby suggesting that job satisfaction and intention to leave are related. On the other hand, involuntary turnover arises when those on non-training schemes leave due to the end of their contracts. Dysfunctional turnover can be seen when the talented non-trainee post doctors leave resulting in the indirect costs of loss of knowledge and work disruptions among other significant issues within the Irish healthcare system (Allen, *et al.* 2018). The economic theory of turnover relates to the supply and demand of doctors (Campion and Maertz, 1998), and the psychological theory of turnover refers to the personal characteristics, attitudes and perceptions towards work and how they shape the employees responses to the workplace, leading to behavioural outcomes (Burns, 2011).

Thompson (2014) established that staff turnover can have a negative impact on employee morale, employee motivation and work ethic. A study of Irish trained doctors conducted by Bruce-Brand *et al.*, (2012), found that of those who had migrated stated that the lack of training opportunities, career pathways, long working hours, work related stress and salary were determinants of turnover.

Similar factors were indicated as drivers of Employee retention; career development systems, flexible work schedule, culture, communication, and pay (Onah and Anikwe, 2016). Research by Peters *et al.*, (2014), on nurse retention found that job satisfaction was a major motivator in retention among nurses, and that satisfaction occurs when expectations are matched with the hospital's vision and values (Boyd *et al.*, 1990). In relation to nursing staff satisfaction, factors such as engagement, leadership style, empowerment, stress, quality of care, turnover and retention levels all contributed to job satisfaction.

2.7 *Job Satisfaction and Job Dissatisfaction in terms of Employee Retention*

Job satisfaction relates to the emotional state that is enhanced by achieving results and a feeling of belonging in an efficient functioning work community and so is linked to the employee's work environment. Research shows that leadership style and the managements approach and behaviour is highly related to job satisfaction and organisational commitment(Lok and Crawford, 2004) and that the role of organisational leaders is key to achieving retention (Doh, *et al.* 2012) thereby leaders must commit to the development and retention of its staff through practices that affect satisfaction and retention levels.

Job dissatisfaction has been highlighted in multiple studies among medical trainees regarding the lack of promotional opportunities. This lack of career development opportunities and career progression are strong contributors to employee dissatisfaction which impacts engagement and performance (Gunnigle, 1992). Pay and working conditions also feature strongly in research as areas of concerns, this supports that job dissatisfaction is a cause of intention to leave an organisation (Nazim, 2008). Humphries, *et al.* (2015), study demonstrates Irish trained doctors' levels of dissatisfaction with working conditions, training and career opportunities in Ireland, in comparison to the expected benefits and opportunities of working abroad.

2.8 Motivational Theories

To understand the motivating factors as to why doctors left Ireland or are going to leave Ireland it is essential to examine some relevant theories. This study is similar to Gauld and Horsburgh, (2015) who examined the reasons why doctors left the National Health Services in England and went to New Zealand.

2.8.1 Maslow's Hierarchy of Needs Theory

A significant theory in studies of retention and turnover, is Maslow's Hierarchy of Needs Theory, which determines an individual's basic need, whether physiological, security, self-actualisation, love and esteem. The findings from Stagnitti *et al.*, (2006), study of health workers using Maslow's Hierarchy of Needs found that workers satisfied their basic needs for security through an induction day, a clear job description, consultant support, work life balance and a career pathway and successfully met their social and/or belonging need thereby positively relating to their intention to stay. In a study on doctors by Hancock *et al.*, (2009), they found that, by using Maslow's theory, that a sense of place, familiarity and community participation were reasons for returning to their homeplace. Kelleher *et al.*, (2013), identified psychological attributes of the work which left doctors feeling undervalued.

2.8.2 Herzberg Two Factor Theory

According to Dolea (2005), job satisfaction is a multifaceted concept which includes motivators, internal values and hygiene factors are external values. Herzberg Two Factor Theory determines the independent relationship between motivation and job satisfaction that exist within the workplace that either satisfy or not satisfy the employee (Herzberg, 1966). Humphries *et al.*, (2015), examine hygiene factors, by using Herzberg's theory in the contribution to a doctor's decision to leave Ireland. Intrinsic factors were justified by motivators, as they had already migrated, including better working conditions and better training support and from senior medical staff. Extrinsic factors, which lead to dissatisfaction in

their home country, such as poor working conditions, inadequate training, hours of work and wages as reasons for migration. Similar to Hayes *et al.*, (2015), study which outlined that excessive workloads, low pay and long working hours, among other reasons for doctor's intention to leave hospitals in Ireland. Bruce-Brand *et al.*, (2012) focussed on the extrinsic factors as reasons for job dissatisfaction and migration.

2.8.3 Push Pull Factor Theory

The proposed causes of medical migration can be seen in a few theories, although most research on migration in Ireland refer to the Push and Pull Factor Theory. Previous research projects on the migration of health workers into and out of Ireland since 2000 include the Nurse Migration Project (2006–2009), the Doctor Migration Project (2011–2013), and the Failure to Retain Project (2014) (RCSI, 2019). All of which provide relevant data for this study on health worker migration in the Irish context and points to the same factors that push trainee NCHDs to leave Ireland. The Irish context of migration highlights push factors as the main migration drivers, including stressful working conditions provoked by low staff, uncertain career progression opportunities, lack of supervised training provoked by consultant shortages, NCHDs having to undertake non-core tasks and the failure to match NCHD's who are leaving training with suitable posts

Medical migration is not new information as in Gouda *et al.*, (2015) survey it showed results of 88% of Irish medical students indicated that they were 'definitely migrating' or 'contemplating migrating' following their graduation or after completing their Internship. The reasons being career opportunities (85%), working conditions in Ireland (83%), lifestyle (80%), pay (65%), and the standard of training (60%) of which similar results are to continue if the desires and opinions of junior doctors are not acknowledged by the Irish healthcare system.

A more recent study, by the medical workforce (Brugha, et al. 2013) evidence compiled by the Royal College of Surgeons in Ireland (RCSI) shows that the factors

that 'push' Irish and international medical graduates to leave Ireland consist mostly of poor working conditions, and inadequate training and career opportunities. These recent 2017-2018 findings (Medical Council, 2019) point to a higher amount of Irish medical students and trainees wishing to make their careers in Ireland than were reported in earlier studies.

While career progression and development are very important to junior doctors, family and family support are significant pull factors in leaving the Irish healthcare system. Family reasons were cited by 13% doctors in the recent Medical Council (2019), with 5%, namely International medical graduates, specified that they were returning to their home country.

For those doctors that have left Ireland, and what pulls our Irish trained doctors abroad is the perception that working, training and career opportunities are better abroad. The lack of improvements in conditions in Ireland keeps them away and the likelihood of these Irish trained doctors returning to Ireland decreases, as they settle abroad (Brugha, *et al.* 2013).

On a side note, the Medical Council (2019), report found that over a quarter of specialist doctors (25.8%) left the register for personal or family reasons or moving abroad to support a partner undertaking a fellowship to further their career. This indicates that supporting our most highly trained and skilled doctors in the workforce requires a more holistic support.

2.9 *Concerns within the Irish healthcare system currently enhancing the migration of Junior doctors from Ireland*

A significant push factor is the current working conditions within Irish hospitals today, where junior doctors feel overworked leading to the possibility of burnout. When doctors are overworked without appropriate rest periods and breaks this can lead to an impact on their physical and mental wellbeing and, in turn, could become a patient safety issue (Murray, 2019). Mosadeghrad's study, (2014) of stress in the working environment determines that stress can have a negative effect on the standard of care provided to patients. Some doctors reject working in the current conditions of the Irish healthcare system, thereby increasing their desire to emigrate. According to Gyorffy, *et al.* (2018) study, burnout of healthcare workers and their desire to migrate are parallel, neither one directly influences the other but are in correlation with one another (Freudenberger, 1974; Gyorffy, *et al.*, 2018).

Although the European Working Time Directive (EWTD) was implemented to elevate long working hours and with the additional NCHDs posts funded to meet this legislative requirements and compliance under EWTD (Hanly, 2003), there is still resistance from doctors and Humphries *et al.*, (2018) suggested that what is likely to be valued by junior doctors today is consequently freedom and time to spend invested in other aspects of identity and to engage in what is perceived as meaningful work.

To be compliant with the European Working Time Directive (EWTD) gave rise to the rapid increase of International medical graduate recruitment (IMG's) into non-training posts in the Irish healthcare system. Despite Ireland being a leader through its successful International Medical Graduate Training Initiative and international recruitment of doctors from low- and middle-income countries, the Irish healthcare system still face significant recruitment challenges (Staff, 2019). IMG's contribute to the Irish healthcare system, while gaining training, clinical experience and qualifications in this timeframe however the majority return to

their home country thereby only resolving the doctor shortage in Ireland temporarily.

Among the recommendations for training and career pathways for doctors in the Strategic Review of Medical Training and Career Structures, it was to address the barriers and issues relating to the recruitment and retention of doctors specifically focused on doctors in service posts, many of whom are foreign trained doctors (Brugha *et al*, 2015). Other issues included improving graduate retention in the public health system; planning for future service needs; and investment in medical education and training.

79.3% of all NCHDs between 2016-2017 were graduates of international medical schools (Medical Council, 2019) and were not in a training scheme. Although most Non-EU doctors come to Ireland to seek postgraduate training (Humphries *et al*, 2014) these doctors don't get postgraduate training and end up occupying 'service posts' which offer little career progression or training (Humphries *et al*, 2014).

According to OECD figures, (Medical Council, 2019) Ireland is producing the highest number of medical graduates however Ireland and many other EU countries, are still challenged by the current migration crisis. Questionable standards of patient care were expressed by some trainee doctors in the recent Medical Council (2019) report, while a sense of frustration with the system including lack of employer support, excessive working hours, non-core tasks all emerged as reasons and a powerlessness to contribute to change in the Irish healthcare system. It is necessary to increase the number of consultant posts in the system for those who have completed specialist training (Hanly, 2003). This would increase the number of training posts and ensuring more opportunities for development and promotion.

2.10 The failure to retain Irish trained doctors

The failure to retain Irish trained doctors has led to the over-dependence of international medical graduates in order to fill the vacant posts that Irish doctors leave behind. However, this dependency on internationally trained medical graduates (IMG) doubled in the last decade, between 2000 and 2008 (Tyrrell *et al.*, 2016). This demonstrates that Ireland is attracting and recruiting a significant number of doctors from abroad, however, the majority intend on returning to their home country as a result of poor career progression opportunities in Ireland, thereby aiding the ongoing retention issue within the Irish healthcare system.

The significance of building a pool of future doctors within the Irish healthcare system is appropriate to our country's growing needs. Several migration studies all point to the need for effective retention measures to achieve medical workforce sustainability. Healthcare organisations need to be more pro-active by improving their staff retention (Duffield *et al.*, 2011). The need to discover what would encourage junior doctors to stay in Ireland is most important and so based on the findings in this literature review, this study wishes to propose solutions to encourage junior doctors to stay in the Irish healthcare system.

The proposed solutions were developed as a result of the issues that came up in the literature review and the most recent Medical Council (2019), report. These issues included; poor working conditions, poor training, lack of career progression routes, excessive working hours, non-core tasks, along with the need for flexibility in terms of work/life balance. All of which are linked to frustration with the system and a powerlessness to contribute to change. Therefore, the proposed solutions were; more training places, more choice and flexibility while training, more structure, an option for joint/split posts, an option of deferral and less than full time training. The implementation of task transfer, clinical courses, campaigns in action and social/networking events were proposed and finally more work life balance activities, more support from senior colleagues and eventually a guarantee of a consultant post in the long term.

2.11 Conclusion

This section has outlined studies that show that junior doctors are opting to leave Ireland and potentially remain abroad rather than accepting the current situation in the Irish healthcare system. In previous years when 'circular migration' was reliable, unfortunately this willingness to return is no longer found in the more recent literature regarding the current generation of doctors (Humphries *et al.*, 2015).

The review of theories in relation to motivation, retention and turnover, give potential insight into understanding of junior doctors' reasons for leaving or staying in Ireland. By understanding the reasons, recruitment and retention initiatives should be implemented to reduce employee turnover and increase employee retention (CIPD, 2019).

To tackle the push factors of migration from Ireland mentioned, it is evident to the researcher that there is a need for effective retention initiatives to achieve medical workforce sustainability in Ireland. The researcher explores areas for improvements, including working conditions, terms and conditions of service, better training opportunities, and clearer career paths.

A primary focus should be placed on junior doctor retention as a starting point, of which similar results are to continue if the desires and opinions of junior doctors are not addressed by the Irish healthcare system. This study seeks to address the gap in the literature where it fails to seek junior doctors' interest on possible solutions that would encourage them to stay in the Irish healthcare system.

3 CHAPTER THREE: RESEARCH TITLE AND OBJECTIVES

3.1 *Research Title*

A review of health worker migration: Investigating which solution best encourages junior doctors to stay in the Irish healthcare system. A case study of Beaumont Hospital.

3.2 *Research Objectives*

In response to the motivators identified in the literature review, this study proposes possible solutions to encourage junior doctors to stay in the Irish healthcare system and aims to establish the solution with the most interest. Information on junior doctor migration and what would encourage them to stay in the Irish healthcare system will be provided by answering the below research questions have been drawn from the literature review:

Q1: What are the reasons that influence junior doctors' decision to stay or leave the Irish healthcare system?

This research question will seek to understand what triggers all junior doctors' intent to leave or stay in the Irish healthcare system, not just medical students as explained in the literature review.

Q2: What would encourage junior doctors to stay in the Irish healthcare system?

This question will seek to identify the factors that would influence junior doctors to stay in the hospital selected (Beaumont Hospital) which will be used in the Irish healthcare system in general.

Q3: What is/are the best possible solution(s) that will encourage junior doctors to stay in the Irish healthcare system.

This question will seek to identify the solution that best encourages the retention of junior doctors in Beaumont Hospital and in the Irish healthcare system in general. The question will therefore seek to identify where the highest interest will

result from an array of possible solutions that will best encourage retention of junior doctors.

The Research Hypothesis in this study will aim at investigating if the possible solution identified has a significant impact on the overall decision by junior doctors to stay in Ireland. The result of this research study will determine which solution has the most interest and if it has any significant impact on junior doctor retention.

4 CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 *Introduction*

This section will explore the methodological approaches and justify the adopted approaches used to answer the above-mentioned research questions. The data collection method used will be examined and justified along with clarification on the method used to analysis the data.

4.2 *Research philosophy*

Research philosophy 'relates to the development of knowledge and the nature of that knowledge' (Saunders *et al.*, 2009). The philosophy undertaken can be closely linked to the assumptions a researcher takes while conducting the research and is influenced by certain considerations. The ontology philosophical approach relates with the researcher's assumption about how the world operates and so was adopted in this study since the actions and perception of the participants are as a result of external influence experienced and their human nature (Saunders *et al.*, 2009). Thereby suggesting that the perception of the junior doctors' decision to stay in Ireland is based on the retention solution adopted by the Irish healthcare system.

4.3 Research Methods

Methodology is a theory on how research should be done, including philosophical assumptions and the theoretical and the implications of these for the chosen method (Saunders *et al.*, 2009). Research can be completed by using quantitative and/or qualitative methods or even a mix of both i.e. a mixed method approach.

4.3.1 Quantitative Methods

A quantitative style focuses upon the examination of results to test theory and provides statistics in a precise manner. A survey would be the most popular method for quantitative analysis. In the literature review, there is strong evidence of the use of quantitative data regarding collecting information on turnover and job retention of doctors (O’Cathain *et al.*, 2004). For example, Gouda *et al.*, (2015) conducted an online survey to determine the migration intention of Irish medical students. This use of quantitative analysis techniques such as statistics, graphs and charts and allowed the researcher to examine the migration trends, the relationships and retention data. The Irish Medical Council had also issued a survey ‘Your Training Counts’, to registered doctors, relating to migration plans, career intentions and retention (Medical Council, 2015) thereby using quantitative data. However, the limitations associated with a quantitative method such as a survey include; low response rates from the medical profession and so introduces no respondent bias (Scott, 2011). Also, data collected through surveys make it impossible to clarify the participant’s responses to gain a deeper understanding of the findings.

4.3.2 Qualitative Methods

Qualitative methods rely on non-scientific research methods and is more of an interpretive approach as the researchers needs to make sense of the subjective and socially constructed meanings expressed about the phenomenon being studies' (Saunders *et al.*, 2009). Interviewing is the most common form of qualitative research and as such is more analytical than compiling a survey with a

limited number of questions and pre-formatted structure. Qualitative data can also be collected via free text responses e.g. a comment box.

However, the limitations associated with a qualitative method include; data analysis being time consuming and resource intensive, and a concern by Lincoln, (2000) states that qualitative data can be influenced by the external factors such as cultural and political and therefore provides a humanistic soft scientific commentary.

4.3.3 Mixed Methods Approach

The best method of research is that of a mix of both the qualitative and quantitative methods. In a Mixed Methods Approach more than one method of data collection is used.

4.4 Chosen Research Design: A Mixed-Method approach

The chosen research design is a mixed-method approach. After researching the literature on qualitative, quantitative and mixed method approaches of research, a mixed method has been chosen for this study. This study employed a partially mixed method with a dominant quantitative design.

The quantitative data will examine the relationships between the variables e.g. the factors that influence migration and the factors that influence job satisfaction using questions and the results will be measured numerically. The use of a Likert scale on gaging interest levels on a scale from 1 to 4, i.e. High Interest, Low Interest, Some Interest, No Interest. This is used to establish where interest falls on several suggested solutions to encourage the retention of junior doctors in the Irish healthcare system.

The qualitative data response opportunities were given throughout the survey by adding in an additional comment/suggestion box for some questions to allow for more information in their responses. Most questions are open ended to allow respondents to expand on their answer. The Likert scale also allowed for any comment or suggestion to be made to support their reason as to where their interest lied.

4.4.1 Justification of chosen design

The researcher will use the quantitative results to indicate a broad view of the research questions and the qualitative results to allow for greater investigation on the themes as identified by Creswell (2003) as the sequential explanatory design.

The researcher chose a mixed-method design as it allows information to be gathered from a larger population quickly and accurately across the grades of junior doctors. Anderson (2018) stated that a mixed method approach can provide a more thorough analysis of the research results and findings.

4.5 Chosen Data Collection mode: Mixed collection

The chosen data collection method consists of two forms; an online survey and a hardcopy survey. The mixed collection mode was decided to allow the researcher to broaden the engagement of the process to achieve results from a medical professional. The primary data used in this research was sourced from a range of junior doctors over two terms, before and after an NCHD rotation in one Irish hospital. The secondary data includes books, journals, websites, Medical Council Reports, and other articles. All secondary data have been referenced to allow the reader access to the original article or report.

4.5.1 Justification for Mixed collection

The choice of mixed collection is to capture as much information from a busy junior doctor to strengthen the range of data received across the different grades of doctor and specialties. The online survey and the hardcopy survey allowed for both quantitative numerical data and the qualitative comments and suggestions to be gathered from both. Both forms of self-administration allow the junior doctors the convenience of responding to the survey at a time that is convenient to them within the hospital environment and allows them to honestly answer the questions.

Both design and methods were informed by previous research (Clarke *et al.*, 2017) and so a mixed method, mixed collection mode was most appropriate for this research study.

4.6 Quality of Research

It is essential for the research to be of high standard and quality for it to be useful.

4.6.1 Reliability

Reliability 'refers to whether the data collection techniques and analytic procedures would produce consistent finding if they were repeated on another occasion or if they were replicated by a different researcher' (Saunders *et al.*, 2009). The research questions will be basic in the quantitative research to allow for full transparency and eradicating assumptions thereby increasing the validity of the survey by representing the reality of each employee's perspective and thus what needs to be measured.

4.6.2 Validity

Validity relates to whether the methods and approaches used have measured accurately the subject that is being explored (Saunders, *et al.*, 2009). Various forms of validity have been identified to guarantee research quality including construct validity and internal validity. Such factors can cause the participants view and responses and therefore can affect the result of the research.

4.6.3 Ethical Issues

Ethics approval was received from the Beaumont Hospital Ethics Committee. The anonymity of the participant is anonymous. All information in relation to their responses are anonymous. Consent was obtained from each participant prior to taking part in the survey. Participation was voluntary. Data that was collected was used solely for the purpose of the research specified.

4.6.4 Access to Sample

Access to the sample of junior doctors was through a direct email with the survey link attached. The email addresses were retrieved from Beaumont Hospitals employee database. Face-to-face access was through two NCHD Inductions that took place within the hospital ground. Surveys and a response box were left in the doctors' residence, giving access to all grades to answer the survey if they wished to do so.

4.6.5 Pilot Testing

The survey was piloted by the Clinical Intern Tutor at Beaumont Hospital and the National Doctors Training and Planning (NDTP) Medical Intern Unit representative, along with the Medical HR team within Beaumont Hospital. The result of the pilot survey was to reword some of the questions and a change to the structure is some of the questions.

4.7 Population Sample

The population profile for this study was 350 junior doctors within Beaumont Hospital, with the inclusion of a very small number of senior doctors' responses.

The researcher used convenience sampling to access the sampling framework of junior doctors associated with one Irish hospital over a three-week timeframe from June to July 2019, all of which were currently practising or due to practice, in Beaumont Hospital. As doctors rotate into different specialities and grades in July, both incoming and outgoing grades were captured in a bid to catch any junior doctors who are leaving Ireland after rotation.

The doctor grades of training defined for this study are those used in the Irish healthcare system. Junior doctors include medical graduates, Interns and SHO's.

4.8 Organisation Profile

Beaumont Hospital is the principal teaching hospital for the Royal College of Surgeons in Ireland. It employs approx. 3,000 staff, has 820 beds and provides both Medical and Surgical care services to approx. 290,000 people. At present, it has approx. 350 Non-Consultant Hospital Doctors (NCHD's) working in Beaumont Hospital (Beaumont Hospital, 2019).

4.9 Procedure

This study was conducted in close collaboration with the Clinical Intern Tutor at Beaumont Hospital and the NDTP Medical Intern Unit representative in order to establish suitable questions to try capture possible retention initiatives. Doctors did not receive any incentives to participate in the study. For the doctors, the direct benefit of participating in this research was the opportunity to express an opinion, comment or suggestion about the Irish healthcare system. Participation and consent information was clearly outlined at the beginning of the survey. A survey was circulated to approx. 350 Non-Consultant Hospital Doctors (NCHDs).

The online survey tool Survey Monkey was used to deliver the online survey to 192 junior doctors in total, comprising of; 72 medical graduates starting in Beaumont Hospital in July 2019, the 58 Interns currently working in Beaumont Hospital in June, of which could be leaving or starting their postgraduate training, and the 62 SHO's who are staying or leaving Beaumont in July 2019. The survey link was included in the email sent in mid-June and was left open for a three-week period, two weeks prior to the NCHD's start date of their July post. One reminder email was sent one week after the initial invite. There was no online survey sent directly to the Registrars or Specialist Registrars as the online link was only sent to junior doctors including incoming interns (medical graduates), current interns and current SHO's for this study.

The hardcopy survey was distributed at the Intern Induction which was the week prior to starting in Beaumont. This was to capture any of the new Interns who hadn't yet completed the online version. The NCHD Induction took place a week later, where the hardcopy survey was distributed to all levels of new doctors commencing July 2019, apart from the new July Interns i.e. medical graduates. A response box was provided for collecting responses. Hardcopy surveys were also placed in the doctor's residence with a confidential response box for any NCHD to complete the survey. This box was placed there ten days prior to the July NCHD rotation and six days following the changeover of doctors.

The survey questions were developed specifically to address the issues highlighted in the literature review. An interview took place with a member of the Intern Unit within the NDTP prior to survey development to help compile the possible solutions that would encourage junior doctors to stay in Ireland. The questions included demographics, intentions, reasons for staying or leaving Ireland, a list of possible solutions to encourage junior doctors to stay in the Irish healthcare system and finally what changes to the Irish healthcare system would encourage the retention of junior doctors.

4.10 Data Analysis

The researcher will analyse the responses of the quantitative data based on descriptive statistics and the qualitative data on the theme categories. Information will be gathered on Response Rates, Demographics, and generating a hypothesis with variables of junior doctors' interest on retention initiatives with their decision to leave or stay in Ireland. The combination of the research methods will allow for an in-depth analysis.

The quantitative data will be entered and cleaned in Microsoft Excel 2010 and statistics were performed using Statistical Package for the Social Sciences (SPSS) v.25. For the purposes of this analysis, percentages and the Chi Square Test of Independence will be used to establish the relationship between two categorical variables and for associations between the possible solution and the respondent's migration intentions. Pearson's Chi-square test will be utilised to determine the significance of differences in responses to questions. The survey applied a Likert scale response to a set of possible solutions to encourage junior doctors to stay in the Irish healthcare system. This Likert scale aims to establish where the respondents interest falls. Correlation is a measure of the relationship between two or more variables. The coefficient between the two variables is statistically significant if the p-value is less than 0.05. Anything above 0.05 is not significant.

The qualitative responses will be grouped together via Microsoft excel 2010, and the recurring key words identified will establish the qualitative themes for this study.

4.11 Limitations of Research

The limitations for this research was to try and capture data from a very busy junior doctor cohort within a period of three weeks. Due to the work schedule of the doctor and the NCHD rotation, it was not possible for the researcher to interview them at this very busy time. This has left some unanswered questions in gaining more responses on what would encourage junior doctors to stay in Ireland.

For the hardcopies distributed, respondents may have felt conscious with writing their answers down while sitting next to another.

Although the survey produced some excellent data, the sample size of participants is not representative of all NCHD's in Ireland and maybe biased towards one hospital setting.

4.12 Conclusion

The research methodology section identified that the research design was a mixed-method design and that the collection method chosen was mixed-collection of both an online and hardcopy survey.

The procedure of distributing the survey to a sample of 350 junior doctors was discussed and how the possible solutions to encourage junior doctors to stay in Ireland were presented in the survey.

The data analysis approach to both quantitative and qualitative data are also explored.

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5 CHAPTER FIVE: RESULTS

5.1 *Introduction*

This section presents the results of the online and hardcopy surveys in this study. The response rate and demographics will be presented in quantitative data, the relationships of the demographics with junior doctors' decision to stay or leave Ireland will be presented in quantitative data, the factors influencing junior doctors decision to leave and to stay in Ireland are presented in both quantitative and qualitative data, and finally, the Likert scale results will be discussed and the solution with the most interest that would encourage junior doctors to stay in Ireland will be presented. This section will also show if statistically significant association exists between variables and the possible solutions with their decision to stay or leave Ireland.

5.2 Response rate and demographics (Quantitative Data)

A population of 136 junior doctors participated in this study out of a total of 350 doctors, representing a response rate of 38%. 78 surveys were collected manually across the hospital and the remaining 58 responses were collected via survey monkey through email. An 86% response rate from medical graduates, where 32 replied to the online survey and 30 replied to the hardcopy survey. A 36% response rate from Interns, where 13 replied to the online survey and 8 replied to the hardcopy survey. A 54% response rate from SHO's, where 13 replied to the online survey and 21 replied to the hardcopy survey. And finally, a 13 Registrars and 5 Specialist Registrars (SPR) responded to the hardcopy survey distributed between the NCHD induction and the response box in the doctor's residence. Registrars and SPR were not directly sent an online survey invitation link, as these are more senior doctors. Table 1 below shows the demographics of this research study. Of the 136 responses, 72 (51.4%) were female respondents and 68 (48.6%) were male respondents. The doctor age majority (49.3%) fell into the '25 – 30' age bracket of junior doctors. 46.3% of the total respondents were medical graduates, 15.7% Interns, 25.4% SHO's, 9% Regs and 3.7% SPR's.

		Count	Layer Column N %
Gender	Female	72	51.4%
	Male	68	48.6%
Age	Less than 25	41	30.6%
	25-30	66	49.3%
	31-35	19	14.2%
	36+	8	6.0%
Group	Medical Graduate	62	46.3%
	Intern	21	15.7%
	SHO	34	25.4%
	Reg	12	9.0%
	SPR	5	3.7%

Table 1: Demographics

5.3 Relationships with junior doctors' decision to stay or leave Ireland (Quantitative Data)

This section will examine at the relationship of gender, age, doctor group and specialty with the junior doctors' decision to stay or leave Ireland will be discussed. In order to interpret the result, the Pearson Correlation will be used to measure if a significant association is present. When $p < 0.05$ there is significant association between the variable and their decision to stay or leave Ireland. When $p > 0.05$ there is no significant association between the variable and their decision to stay or leave Ireland.

- **Gender**

The relationship of gender with the leave/stay Ireland decision shows that females are 50/50 when it comes to leaving Ireland or staying in Ireland, whereas for Males 70.8% prefer to stay in Ireland while 29.2% wish to leave Ireland. There is a significant association between gender and the doctor leave/stay Ireland decision (chi-sq = 4.86, df = 1, p = 0.028) and so this variable is a factor in the overall decision of junior doctors to stay in Ireland.

- **Age**

Out of the 136 junior doctors that participated in this study, 33 were aged 'less than 25', 57 were aged 25 – 30 years old, 15 were aged 31-35 years, 5 were aged 30+ years. The relationship of age with the leave/stay Ireland decision showed that the age range 25 – 30 had 61.4% of junior doctors wishing to stay, however those in the younger age group of 'less than 25', showed 60.6% of junior doctors wanting to leave Ireland. There is a significant association between age and the doctor leave/stay Ireland decision (chi-sq = 11.60, df = 3, p = 0.009) and so this variable is a factor in the overall decision of junior doctors to stay in Ireland. The older ages, 80% of the 31-35 age group and 100% of the 30+ age group wished to stay in Ireland.

- **Doctor group**

Overall, 59.1% of junior doctors want to stay in Ireland and 40.9% want to leave Ireland. As seen in table 2, 53.3% of the medical graduates and 61.9% of the Interns answered by wishing to stay in Ireland after completing their internship. 59.4% of SHO's and 71.4% of Reg and 59.1% of SPR's stated that they stayed in Ireland after completing their internship. A higher proportion of each doctor group wants to stay. No significance was found as $p = 0.730$ (chi-sq = 2.032, df = 4, $p = 0.730$) and so this variable is not a factor in the overall decision of junior doctors to stay in Ireland.

Group		Leave Ireland or Stay		Total
		Stay	Leave	
Medical Graduate	Count	24	21	45
	% within Group	53.3%	46.7%	100.0%
Intern	Count	13	8	21
	% within Group	61.9%	38.1%	100.0%
SHO	Count	19	13	32
	% within Group	59.4%	40.6%	100.0%
Reg	Count	5	2	7
	% within Group	71.4%	28.6%	100.0%
SPR	Count	4	1	5
	% within Group	80.0%	20.0%	100.0%
Total	Count	65	45	110
	% within Group	59.1%	40.9%	100.0%

Table 2: Doctor group with leave/stay Ireland decision

- **Specialty**

The relationship of specialty with the leave/stay Ireland decision showed that 53% (n=66) of Medical junior doctors want to stay, with 47% wanting to leave Ireland. Of the Surgical specialty, 82.1% (n=28) want to stay, with 17.9% wanting to leave Ireland. A significance was found as $p = 0.008$ (chi-sq = 7.051, df = 1, $p = 0.008$) and so this variable is a factor in the overall decision of junior doctors to stay in Ireland.

5.4 Factors influencing junior doctors' decision to leave/stay Ireland (Quantitative and Qualitative Data)

Reasons for leaving Ireland

For the 40.9% of respondents who wishes to leave/left Ireland after their internship, it can be seen that a 'mix of both personal reasons and HSE factors' influenced their decision to leave Ireland, with an increase of 3.5% more respondents choosing personal reasons over HSE factors where an individual's reason was answered individually.

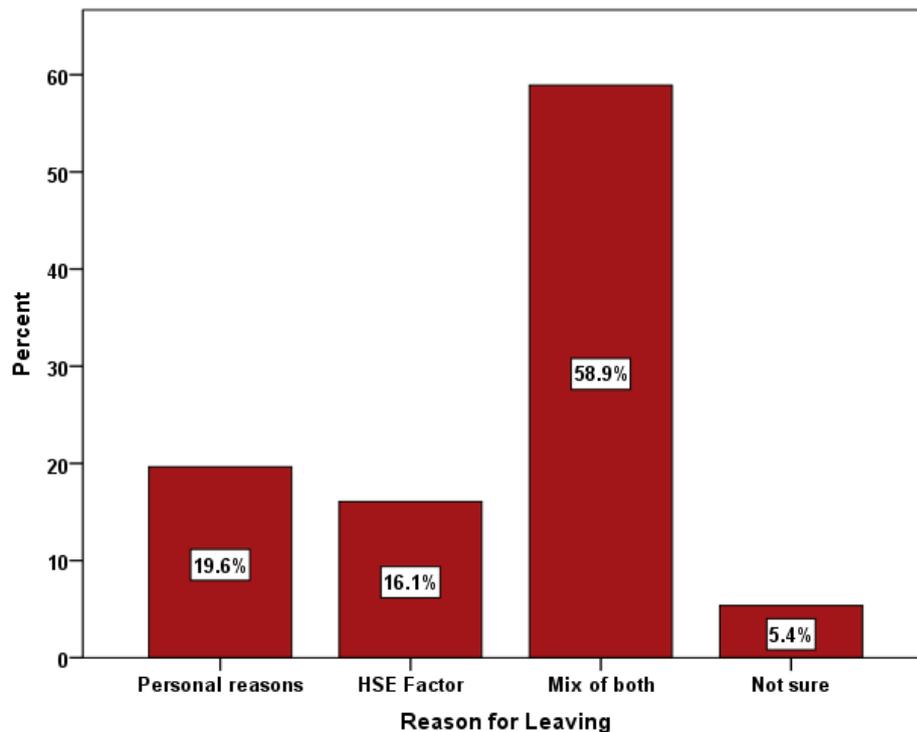


Figure 1: Reason for leaving

Of those who left or are leaving Ireland, as a result of personal reasons, the below frequencies arose: 28.2% as a result of their desire to travel, 26.2% as a result of their desire to work in a hospital abroad, 18.1% as a result of their colleagues were going abroad to work and 20.8% as a result of a break before starting postgraduate training.

Of those who left or are leaving Ireland, as a result of HSE/work-related factors, the below frequencies arose: 50% as a result of wanting to broaden their work experience abroad, 20% as a result of being unaware/unsure of their postgraduate training choice, 35% as a result of the intern workload was too demanding, 15.8% as a result of inadequate supervision by supervisors and 35% as a result of a not feeling valued by superiors.

Among the junior doctors who stated their preferred destination country, 86% (n=53) reported that Australia was their preferred destination country in this study.

Among the junior doctors who stated their preferred length of stay. This study found that 34.5% (n=55) plan to stay abroad for 1 year and 32.7% (n=5) plan to stay abroad for 2 years.

Among the junior doctors, 30.3% responded with a Yes to 'intending on migrating after their postgraduate training' as seen in Figure 2.

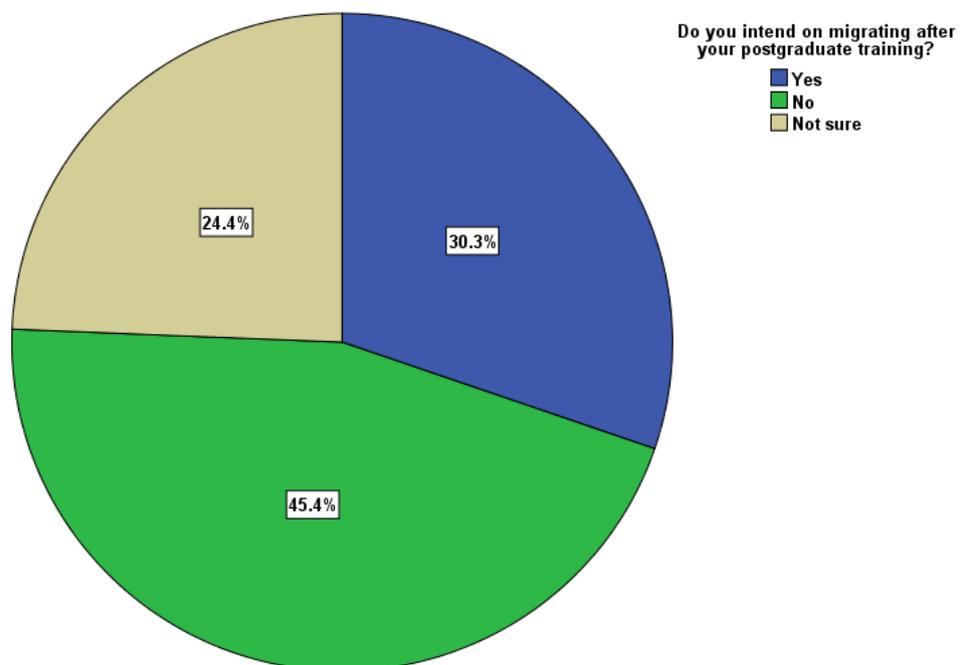


Figure 2: Intend on migrating after postgraduate training

Current reasons for staying in Ireland:

Among the junior doctors, 88.1% responded with a Yes to ‘intending on completing postgraduate training in Ireland’, as seen in Graph 2.

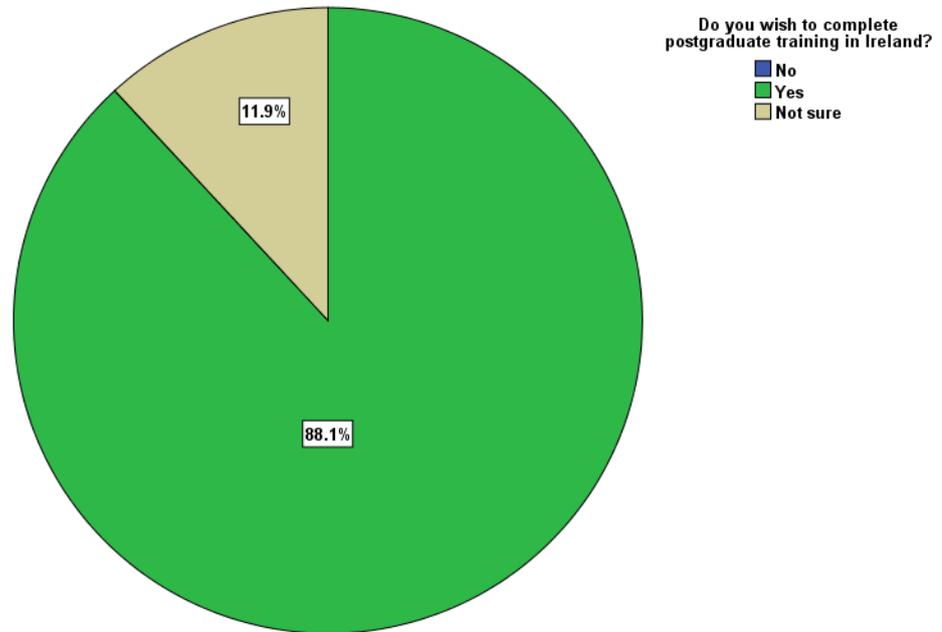


Figure 3: Wish to complete postgraduate training in Ireland

When the junior doctors were asked ‘**Why did you/do you wish to stay in Ireland after your Internship?**’ 58% (n = 72) stated ‘to start Postgraduate training’, 19% stated ‘Personal reasons’ referring to family, a relationship/partner, 13% stated ‘No desire to go abroad’. One Interns response:

‘Currently undergrad training is excellent. Knowing a hospital or university is interested in setting up a good training pathway will definitely keep me here. The commitment to improving morale and having competitions and incentive to further educate is very important’

Improvements that would encourage junior doctors to stay in Ireland:

Better working conditions at 29% (n = 117). Comments/suggestions included; 'Safe working conditions', 'better hospital atmosphere', 'less stressful environment'. 'Better rest facilities', 'better food', 'More of a focus on service provision than education/training'.

Better pay at 20% (n= 117). Comments/suggestions included; 'Fair and appropriate pay (including all hours worked, no withholding of overtime, paid induction etc.)', 'better educational opportunities (that aren't personally paid for, the NHS provides so many free educational opportunities for trainees in comparison to the HSE)', 'increase pay (time and 1/4 not good enough for overtime. Saturdays should be @ OT rates)', 'loan repayments are significant, and the salary abroad allows repayments to happen more easily'. 'I think that tax breaks for loan repayments would be a significant draw for older doctors.

Better training at 11% (n= 117). Comments/suggestions included; 'Higher chances of getting on to desired training schemes', 'Increased training opportunities', 'Greater flexibility regarding training (i.e. July-July, year on year, is very inflexible)', 'More flexible training schemes options - not moving location every 6 months-1 year', 'Flexibility in training to allow for the normal change in life e.g. children, burnout, family members being sick', 'Better more structured training'.

Better working hours at 9% (n= 117). Comments/suggestions included; 'Max 48 hr working week, with max. 12hr shift', 'Less hours (days off mid-week if working weekends)'.

The remaining responses referred to 'better work/life balance' of 5% (n= 117), 'better career progression' of 2% (n= 117) and the remaining 24% (n= 117) consisted of; 'better travel/work and research opportunities in postgrad study, 'less admin work i.e. transfer of tasks', 'centralised training', 'increased staff', 'more action to expedite patient care' 'flexibility of training hours' and 'to feel valued'.

Other changes to the Irish healthcare system that would encourage the retention of junior doctors:

Better training at 21.25% (n=80). Comments/suggestions included; 'more training opportunities', 'provide non-EU NCHDs training and give them posts', 'better encouragement and training for Interns to train further in Ireland', 'allow surgical trainees time to do research/work abroad', 'recognition of non-scheme experience', 'if training were more centralised until consultancy and less movement within post', 'more consideration for spouses to train in same location', 'more consultant posts'.

Better pay at 13.7% (n=80). Comments/suggestions included; 'increased wage to retain doctors', 'reverse consultant contract cuts', 'guarantee of overtime payments', 'more allowance for training for NCHDs'.

More respect at 12.5% (n=80). Comments/suggestions included; 'I don't want to leave, but if I'm going to be treated so disrespectfully, can you blame me for leaving?', 'an environment of mutual respect for trainees', 'responding to requests and working with doctors', 'make doctors feel like they are being listened to', 'we are highly trained professionals, high achievers. All we ask is to be treated reasonably when we take care of others', 'treating them with respect. i.e. not expecting them to work 24 hours.

Better hours at 11.25% (n=80). Comments/suggestions included; 'reasonable working hours', 'reduce hours worked', 'less hours per week. No 24-hour shifts', 'EWTD compliance (no more fudging of figures)', 'periods of time call free e.g. 2 months off call in 6 months', 'lunch hours (full hour at least once a week)

More staff at 6.2% (n=80). Comments/suggestions included; 'increase the workforce numbers to lessen the individual burden on physicians', 'more doctors on teams to reduce workload', 'greater/safer staffing numbers'

More work/life balance at 3.75% (n=80). Comments/suggestions included; 'with responses including 'should be limited to maximum 13-hour days.

Better system at 3.75% (n=80). Comments/suggestions included; 'with responses including' 'a system which doesn't blame, more support teaching wise and education for staff shared tasks', 'system overhaul with focus on trainee welfare, fair treatment and ease of life'

Consultancy post at 1.25% (n=80). Comments/suggestions included; 'full consultant pay that was cut back during the recession', 'likely to leave, the reason being I won't likely find a consultant post here'

The remaining 16.25% (n=80) referred to a range of other areas.

Comments/suggestions included; 'it would be good if free tea and coffee. Not much to ask but serious morale boost',

'tax breaks, help pay back bank loans. HSE to pay medical council fees, or fund some of them',

'I think there is a focus on cheap, short term measures that look good in an email such as giving mindfulness training and the intern gathering rather than actually tackling the root issues',

'we have a qualification that is largely international and currently I would say Ireland is one of the worst developed nations to practice as an NCHD globally. The United States is probably worse in terms of excessive working hours; however, training is much faster. The UK has better hours and training. Most of mainland Europe has better hours and training. Australia and New Zealand are so much better it is almost inconceivable that it's the same career',

'the HSE is not investing in doctors, in their training or wellbeing and by default this is resulting in poor outcomes for patients. It is obvious why so many doctors leave for Australia. Their doctors are valued'.

When the junior doctors were asked **‘Do you think there is an expectation that Irish trained Junior Doctors should work abroad?’** This resulted in 45.2% saying No and 54.8% responding with a Yes.

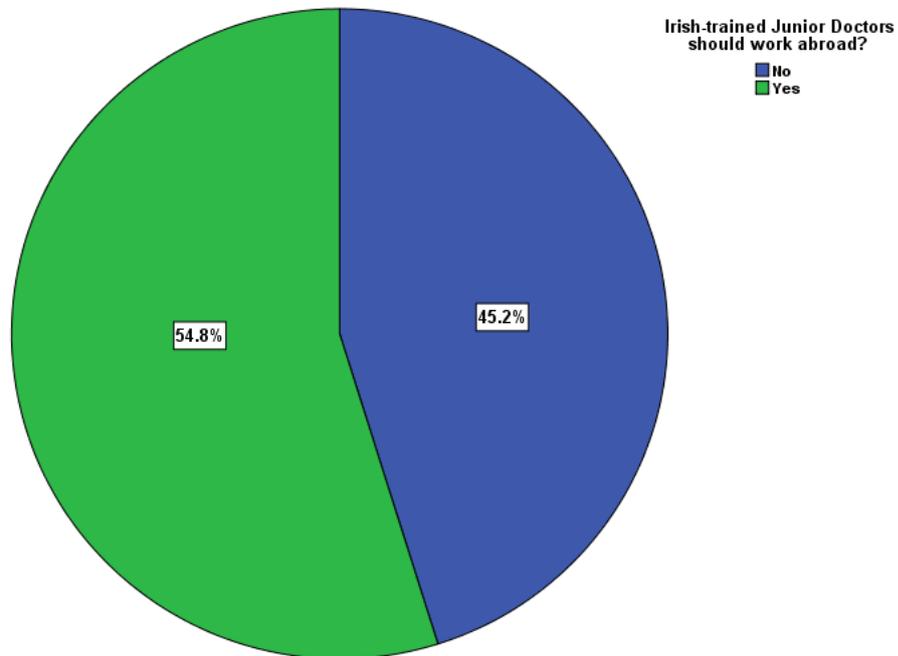


Figure 4: Expectation to work abroad

Some ‘Yes’ respondents cited ‘experience’ and responses included; ‘for fellowship or to improve chances of securing a consultant post in the future’, ‘gain relevant experience in different countries and endeavour to bring that knowledge back to the HSE’.

Some ‘No’ respondents included; ‘not necessarily, it is seen very much as a personal choice’, ‘Not so much an expectation, more a cultural trend’, ‘an expectation at a more advanced level but not at intern/SHO level’.

5.5 *The possible solutions that would encourage junior doctor retention with their decision to stay or leave Ireland (Quantitative and Qualitative Data)*

Table 3 below shows junior doctors interest level, in response to the Likert scale, on each of the proposed solutions to encourage junior doctors to stay in Ireland. The quantitative and qualitative responses will be examined for each of the possible solution. The quantitative relationship between the solution(s) with the most interest and the junior doctors’ decision to stay or leave Ireland, measured using Pearson Correlation test. In order to interpret the result, when $p < 0.05$, there is significant association between the variable and their decision to stay or leave Ireland. When $p > 0.05$ there is no significant association between the variable and their decision to stay or leave Ireland.

	No Interest		Little Interest		Some Interest		High Interest	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
More internship places to be made available	17	14.2%	25	20.8%	39	32.5%	39	32.5%
More individual choice available when choosing training	5	4.0%	11	8.9%	43	34.7%	65	52.4%
More flexibility while training	6	4.8%	11	8.8%	30	24.0%	78	62.4%
The option of linking hospitals to allow for joint/split posts	5	4.2%	19	15.8%	48	40.0%	48	40.0%
Less than Full time training as an option	14	11.5%	27	22.1%	35	28.7%	46	37.7%
Task transfer to be implemented	0	0.0%	3	4.5%	10	15.2%	53	80.3%
More social/networking events made available	13	10.7%	30	24.6%	45	36.9%	34	27.9%

Table 3: Likert scale on some solutions

The top ten highest interest ranking on the possible solutions that would encourage junior doctors to stay in Ireland:

1. **A guarantee of a Consultant post in Ireland** received the most interest with 89.22% stating High Interest. Out of the 91 respondents with High Interest, 61.5% wish to stay in Ireland while 38.5% wish to leave Ireland. Although no significance was found as $p = 0.584$ (chi-sq = 1.077, df = 2, $p = 0.584$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: 30% (n=10) of the comments/suggestions referred to 'career progression', including

'We need to know along the way that we can see our career progression' and 'Yes, definitely of interest, but for family reasons I'd be eager to have flexibility on that. I don't want to move family if I'm assigned a consultancy post. I want to apply and be competitive for the posts I want to get, not assigned somewhere at the end of my training. Once you take a consultancy post on, consultants tend not to move from one hospital to the other and that inflexibility would make me wonder about how you'd assign a guaranteed consultancy post at the end of the training programme', and another stating; 'If I train for years in Ireland, and there is no consultancy post available to me at the end, why should I remain in Ireland when I can secure one elsewhere. We have a severe lack of consultants' posts, more consultants mean more patients treated, reducing waiting lists, reducing locum costs, improving patient care outcomes' and finally 'from speaking to other doctors, we all agreed this would keep us here'.

2. **Task transfer to be implemented** received the second most interest with 80.3% stating High Interest. Out of these 53 respondents with High Interest, 62% wish to stay in Ireland while 38% wish to leave Ireland. Although no significance was found as $p = 0.225$ (chi-sq = 2.982, df = 2, $p = 0.225$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: 60% (n=7) of the comments/suggestions stated 'time' was being wasted on administration work. Responses included;

'it is very time consuming and ridiculous how much admin is placed on the doctors on schemes, repetition and we don't get much free time and to have to spend it on admin' and another 'large amount of admin work at present impinges on service provision capabilities'. Other comments were 'the fact that transfer of tasks has not happened is hugely frustrating' and 'being going on for too long, a particular bug bearer'.

- 3. More structured postgraduate training** received the third most interest with 70% stating High Interest. Out of the 42 respondents with High Interest, 64.3% wish to stay in Ireland while 35.7% wish to leave Ireland. Although no significance was found as $p = 0.357$ (chi-sq = 3.235, df = 3, $p = 0.357$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: One comment/suggestion was made: 'Beaumont was very good for organising post graduate surgical training, which was to a very high standard, the new skills lab is truly an asset to the hospital and should be nurtured further this year'.

- 4. More flexibility while training** received the fourth most interest with 62.4% stating High Interest. Out of the 72 respondents with High Interest, 59.4% wish to stay in Ireland while 40.6% wish to leave Ireland. Although no significance was found as $p = 0.185$ (chi-sq = 4.825, df = 3, $p = 0.185$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: 78% (n=11) of the comments/suggestions stated; 'work life balance &/ family', with one medical graduate response:

'Even for partners who are not medics, consideration must be given to people's personal circumstances. It wholly unfair to expect someone to move across the country to take up a post, to leave their family behind. Because of this practice, it is nearly impossible to put down roots, buy a house, etc.'

and a Registrar responded with: 'consideration for spouses to work in same area, especially family location where two doctors moving away'

5. **An option of deferral of scheme posts** received the fifth most interest with 58.06% stating High Interest. Out of the 36 respondents with High Interest, 58.3% wish to stay in Ireland while 41.7% wish to leave Ireland. Although no significance was found as $p = 0.357$ (chi-sq = 1.727, df = 3, $p = 0.631$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: No comments/suggestions received

6. **More individual choice available when choosing training** received the sixth most interest with 52.4% stating High Interest. Out of the 65 respondents with High Interest, 66.7% wish to stay in Ireland while 33.3% wish to leave Ireland. Although no significance was found as $p = 0.378$ (chi-sq = 3.090, df = 3, $p = 0.378$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: 36% (n=11) of the comments/suggestions stated 'improve rotations', with one intern response:

'Yes. All I wanted was 3 months in paediatrics and due to the limited spots available and competitiveness of the jobs, even with a first-class honours degree, I failed to secure a job with a paediatrics rotation'. 27% (n=11) referred to 'work life balance &/ family'

Another medical graduate response:

'I think during the training process there should be a facility to have some flexibility for those who have partners/husband/wife and/or children, and the required 6months of rural placement during a BST/SHO scheme should be a little more flexible to prevent undue costs, moving children's schools, putting pressure on personal relationships etc.'

7. **The option of linking hospitals to allow for joint/split posts** received the seventh most interest with 40% stating High Interest. Out of the 42 respondents with High Interest, 66.7% wish to stay in Ireland while 33.3% wish to leave Ireland. Although no significance was found as $p = 0.245$ (chi-sq = 4.156, df = 3, $p = 0.245$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.
- Qualitative data: (n=3) comments/suggestions stated; 'Where appropriate this could be useful', 'Not a massive concern, and 'Not sure'.
8. **Less than Full time training as an option posts** received the eighth most interest with 37.7% stating High Interest. Out of the 39 respondents with High Interest, 56.4% wish to stay in Ireland while 43.6% wish to leave Ireland. Although no significance was found as $p = 0.700$ (chi-sq = 1.424, df = 3, $p = 0.700$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.
- Qualitative data: 50% (n=6) of the comments/suggestions, referred to 'work life balance/family', with one medical graduate response: 'Part time training posts should be available where possible, e.g. for people with families' and another stated; 'In certain circumstances this would be very helpful to the person, but you have to acknowledge it will reduce the medical output and comes at increased cost to the hospital/HSE - but it'll come back by having a happier healthier workforce'
9. **More Internship/SHO/Scheme places to be made available** received the ninth most interest with 32.5% stating High Interest. Out of the 34 respondents with High Interest, 64.7% wish to stay in Ireland while 35.3% wish to leave Ireland. Although no significance was found as $p = 0.397$ (chi-sq = 2.963, df = 3, $p = 0.397$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: 35% (n=14) of the comments/suggestions stated 'make open to International students', 20% (n=14) stated 'more scheme posts' and 20% (n=14) stated 'more Intern places'.

10. **More social/networking events made available** received the tenth most interest with 27.9% stating High Interest. Out of the 30 respondents with High Interest, 43.3% wish to stay in Ireland while 53.7% wish to leave Ireland. Although no significance was found as $p = 0.052$ ($\chi^2 = 7.736$, $df = 3$, $p = 0.052$) and so this initiative is not a factor in the overall decision of junior doctors to stay in Ireland.

Qualitative data: (n=3) comments/suggestions stated; 'that would be good, especially for people who have no connections (family, family friends) in medicine. I often feel very behind as most of my friends have grown up in families of doctors and they have received a lot of help and support the whole way through college and beyond' and another 'improve morale and encourage networking and support for colleagues'.

The remaining retention initiatives ranked low on junior doctor interest and so are not possible solutions to encourage junior doctors to stay in Ireland;

- **More support from senior colleagues**

Qualitative data: (n=5) one positive response from an intern; ‘my experience of this in Beaumont has been fantastic, and from a Reg; ‘generally very well supported by Consultants’.

However, a negative response stated; ‘this is very much the case, especially for non-Irish trained doctors, they are very reluctant to allow us attend anything’, although an SHO stated:

‘the problem is not senior staff, there are not enough team members to allow study days.

- **More clinical courses/ resilience courses:**

Qualitative data: (n=4) one comment from an SHO;

‘teaching coping mechanisms should not replace fixing environmental and work hygiene factors in hospital. fix the latter problems first and you won’t have to teach NCHD’s how to grit and bear these inclement environments.

- **More campaigns in action:**

Qualitative data: (n=3) one response from an Intern was

‘No real point in having campaigns if the root cause (dreadful working conditions) aren't addressed’.

11. **More work/life balance activities:**

Qualitative data: 61% (n=13) of comments/suggestions referred to ‘hours’ with one response stating:

‘I think that doctors being given an assigned and uninterrupted lunch (bleep free) would be a more realistic goal and something more highly sought after’ and another ‘barely have time to attend teaching’. Other responses included; ‘If I had more time, I wouldn’t feel stressed’ and ‘we need more staff in order to have time for lunch’ and ‘perhaps just working a normal-ish roster would allow for work life balance’.

5.6 Conclusion

This section has shown the results of a population of 136 junior doctors who participated in this study out of a total of 350 doctors, representing a response rate of 38% and demographics of this study were discussed.

This section showed that a statistically significant association exists in the relationship between gender, age and specialty with the doctors leave/stay Ireland decision, meaning that gender, age and specialty as variables, are factors in the junior doctors' decision to stay in Ireland.

This section also highlights the factors influencing junior doctors' decision to leave/stay Ireland and are presented in both quantitative and qualitative data.

And finally, the Likert scale resulted in 'A guarantee of a consultant post in Ireland' as being the solution with the most interest that would encourage junior doctors to stay in Ireland. However, this initiative is not a in the junior doctors' decision to stay in Ireland as $p = 0.584$. A qualitative theme of career progression coincides with this result.

The results will be explained in detail in the next chapter.

6 CHAPTER SIX: DISCUSSION AND FINDINGS.

6.1 Introduction

In this section, the research questions and the research hypothesis will be discussed and examined against the literature review as a result of the survey responses from junior doctors in one Irish hospital, Beaumont Hospital.

This study shows that a statistically significant association exists in the relationship between gender, age and specialty with the doctors leave or stay in Ireland decision, meaning that gender, age and specialty as variables, are factors in the junior doctors' decision to stay in Ireland.

The findings of this study revealed that 'A guarantee of a consultant post in Ireland' was identified as being the solution that best encourages junior doctors to stay in the Irish healthcare system, although it has no factor in the junior doctors' decision to stay in Ireland. However, it was accompanied by a qualitative theme of career progression which coincided with this result.

It was also discovered that among the junior doctor in Beaumont Hospital who are samples for the Irish healthcare system in general that Better working conditions, Better pay , Better training, Better working hours, More respect, More staff, More work/life balance, 'Better career progression' and 'To feel valued' all would encourage junior doctors to stay in Ireland.

This study shows that career progression has an impact on junior doctor retention and so it is important that management to recognise and satisfy this need to encourage junior doctor retention in Ireland.

6.2 Research Objectives

This research study's objective was to investigate the reasons that influence junior doctors' decision to stay or leave the Irish healthcare system. It was also aimed at identifying what would encourage junior doctors to stay in the Irish healthcare system and lastly to identify which possible solution best encourages junior doctors to stay in the Irish healthcare system.

The research hypothesis in this study was to investigate if the possible solution identified with the most interest has a significant impact on the junior doctors' decision to stay in Ireland.

The purpose of this study was to gain insights into the factors that would encourage junior doctors to stay in the Irish healthcare system, and to help the National Doctors Training and Planning (NDTP) as well as other organisations to adopt this solution as an effective retention initiative for junior doctors.

6.3 Discussion of the Research Result

Findings of this study show that a 38% response rate took place from a mixed-methodology method. Anderson (2018) stated that a mixed method approach can provide a more thorough analysis of the research results and findings.

The literature review highlighted that doctors migrate from Ireland mainly due to the difficult working conditions, including the long working hours and uncertain career progression opportunities. These reasons cited by Irish doctors who had left consisted of dissatisfaction with career opportunities, career progression, training, salary and adds to her studies showing that personal factors are one of the reasons of migration (Humphries *et al.*, 2015).

This study did see that almost half, 40.9% of the junior doctors expressed their dissatisfaction with the Irish healthcare system whom stated that a 'mix of both personal reasons and HSE factors/work related' were the reasons that influenced their decision to leave. It found that 19.6% of junior doctors were influenced to leave by 'Personal reasons' which saw 28.2% leave as a result of their desire to travel, 26.2% leave as a result of their desire to work in a hospital abroad, 18.1% leave as a result of their colleagues were going abroad to work and 20.8% leave as a result of a break before starting postgraduate training. Of those who left or are leaving Ireland, as a result of HSE/work-related factors, this study found that 50% wish to leave/left as a result of wanting to broaden their work experience abroad, 20% as a result of being unaware/unsure of their postgraduate training choice, 35% as a result of the intern workload was too demanding, 15.8% as a result of inadequate supervision by supervisors and 35% as a result of a not feeling valued by superiors.

This study supported McDermott's *et al.*, study (2015) where Australia is the preferred destination for junior doctors, with the majority leaving to travel and work in Australia for one to two years with a plan to return, again this is similar to previous reports (Medical Council, 2019).

The literature review conclusion determined that junior doctors are opting to leave Ireland and potentially remain abroad rather than accepting the current situation in the Irish healthcare system and so it is evident to the researcher that there is a need for effective retention initiatives to achieve medical workforce sustainability in Ireland

When the relationships of gender, age, doctor group and specialty were discussed with the junior doctors' decision to stay or leave, it found that a statistically significant relationship exists between gender, age and specialty with the decision to stay in Ireland, females are 50/50 when it comes to leaving Ireland or staying in Ireland, whereas for Males 70.8% prefer to stay in Ireland. The age range 25 – 30 had 61.4% of junior doctors wishing to stay, however those in the younger age group of 'less than 25', showed 60.6% of junior doctors wanting to leave Ireland but 53% of medical junior doctors and 82.1% of surgical specialty both want to stay in Ireland.

Overall, this study has found that overall, 59.1% of junior doctors want to stay in Ireland and 40.9% want to leave. The literature review saw the need of junior doctor retention as being a primary focus, of which similar migration results will continue if the desires and opinions of junior doctors are not addressed by the Irish healthcare system. Therefore, this study asked all participants 'what would make them stay in the Irish healthcare system? The findings from this question showed that the reasons that would influence junior doctors' decision to stay in the Irish healthcare system were 58% (n = 72) 'to start Postgraduate training' and 19% stated 'Personal reasons' referring to family, a relationship/partner. As this was a qualitative question, it was asked again later in the survey with a quantitative approach of 'do you intend on completing postgraduate training in Ireland? which resulted in 88.1% of the junior doctors intend on completing postgraduate training in Ireland. This supports the Royal College of Surgeons in Ireland (RCSI) recent study where it was found that 2017-2018 findings (Medical Council, 2019) point to a higher amount of Irish medical students and trainees

wishing to make their careers in Ireland than were reported in earlier studies, adding to the need for up to date data on migration trends.

When the junior doctors were asked what would encourage them to stay in Ireland, findings of this study show that *Better working conditions* and *better pay* came out on top. By understanding the reasons, and what would encourage them to stay, it will give way to recruitment and retention initiatives that should be implemented to reduce employee turnover and increase employee retention (CIPD, 2019), as highlighted in research by Boyd *et al.*, (1990), where satisfaction occurs when expectations are matched. Although, here was no mention of pay suggested in the survey as the NDTP Intern lead stated that junior doctors have enough pay compared to other countries however it is one of the encouraging factors, according to the junior doctors themselves that would keep them in Ireland. Again, when the junior doctors were asked 'What other changes to the Irish healthcare system might encourage the retention of junior doctors? The qualitative responses (n=80), showed 21.25% want *Better training*, 13.7% want *Better pay* and 12.5% want *More respect*.

Although, there has been an investment in training over the last few years (Suciu *et al.*, 2017), this desire for better training, which continues to come up in several studies, still remains. Bruce-Brand *et al.*, (2012) study of Irish trained doctors found that those who had migrated stated that the lack of training and career opportunities, career pathways, long working hours, work related stress and salary were determinants of turnover.

The literature review identified a gap where the need arose to determine junior doctors interest fall on possible solutions that would best encourage them to stay in the Irish healthcare system. Findings of this study show that 'A guarantee of a consultant post in Ireland' was identified as being the solution that best encourages junior doctors to stay in the Irish healthcare system, along with a qualitative theme of career progression coinciding with this result. However, qualitative responses indicated:

'We need to know along the way that we can see our career progression'
another stating

‘Yes, definitely of interest, but for family reasons I’d be eager to have flexibility on that.....Once you take a consultancy post on, consultants tend not to move from one hospital to the other and that inflexibility would make me wonder about how you’d assign a guaranteed consultancy post at the end of the training programme’,

and another stating;

‘If I train for years in Ireland, and there is no consultancy post available to me at the end, why should I remain in Ireland when I can secure one elsewhere’.

The implementation of ‘Task transfer’ also had very high interest, with a coincided qualitative theme of Time, relating to the long hours being worked with comments like; ‘large amount of admin work at present impinges on service provision capabilities’, and other comments highlighting the ongoing frustration with the need or changes ‘the fact that transfer of tasks has not happened is hugely frustrating’ and ‘being going on for too long, a particular bug bearer’.

Training improvements had the next most interest, where the interest fell on ‘More structured postgraduate training’, ‘More flexibility while training’ with a coincided qualitative theme of Work life balance & family. ‘An option of deferral of scheme posts’, ‘More individual choice available when choosing training’ received with a coincided qualitative theme of Improve rotations. ‘The option of linking hospitals to allow for joint/split posts’, ‘Less than Full time training as an option posts’ with a coincided qualitative theme of Work life balance & family. ‘More Internship/SHO/Scheme places to be made available’, and finally ‘More social/networking events made available’.

Although ‘More structured postgraduate training’ is not a factor in the overall decision of junior doctors to stay in Ireland, it still needs to be improved as one comment made was that ‘Beaumont was very good for organising post graduate surgical training, which was to a very high standard, the new skills lab is truly an asset to the hospital and should be nurtured further this year’.

Work life balance, family, flexibility, to improve rotations coincided with the need for the retention solutions of 'More flexibility while training', 'An option of deferral of scheme posts', 'More individual choice available when choosing training' received with a coincided qualitative theme of Improve rotations. 'The option of linking hospitals to allow for joint/split posts', 'Less than Full time training as an option posts', 'More Internship/SHO/Scheme places to be made available', and finally 'More social/networking events made available'.

The findings of this study found that improvements to the following would encourage junior doctors to stay in Ireland; *Better working conditions* at 29% (n = 117), *Better pay* at 20%, *Better training* at 11% in regards to flexibility in training, *Better working hours* at 9% and other areas for improvement were 'better work/life balance', 'better career progression', 'better travel/work and research opportunities in postgrad study, 'less admin work', 'centralised training', 'increased staff', 'more action to expedite patient care' and 'to feel valued'.

The findings of this study found that the following changes to the Irish healthcare system that would encourage the retention of junior doctors; *Better training* at 21.25% (n=80), *Better pay* at 13.7%, *More respect* at 12.5%, *More staff* at 6.2%, *More work/life balance* at 3.75%, *Better system* at 3.75%, *Consultancy post* at 1.25% and the remaining 16.25% referred to a range of other areas including; 'it would be good if free tea and coffee. Not much to ask but serious morale boost', and finally; 'the HSE is not investing in doctors, in their training or wellbeing and by default this is resulting in poor outcomes for patients. It is obvious why so many doctors leave for Australia. Their doctors are valued'.

Findings on the research hypothesis in this study show that the possible solution identified, 'A guarantee of a consultant post in Ireland', received the most interest. However, it does not have a significant impact on the junior doctors' decision to stay in Ireland as no statistically significant association was identified as existing in the relationship meaning that 'A guarantee of a consultant post in Ireland' has no factor in the junior doctors' decision to stay in Ireland.

However, the relationship between the 'More social/networking events made available' solution and the junior doctors decision to stay in Ireland showed an association of $p = 0.05$ suggesting that this solution is very near to having a statistically significant association existing in the relationship between this solution and therefore could be a factor in the junior doctors decision to stay in Ireland.

Overall, in response to this study, it was found that 'A guarantee of a consultant post in Ireland' was identified as being the solution that best encourages junior doctors to stay in the Irish healthcare system, although it has no factor in the junior doctors' decision to stay in Ireland. However, it was accompanied by a qualitative theme of career progression which coincided with this result. The findings of this study found that *Better working conditions, Better pay, Better training, Better working hours, More respect, More staff, More work/life balance, 'Better career progression' and 'To feel valued'* all would encourage junior doctors to stay in Ireland.

6.4 Conclusion

The findings of this study revealed that 'A guarantee of a consultant post in Ireland' was identified as being the solution that best encourages junior doctors to stay in the Irish healthcare system, although it has no factor in the junior doctors' decision to stay in Ireland. However, it was accompanied by a qualitative theme of career progression which coincided with this result.

It was also discovered that among the junior doctor in Beaumont Hospital who are samples for the Irish healthcare system in general that Better working conditions, Better pay , Better training, Better working hours, More respect, More staff, More work/life balance, 'Better career progression' and 'To feel valued' all would encourage junior doctors to stay in Ireland.

This study shows that career progression has an impact on junior doctor retention and so it is important that management to recognise and satisfy this need to encourage junior doctor retention in Ireland.

7 CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

7.1 *Conclusion*

The aim of this research study was to review health worker migration and to investigate which solution best encourages junior doctors to stay in the Irish healthcare system. The objectives of this research study was to investigate the reasons that influence junior doctors' decision to stay or leave the Irish healthcare system, to investigate what would encourage junior doctors to stay in the Irish healthcare system and lastly to investigate which possible solution best encourages junior doctors to stay in the Irish healthcare system. The research hypothesis in this study was to investigate if the possible solution identified with the most interest has a significant impact on the junior doctors' decision to stay in Ireland.

The result of this study revealed that 'A guarantee of a consultant post in Ireland' was identified as being the solution that best encourages junior doctors to stay in the Irish healthcare system, although it has no factor in the overall junior doctors' decision to stay in Ireland. However, it was accompanied by a qualitative theme of career progression which coincided with this result and so it is important that management recognise and satisfy this need of career progression to encourage junior doctor retention in Ireland.

It discovered that among the junior doctor in Beaumont Hospital who are samples for the Irish healthcare system in general that Better working conditions, Better pay, Better training, Better working hours, More respect, More staff, More work/life balance, 'Better career progression' and 'To feel valued' all would encourage junior doctors to stay in Ireland.

This study found that the main reasons for staying were 58% 'to start Postgraduate training' and 19% stated 'Personal reasons' referring to family, a relationship/partner. The survey also included a quantitative question in the

survey of 'do you intend on completing postgraduate training in Ireland? which resulted in 88.1% of the junior doctors stating yes. Overall, this study has found that, 59.1% of junior doctors want to stay in Ireland and 40.9% want to leave.

7.2 Recommendations and Implications for further research

The researcher of this study would like to make the below recommendations to encourage junior doctors to stay in the Irish healthcare system. All of which require further research;

1. Develop career progression opportunities

Doctors need to be provided with more support in terms of their career development. As the result of this research study showed that 'A guarantee of a consultant post in Ireland' was identified as being the solution that best encourages junior doctors to stay in the Irish healthcare system. A recommendation would be to offer career advice opportunities within the workplace during their career path towards a consultant post in Ireland. Comments from this study, supporting this recommendation, include; 'We need to know along the way that we can see our career progression' and 'If I train for years in Ireland, and there is no consultancy post available to me at the end, why should I remain in Ireland when I can secure one elsewhere'.

2. Develop flexibility for training, work/life balance and family reasons

Throughout this study, flexibility has been mentioned several times regarding training, work/life balance and family reasons.

Comments from this study, supporting this recommendation, include;

- Flexibility in Training include; 'greater flexibility regarding training (i.e. July-July, year on year, is very inflexible)', 'more flexible training schemes options - not moving location every 6 months-1 year', 'if training were more centralised until consultancy and less movement within post' 'provide non-EU NCHDs training' etc.
- Flexibility for work/life balance include; 'I think during the training process there should be a facility to have some flexibility for those who have partners/husband/wife and/or children, and the required 6months of rural placement during a BST/SHO scheme should be a little more flexible to

prevent undue costs, moving children's schools, putting pressure on personal relationships etc.

- Flexibility for family reasons include; 'allow for the normal change in life e.g. children, burnout, family members being sick', 'for family reasons I'd be eager to have flexibility on that. I don't want to move family if I'm assigned a consultancy post', 'more consideration for spouses to train in same location'.

3. Develop research/work opportunities abroad

Comments from this study, supporting this recommendation, include; 'better travel/work and research opportunities in postgrad study', 'allow surgical trainees time to do research/work abroad'.

The researcher of this study would like to make the recommendation of a partnership to take place between Irish hospitals and with hospitals in the 'preferred destination country' of Australia that would give junior doctors the opportunity of a work placement abroad which would satisfy all the 'personal reasons' stated in this study for leaving Ireland, while also satisfying all of the 'HSE/work-related reasons' that were stated as influencing their decision to leave.

Other areas of recommendation include:

- Improve doctors terms of contract including; offer longer full-time contracts to encourage career progression, provide contracts that guarantee post training employment, provide career breaks within the contract to allow travel for a period of time, Improve pay, implement a no bleep policy to allow for an uninterrupted lunch hour
- Introduce reward strategies following the return to Irish doctors
- Improve the tracking of migration in future

Effective retention initiatives are required, as the cost of producing a medical graduate comes at a considerable expense to the Irish economy and to lose these Irish-trained doctors to other countries after their training means that the Irish healthcare system will not reap the rewards of their training investment to date.

7.3 A personal learning statement

This research study has given me a great understanding of the Irish healthcare system and I have found a new sense of awe for junior doctors in terms of the hours they work under the current working conditions.

This study has been very challenging however, I was determined enough to stay focused and in doing so I reached the answers to my research questions. I hope that this study will be of benefit to the Irish healthcare system in the future.

The two challenges I found most difficult, while doing this study, were trying to get a medical insight prior to determining the proposed solutions for the junior doctors to rate their interest off, and analysing the quantitative and qualitative data, using SPSS and determining the themes.

Another challenge was gaining the migration information from an Irish context as there are not many journals to date with specific figures, although the concept of health worker migration from Ireland has been going on for decades.

Time was a constant battle in doing this research study. If anything, I have learnt to be organised and disciplined and this was prompted by the continued effort to analyse the data received to conduct this research study.

If the researcher was conducting this research again, the study would involve a wider sample from a range of Irish hospitals within the Irish healthcare system and in doing so would conduct interviews to allow for more detailed information to be obtained.

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APPENDIX A: Hardcopy Survey

Thank you for participating in my survey. Please be advised that you can withdraw at any time and that all data collected will be anonymous. This survey is being conducted as part of service planning and evaluation of Junior Doctors in Beaumont Hospital and your feedback is very much appreciated. Kind Regards, Dallas Maher (Hk Masters teacher).

NCHD's - Your experience/suggestions!



Beaumont Hospital
Capital Beaumont

Gender: Male Female
 Age: Under 25 25 - 30 31 - 35 36 & older
 Year of Graduation: _____ Year of Internship: _____
 Specialty: Medical Surgical
 Grade: Intern SHO1 SHO2 REG Other please specify _____

- When did you start your postgraduate training in Ireland?
 Straight after Internship 1 year gap 2 year gap Other please specify _____
- What did you do after completing your Internship?
 Stayed in Ireland Left Ireland

- If you indicated that you **Stayed in Ireland after your Internship**, please outline your reasons for staying: (e.g. started postgraduate training, had no desire to go abroad, personal reasons)

- If you indicated that you **LEFT Ireland after your Internship**, please outline your reasons for leaving:

- Personal reasons
 Work-related (HSE) reasons A mix of both
 Other reasons for leaving? _____
- Where did you go after completing your Internship? _____
 - Did you work in Medicine abroad? Yes No
 - How long did you work abroad for? a few ~~months~~ 1 year 2 ~~yrs~~ more than 2 ~~yrs~~

The below table is only applicable to those who **Left Ireland after their Internship**

If you chose Personal reasons in Q4 for leaving Ireland after your Internship , please choose from the below selection what closely relates to your decision at the time:	If you chose Work-related (HSE) reasons in Q4 for leaving Ireland after your Internship , please choose from the below selection what closely relates to your decision at the time:
Wanted to travel	Wanted to broaden work experience abroad
Wanted to work in a hospital abroad	Was unaware/unsure of postgraduate training choice
Your intern colleagues were going abroad to work	The intern workload was too demanding
It was a break before starting postgraduate training	Inadequate supervision by superiors
Not applicable (as I stayed in Ireland)	Did not feel valued by superiors
Any other reasons _____	Not applicable (as I stayed in Ireland)

- Do you think there is an expectation that Irish-trained Junior Doctors should work abroad? Yes No
 What are your reasons for your answer? _____

- What do you think would encourage Irish doctors to **STAY** in Ireland?

Please turn over!



7. The following questions are possible solutions to encourage Junior Doctors to stay in the Irish healthcare system. Please indicate your interest for each:

Would any of the below interest you?	HIGH Interest	SOME Interest	LITTLE Interest	NO Interest	Any Comments/ Suggestions
More Internship/SHO/Scheme places to be made available?					
More individual choice available when choosing training? (e.g. temporary swaps to other hospitals)					
More flexibility while training? (e.g. a placement for your partner/family member)					
The option of linking hospitals to allow for joint/split posts?					
Less than Full time training as an option? (i.e. to allow for previous qualification recognition)					
Task transfer to be implemented (e.g. remove admin workload and transfer to the responsible person)					
More support from senior colleagues? e.g. being allowed to go to courses					
More clinical courses made available?					
More campaigns in action (e.g. Anti-Bullying campaign)					
More social/networking events made available?					
More work/life balance activities (e.g. yoga at lunch)					
More structured postgraduate training made available?					
An option of deferral of scheme posts					
A guarantee of a Consultant post in Ireland (in the long term)					

8. Do you intend on migrating after completing your postgraduate/HST training? Yes No Not sure yet

9. What other changes to the HSE might encourage the retention of Junior Doctors in the Irish healthcare system?

Thank you for completing my questionnaire,

All the best in your July post!

APPENDIX B: Online Survey



Interns - your experience/suggestions

Thank you for participating in my survey.

Please be advised that you can withdraw at any time and that all data collected will be anonymous. This survey is being conducted as part of service planning and evaluation of Junior Doctors in Beaumont Hospital and your feedback is very much appreciated.

Kind Regards,

Darina Maher (HR Masters student)

Interns - your experience/suggestions

* 1. Gender

- Male
 Female

* 2. Age

- Under 25
 25 to 30
 31 to 35
 36 & older

* 3. What year did you graduate from Medical school? e.g. 2018

* 4. Which area of Medicine do you prefer?

- Medical
 Surgical
 Not sure yet

* 5. What do you plan to do after completing your Internship?

- Stay in Ireland
- Leave Ireland
- Not sure yet

6. Why do you wish to STAY in Ireland after your Internship? e.g. starting postgraduate training, no desire to go abroad, personal reasons etc...

* 7. If you indicated that you wish to LEAVE Ireland after your Internship, please outline your reasons for leaving:

- Personal reasons
- Work-related (HSE) reasons
- A mix of both
- Not applicable (as staying in Ireland)
- Other reasons for leaving

8. Where do you intend to go? (only required if you indicated that you wish to leave after your Internship)

9. How long do you intend on going abroad for? (only required if you indicated that you wish to leave after your Internship)

- a few months
- 1 year
- 2 years
- more than 2 years
- Uncertain
- Not applicable (as staying in Ireland)

10. Do you wish to work in Medicine abroad after Internship? (only required if you indicated that you wish to leave after your Internship)

- Yes
- No
- Not applicable (as staying in Ireland)
- Other (please specify)

* 11. If you chose Personal reasons in Q7 for leaving Ireland, please choose from the below selection that most closely relates to the basis of your decision:

- A desire to travel
- Its a break before starting postgraduate training
- A desire to work in a hospital abroad
- Not applicable (as staying in Ireland)
- Your Intern colleagues are considering working abroad
- Any other reasons

* 12. If you chose Work-related (HSE) reasons in Q7, please choose from the below selection that most closely relates to the basis of your decision:

- To broaden work experience abroad
- Inadequate supervision by superiors
- Unaware/unsure of postgraduate training choice
- Not feeling valued by superiors
- The Intern workload is too demanding
- Not applicable (as staying in Ireland)
- Any other reasons

* 13. Do you think there is an expectation that Irish-trained Junior Doctors should work abroad?

- Yes
- No
- What are your reasons for your answer

* 14. What do you think would encourage Irish doctors to STAY in Ireland?

* 15. The following questions are possible solutions to encourage Junior Doctors to stay in the Irish health care system. Please indicate your interest for each:

More internship places to be made available?

No Interest	Little Interest	Some Interest	High Interest
★	★	★	★
Any Comments			
<input type="text"/>			

* 29. More structured postgraduate training programmes made available?

No Interest	Little Interest	Some Interest	High Interest
★	★	★	★
Any Comments			
<input type="text"/>			

* 30. An option of deferral of scheme posts?

No Interest	Little Interest	Some Interest	High Interest
★	★	★	★
Any Comments			
<input type="text"/>			

* 31. A guarantee of a Consultant post in Ireland (in the long term)

No Interest	Little Interest	Some Interest	High Interest
★	★	★	★
Any comments			
<input type="text"/>			

* 32. What other changes to the HSE might encourage the retention of Junior Doctors in the Irish healthcare system?