Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Dissertation

Post Foundation Training Careers Choices of Junior Doctors in NHS Wales: Investigating Motivational Drivers and Correlational Patterns.

Total Word Count: 15015 words

Submitted on 26/09/2025

Student: ***Pavlo Gladkyi***

Student Number: ***1918831***

Dissertation Supervisor: ***Dr Helen Lee***

Master of Business Administration – 2025/2026

Declaration & Statements

Declaration

This specific academic research in the form of a dissertation has not previously been accepted in substance for any degree. It is not being concurrently submitted as a candidature for any degree.

Signed: …… Pavlo Gladkyi (candidate)

Date: ……..26/09/2025…….

Statement 1

This dissertation is being submitted in partial fulfilment of the requirements for the Master of Business Administration degree.

Signed: …… Pavlo Gladkyi (candidate)

Date: ……..26/09/2025…….

Statement 2

This dissertation is the result of my own independent investigation, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

Signed: …… Pavlo Gladkyi (candidate)

Date: ……..26/09/2025…….

Statement 3

I hereby consent to my dissertation, if accepted, being available for photocopying and interlibrary loan and for the title and summary to be made available to outside organisations.

Signed: …… Pavlo Gladkyi (candidate)

Date: ……..26/09/2025…….

Statement 4

I hereby give consent for my dissertation, if accepted, to be available on the University of Wales Trinity Saint David's IT system to those who have consented to use the system.

Signed: …… Pavlo Gladkyi (candidate)

Date: ……..26/09/2025…….

Nota Bene

Candidates on whose behalf a bar on access has been approved by the University (see Note 1) should use the following version of Statement 2:

I hereby consent to my work, if accepted, being available for photocopying and inter-library loans after the expiry of a bar on access approved by the University.

Signed: …… Pavlo Gladkyi (candidate)

Date: ……..26/09/2025…….

Candidate's signature .....

Date .....26/09/2025.....

Notes

1. Provisions for Bars on Access to Higher Degree Dissertations

A student may request that a bar on photocopying and/or access to a dissertation may be put in place for a specified period of up to 5 years. Requests for a bar on access should normally be made in writing to the relevant Head of School immediately after the approval of the dissertation proposal. The title and summary of the dissertation should remain freely available.

2. Taught Master's Dissertation Archive

The University will keep a record of all dissertations successfully submitted for Part II of a taught Master's Degree. The record will include the student code, student name, the dissertation title and the mark awarded. The record will also include the title of the degree awarded and the year in which the award was conferred.

The University will keep one copy of each dissertation successfully submitted for Part II of a taught Master's Degree. Following the successful outcome of the relevant. Progression/Award Examining Board, a printed copy of the dissertation will be sent to the Library and Learning Resources for cataloguing and storage within the Library. Dissertations will subsequently be available for reference use only.

An electronic copy of any dissertation deposited in the National Library of Wales will also be deposited in the University's digital repository.

3. National Library of Wales

In the event that the dissertation meets the criteria for being deposited in the National Library of Wales, the candidate will be required to provide an additional copy that is permanent and hardback binding.

Dissertations are only deposited in the National Library of Wales if:

A. Deemed by the examiners to be of Distinction standard

or

B. if they are in the fields of Celtic Studies, Welsh or Welsh History;

or

C. if they do not meet either of the above criteria but are considered by the examiners to be of particular relevance to Wales.

Word Count Details

Chapter	Word Count
Introduction	2,460
Literature Review	4,832
Research Methods	3,531
Research Findings	3,287
Discussion	905
Total word count	**15,015**

Acknowledgements

Firstly, I want to sincerely thank my supervisor, Dr Helen Lee, for her professional support, constructive feedback, and encouragement throughout this dissertation. Her expertise has been truly invaluable in guiding the direction and academic quality of this work.

My special thanks also go to the UWTSD academic and administrative team for providing a conducive learning environment with all the necessary resources and consistent assistance throughout the MBA programme.

I am especially grateful to all the participants, resident doctors, trainers and BMA representatives who generously shared their time and insights to make this research possible.

I also wish to thank my wonderful fiancée, Olena, for her unwavering support, patience, motivation, and understanding, which have helped me balance research, work, PCET study, and family life.

Finally, I dedicate this dissertation to my family in Ukraine – my mother Olena and my sister Kate, who are my muses and role models. They have demonstrated stalwart resilience and courage in the face of hardships beyond imagination. Their immense fortitude has been a constant source of strength during these last three years, teaching me to appreciate the simple things I am privileged to have here in the UK, such as a peaceful sky.

Abstract

In Wales, the retention of junior doctors after foundational training has shown a disproportionate decline compared to the rest of the UK. Recent industrial actions driven by pay erosion and working conditions accentuate systemic flaws within NHS Wales and expose critical gaps in its workforce retention strategy. The organisation's limited responsiveness to junior doctors' professional needs and their essential motivational drivers negatively impacts service quality, workforce productivity, and patient safety.

This study investigates the motivational factors influencing junior doctors' career choices after foundation training in NHS Wales, examining links between experiences, motivations, and retention to provide evidence-based insights for future improvements and remedial actions. Adopting a mixed-methods approach within a pragmatic philosophy, the research combines a quantitative survey of 155 FY1–FY2 doctors with qualitative interviews involving 8 NHS Wales trainers and 2 BMA representatives. Quantitative data were analysed using descriptive statistics, Spearman's Rank-Order Correlation, and Chi-Square Tests of Independence, while qualitative data were explored through thematic analysis guided by Herzberg's Two-Factor Theory and Social Cognitive Career Theory.

Findings from the literature and empirical data indicated that FY1–FY2 doctors' career choices are mainly based on experience, influenced by training quality, interactions with trainers, and organisational culture. Along with their personal motives – which cannot be fully captured or measured with the analytical tools used due to the complexity of human behaviour – these experiences affect their decision to stay in or leave NHS Wales after their foundational training.

The study concludes that retention issues stem from structural inefficiencies, inconsistent training experiences, and limited organisational responsiveness to junior doctors' motivational drivers. Although theoretical frameworks such as Herzberg's Two-Factor Theory and SCCT are conceptually relevant, their effectiveness depends on active organisational implementation and alignment with workforce realities.

This dissertation recommends targeted interventions to address dissatisfaction areas like rota fairness, workload, and psychological safety, while also enhancing motivational drivers through mentorship, career development options, and structured professional support. Strategies that improve self-efficacy, clarify outcome expectations, reduce contextual barriers, and facilitate goal-oriented career planning are essential for boosting workforce retention and enhancing long-term NHS Wales performance.

Keywords: Herzberg's Two-Factor Theory; Social Cognitive Career Theory; Junior Doctors Career Choice; Motivational Drivers; NHS Wales

Table of Contents

Declaration & Statements ii
Declaration ii
Statement 1 ii
Statement 2 ii
Statement 3 ii
Statement 4 iii
Nota Bene iii
Notes iv
Word Count Details iv
Acknowledgements v
Abstract vi
Table of Contents vii
Abbreviations x
List of Figures xi
List of Tables xii
1. Chapter 1 – Introduction 1
1.1 Background of the Study 1
1.1.2 Current Situation in NHS UK 1
1.1.3 NHS Wales Organisational Structure 2
1.1.4 Stages of Medical Training and Professional Development in the UK 3
1.1.5 NHS Wales Performance Context 3
1.2 Research Focus 4
1.3 Overall Research Aim & Individual Research Objectives 5
1.4 Research Methods & Timescales 6
1.5 The Research Value 7
1.6 Dissertation Outline Structure 7
2. Chapter 2 – Literature Review 10
2.1 Introduction 10
2.2 Theoretical Framework of Motivation 10
2.2.1 The Concept of Motivation 10
2.2.2 Theoretical Approaches to Motivation 12
2.3 Reasons that Shape Career Choices of Junior Doctors in NHS Wales 16
2.4 Key Drivers of Junior Doctors' Motivation and Aspirations 18
2.5 Career Choices Impact on NHS Wales 21

2.6 Summary 23
3. Chapter 3 – Research Methods 24
3.1 Introduction 24
3.2 Research Philosophy 24
3.3 Research Approaches 25
3.4 Strategies & Methodological Choices 26
3.5 Time Horizons 27
3.6 Techniques and Procedures 27
3.6.1 Primary Data Collection 28
3.6.2 Secondary Data Collection 30
3.7 Sampling Strategy 30
3.8 Data Analysis 31
3.8.1 Quantitative Analysis 31
3.8.2 Qualitative Analysis 32
3.8.3 Data Integration 32
3.9 Research Limitations 32
3.9.1 Access and Recruitment Constraints 32
3.9.2 Reliability and Validity 32
3.9.3 Cross-Sectional Design Limitation 33
3.9.4 Theoretical and Analytical Framework Constraints 33
3.9.5 Ethical Restrictions and Data Sensitivity 33
3.9.6 Environmental and Temporal Pressures 34
4. Chapter 4 – Research Findings 35
4.1 Introduction 35
4.2 Qualitative Findings: The Voice of the Profession 35
4.2.1 Participant profile 35
4.2.2 Presentation of Themes 35
4.3 Quantitative Findings: Validating the Scale of the Issues 42
4.3.1 Descriptive Statistics and Sample Profile 42
4.3.2 Chi-Square Tests of Independence 42
4.3.3 Spearman's Rank-Order Correlation Matrix Analysis 43
5. Chapter 5 – Discussion 46
5.1 Introduction 46

5.2 RO 1: Identify the primary reasons and main drivers influencing junior doctors' career choices after foundation training in NHS Wales and understand their motivations, aspirations, and personal and professional priorities 46

5.3 RO 2: Analyse the impact of these career choices on the overall performance of the NHS Wales healthcare system 47

5.4 RO 3: Develop a deeper understanding of the factors that attract and retain junior doctors in NHS Wales to synthesise potential strategies to improve workforce planning and retention efforts 47

5.4.1 Conclusion and Recommendations 47

5.5 Self-Reflection 49

6. References 50

7. Appendices 67

Appendix A – NHS Wales Organisational Structure 67

Appendix B – Medical Training & Professional Development Path in the UK 68

Appendix C – Barriers to providing good patient care 69

Appendix D – Ethics Approval Form 70

Appendix E – Chi-Square Analysis Results 83

Appendix F – Online Survey Questionnaire 84

Appendix G – Interview Question Script 92

Appendix H – Survey Results 94

Appendix I – Interview Transcript 105

Appendix J – Self-Reflection 121

Abbreviations

BMA – British Medical Association

CCT – Certificate of Completion of Training

CT1 – CT2 – Core Training Year one and two

SAS – speciality doctors and specialist grade doctors with at least four years of postgraduate training.

ST – Speciality trainee in a hospital speciality

SpR – Speciality registrar in a hospital speciality

DHCW – Digital Health and Care Wales

DHSC – Department of Health and Social Care

FY1 – FY2 – Foundation year one and two junior (resident) doctor

GMC – General Medical Council

GP – General Practice

HEIW – Health Education and Improvement Wales

HSCEY – The Health, Social Care and Early Years Group

IMT1 – IMT3 – Internal Medicine Training

JCC – NHS Wales Joint Commissioning Committee

LHB – Local Health Board

MBBS – Medicinae Baccalaureus, Baccalaureus Chirurgiae (Latin)

MBChB – Medicinae Baccalaureus, Chirurgiae Baccalaureus (Latin)

NHS – National Health Service

NHSW Act 2006 – The National Health Service Act 2006

NMC – Nursing and Midwifery Council

NWSSP – NHS Wales Shared Services Partnership

WRDC – the Welsh Resident Doctors Committee (a representative body in Wales)

RCEM – The Royal College of Emergency Medicine

UKFPO – UK Foundation Programme Office

SoMEP – State of Medical Education and Practice

List of Figures

Figure 1: The proportion of UK Foundation (F2) doctors who entered speciality training directly after completing their foundation training between 2014 and 2023 ……... 2

Figure 2: Proportion of CT1/ST1 entrants taking a 1–3 Year break after FY2 between 2014 and 2023 ……..……..…...… 2

Figure 3: Dissertation Research Timescale …….…...…. 6

Figure 4: Basic Motivational Model ……...…….….. 11

Figure 5: Herzberg's Two-Factor Model……...…….…..…….. 13

Figure 6: Simplified representation of how career-related interests and choices develop over time according to SCCT ……. 15

Figure 7: Map of Wales – hospitals and health boards …….……. 17

Figure 8: Vicious Cycle Affecting Doctors ……..…….…. 18

Figure 9: Correlation between Three Extrinsic Factors and Doctors' Motivation …….. 19

Figure 10: Median Waiting Times for Referral to Treatment …….… 21

Figure 11: Treatable Mortality Rate ……...…….... 22

Figure 12: Research Onion …….... 25

List of Tables

Table 1: Comparison of Research Philosophies …….…. 26

Table 2: Summary of the Qualitative Interview Phase …….....…. 28

Table 3: Summary of Quantitative Survey Phase ……...…….…… 29

Table 4: Demographic Information of The Interview Respondents ....……..…. 36

Table 5: Mapping of Identified Themes to Herzberg's Two-Factor Theory and SCCT ….. 37

Table 6: Observed Frequency Counts for Perceived Workload – Intention to Stay ……... 42

Table 7: Expected Frequency Counts under the Null Hypothesis (Workload – Intention to Stay) ……..…….....…. 43

Table 8: Spearman's Rank-Order Correlation Matrix …….....… 44

Table 9: Recommendations for Improvements …… 48

1. Chapter 1 – Introduction

1.1 Background of the Study

1.1.2 Current Situation in NHS UK

Warrender (2025) posits that the UK's NHS faces turbulent times. Grace (2024, pp.69–95) suggests that the complexity of the problem stems from austerity reforms, segmentation, and privatisation, which are part of a long history of successive governments and their political decisions on how to manage the NHS's long-term strategic trajectory. Lock and Carrieri (2022a) express concerns about the NHS's succession planning strategy and the future-proofing of medical leadership and management development for an efficient and sustainable healthcare system that can meet increasing demand and address growing medical attrition, as well as the junior doctors' retention crisis. Indeed, a sustainable healthcare system cannot function adequately without well-supported, trained, resilient, and satisfied medical professionals (House of Commons, 2021).

The recent report on attrition costs in the UK's health services emphasises the urgency of prioritising doctors' retention in the NHS (BMA, 2024). For instance, between 2022 and 2023, NHS England alone permanently lost around 23,000 doctors (who left before reaching retirement age), incurring additional costs of approximately £2.4 billion for NHS employers and the public purse to replace headcounts and cover Administrative, Replacement, Productivity, and Training expenses.

The cost of training a single doctor in the UK, from the start of medical school to becoming a consultant, exceeds £584,000 (including undergraduate medical education and postgraduate training) (Jones et al., 2023). Despite this significant expenditure, the NHS is experiencing a decline in staff retention rates, with a considerable number of doctors leaving the NHS UK at the end of postgraduate foundation training (GMC, 2024b).

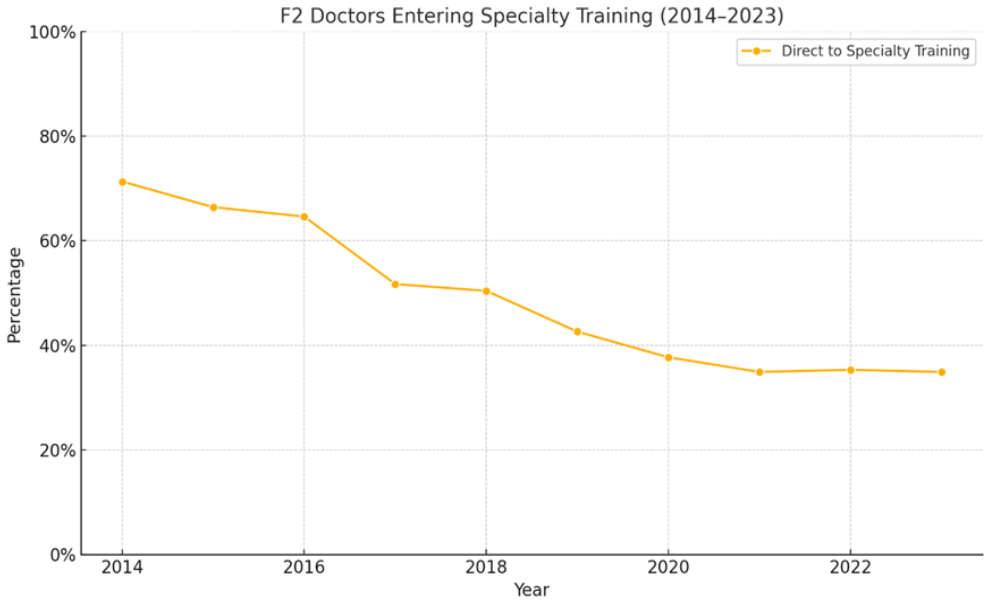
The Workforce Report 2024 highlights a concerning pattern of disengagement among junior doctors in the UK, where, in 2011, 71.3% of Foundation Programme graduates progressed directly into speciality training within the NHS UK (SoMEP, 2024a). This figure has declined steadily over subsequent years (see Figure 1), falling to 50.4% in 2016, 42.6% in 2017, 37.7% in 2018, and just 34.9% by 2022 (Armitage, 2023).

Moreover, between 2014 and 2023, 41% to 51% of CT1/ST1 entrants took a one to three-year break after FY2 before resuming postgraduate training (see Figure 2). The share of foundation doctors leaving UK practice has grown, with many seeking jobs abroad or switching to non-clinical roles (SoMEP, 2024b).

These trends appear in all four UK nations. However, this research investigates the NHS Wales, analysing junior doctors' post-foundational training career choices and motivations. Their career decisions significantly influence NHS Wales's staffing and patient outcomes.

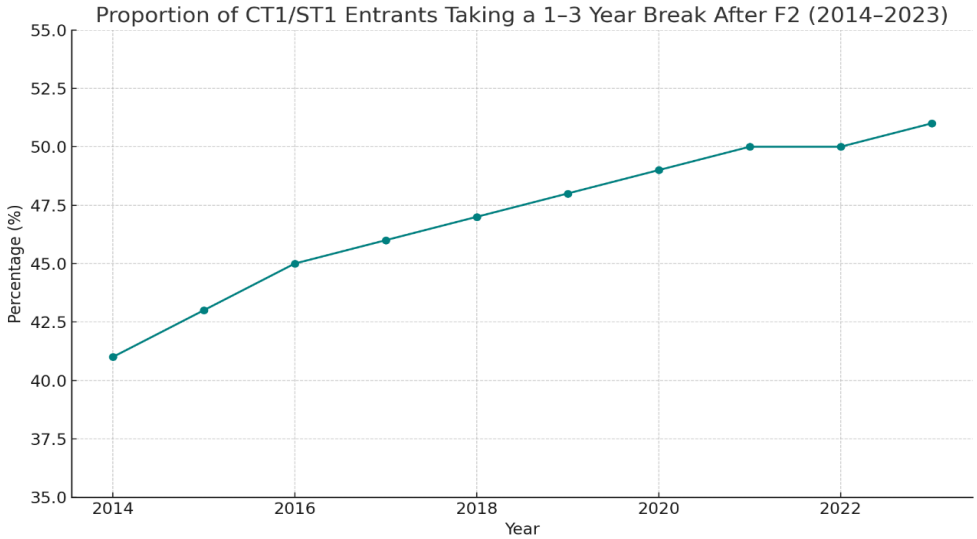
Given the research topic, it is important to provide key information as a preface, expanding on NHS Wales's structure, performance, and doctors' training and development pathways in the UK.

Figure 1: The proportion of UK Foundation (F2) doctors who entered speciality training directly after completing their foundation training between 2014 and 2023



Source: (SoMEP, 2024c)

Figure 2: Proportion of CT1/ST1 entrants taking a 1–3 Year break after FY2 between 2014 and 2023



Source: (SoMEP, 2024c)

1.1.3 NHS Wales Organisational Structure

Since 1999, the National Assembly for Wales has had devolved authority over Welsh health services (NHS Confederation, 2024). While all four nations follow NHS principles, NHS Wales has a complex, multilayered structure (see Appendix A), different funding, and strategic priorities (Shuttleworth and Nicholson, 2020). The UK has a unified medical registration system, allowing GMC-registered doctors to practise across all four nations (GMC, 2025). However, salary and conditions may vary by location or employment (GOV.UK, 2025).

1.1.4 Stages of Medical Training and Professional Development in the UK

Addressing succession planning and retention for junior doctors requires recognising their strategic role within the NHS UK. They are the "working horse of the NHS" and the second-largest group of medical staff after nurses (Campbell, 2023). They handle numerous tasks and often serve as the first point of contact, connecting nurses, CTs, STs, SpRs, SASs, and consultants while gaining essential professional skills (Ajaz, 2024).

Appendix B shows that Postgraduate Foundation Training is a key transition from graduate to independent doctor. During this period, NHS UK (de facto a monopsony employer) provides on-the-job training, clinical experience, and exam preparation under the supervision of senior consultants (NHS, 2015). After the first Foundation Year, junior doctors can apply for GMC registration, practice independently and advance in their chosen speciality (GMC, 2024a). Hence, foundational training bridges the gap between medical school and speciality training. These two years are pivotal in junior doctors' exposure to the medical profession and in their decision-making regarding whether to stay or leave the profession, which will ultimately affect the NHS's workforce planning strategies.

The term 'junior' doctor was changed to 'resident' in August 2024, but remains informal within the NHS (British Medical Association, 2024a). **It refers to any doctor, whether in training or not, below the consultant level. This research uses the term specifically when describing foundation training doctors (FY1–FY2), the focus of interest.**

1.1.5 NHS Wales Performance Context

Comparative analyses of the four UK nations reveal that NHS Wales faces systemic challenges in workforce planning, training, and retention of junior doctors (Bevan et al., 2014). Demand for healthcare services is rising due to an ageing population, increasing immigration, and a higher prevalence of chronic disease. This increased demand and workforce shortages undermine service quality and patient safety (Welsh Government, 2024).

Despite legislative reforms aimed at integrating health and social care, inconsistent standardisation across local authorities, health boards, and voluntary sector partners has led to operational fragmentation, hindering service delivery and workforce coordination (Bebb & Bryer, 2020). Moreover, governance weaknesses – characterised by poor leadership and short-term managerial appointments – have eroded organisational stability and staff morale (OECD, 2016).

Another constraint is the Integrated Medium-Term Plan, a three-year financial cycle that prioritises short-term targets over strategic workforce development (Brown, 2024). Furthermore, underinvestment, ageing staff, limited training opportunities, and rising burnout continue to impede NHS Wales's adaptability and post-COVID-19 recovery (Welsh Government, 2023).

Audit Wales (2025) highlights persistent and systemic challenges affecting the progression and retention of junior doctors in Wales. Notwithstanding substantial investment in training (NHS Wales staff pay costs increased by 62%: from £3.23 billion in 2017–2018 to £5.23 billion in 2023–2024), the retention of Welsh-trained doctors remains comparatively low. Of the 8,180 Welsh-trained doctors registered with the GMC, only 42.8% (3,505) continue to practise in

Wales, significantly lower than retention rates in England (94%), Scotland (61%), and Northern Ireland (76%) (GMC, 2023).

1.2 Research Focus

Rees and Aitken (2023) revealed that resident doctors in the UK have experienced a 29.6% real-term pay reduction over the last 15 years due to the pay-inflation discrepancy. This decline stems from the impact of inflation combined with pay increases that have consistently fallen below inflation rates since 2008 (Gammie, 2023). According to the British Medical Association (2024b), this pay erosion affects doctors' financial security and poses considerable challenges in attracting and retaining medical staff within the NHS (especially NHS Wales, due to the smaller regional salary gap between the four nations).

The recent junior doctors' strikes in Wales, related to the issues of pay restoration and improvements in working conditions, have highlighted the severity of the problem (Murphy, 2024). After rejecting the Welsh government's pay offer of 5%, which was below inflation and the least generous among all UK nations, approximately 3,000 junior doctors went on a 7-day strike (Rees and Pigott, 2024). This strike resulted in an estimated loss of £11 million for NHS Wales and caused significant disruptions to health services, including the cancellation of appointments and non-emergency procedures (Rees, 2024). Despite agreeing to a cumulative pay uplift between 20.9% and 22.8% over the next two years, achieving complete pay restoration remains the top priority for the WRDC, as the Welsh government's pay increase actions remain insufficient to bridge the gap between the junior doctors' salaries and ongoing inflation rates (British Medical Association, 2025).

Although the tangible decrease in real-term earnings has been one of the central claims behind recent industrial actions of resident doctors in Wales, there are some arguments among academics and business scholars about whether monetary reward is the primary motivation for employees' job satisfaction and high retention (Javid and Chapa, 2014). For instance, De Jong et al. (2025) argue that simple financial incentives are insufficient to attract and retain medical professionals, such as junior doctors, as they are primarily driven by intrinsic motivation – a desire to help others. Similarly, the industry-related study of Pathmanathan and Snelling (2023a) showed that doctors leave the medical profession mainly because of factors that hinder them from delivering the level of patient care they aspire to provide.

Lock and Carrieri (2022b) note that various interdependent variables influence junior doctors' career decisions, including personal motivations, professional aspirations, concerns about work-life balance, and financial considerations. These factors can lead to a vast range of career choices, such as pursuing higher specialist training or opting for alternative careers within or outside of medicine (Dichoso, 2024).

From an industry perspective, the complex relationship between various motivational factors beyond monetary reward is evident in the summary of the National Training Survey results, which emphasise changes in the working environment and expectations contributing to resident doctors' career decisions and, consequently, to the retention problem (General Medical Council, 2024a).

For instance, the recent report highlights that 52% of resident doctors in the UK experience emotional exhaustion, and 21% are at high risk of burnout, demonstrating how excessive workload and compromised well-being influence career decisions. In addition, only 63% of

respondents reported having opportunities to develop leadership skills, a figure that has declined steadily from 69% in 2022. Alarmingly, 56% of resident doctors reported having no support from a mentor, indicating a substantial gap in career guidance during this formative stage. These non-monetary concerns, alongside persistent issues of the inconsiderate rota design, limited recognition for effort, and experiences of discrimination or exclusion, create working environments in which doctors feel unsupported and undervalued. Given these results, it is possible to assume that such working conditions directly contribute to increased attrition rates and a growing reluctance to progress immediately into speciality training.

Although some studies and national reports have examined factors influencing junior doctors' career choices across the UK medical landscape, only a few of these studies investigate junior doctors' motivations within the Welsh context from a business management and organisational theory framework perspective (Figueroa et al., 2019).

It is essential to identify and analyse the factors that influence the career-related decisions of resident doctors in Wales after the foundational training period, as they have already been exposed to the realities of clinical practice and can share their experiences, allowing an understanding of the correlation between motivations and dissatisfactions that affect their decision to either remain or leave the NHS Wales.

1.3 Overall Research Aim & Individual Research Objectives

The research examines the factors influencing the career choices of junior doctors in NHS Wales after completing their two-year Foundation Training. Specifically, the study investigates the intrinsic and extrinsic factors that influence their career decisions and analyses how mediating variables, such as personal aspirations, professional experiences during foundational training, and individual priorities, impact their long-term career trajectories.

To meet this aim, the research will focus on the following objectives:

1. ***Identify the primary reasons and main drivers influencing junior doctors' career choices after foundation training in NHS Wales and understand their motivations, aspirations, and personal and professional priorities.***

2. ***Analyse the impact of these career choices on the overall performance of the NHS Wales healthcare system.***

3. ***Develop a deeper understanding of the factors that attract and retain junior doctors in NHS Wales to synthesise potential strategies to improve workforce planning and retention efforts.***

Based on the outlined objectives, the study strives to answer the following research question:

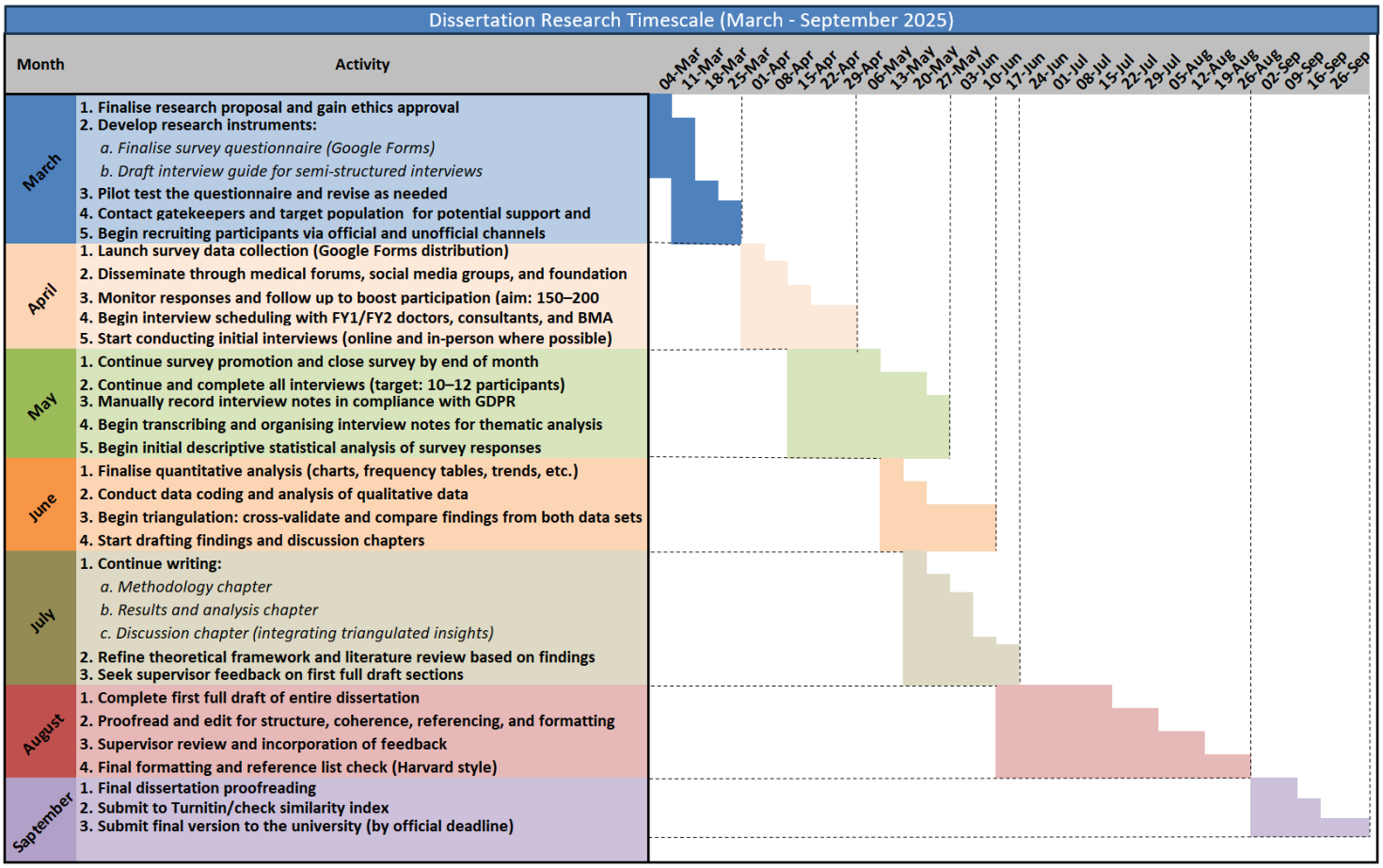
What primary motivation factors drive the career choices of FY1–FY2 junior doctors in Wales after completing the foundation training programme, and how can these factors be mitigated?

1.4 Research Methods & Timescales

This research employs a triangulation approach, involving the cross-validation of data from both primary and secondary research methodologies, to enhance the study's academic validity and reliability, thereby supporting a focused and nuanced investigation (Briggs and Coleman, 2012).

The study collects primary data through surveys with FY1-FY2 (quantitative, numerical) and interviews (qualitative, non-numerical) with their trainers and BMA representatives. It is complemented by an extensive review of relevant existing literature as a secondary data source (peer-reviewed medical journals and organisational management literature relating to workplace experiences, job satisfaction, and the quality of foundational training).

Figure 3: Dissertation Research Timescale



Source: Researcher's creation

The target population includes FY1 and FY2 junior doctors in Wales who are willing to participate in this survey, their trainers, and BMA representatives who have agreed to be interviewed.

This research does not aim to produce groundbreaking findings that challenge existing medical and business management studies related to the NHS UK crisis. Instead, it seeks to deepen understanding of the factors affecting resident doctors in Wales by contextualising the current situation through primary and secondary data collection, thereby clarifying the root causes of the issue.

Figure 3 outlines the research activities along with their expected durations, illustrating a timescale spanning six months, from research initiation to dissertation submission. However, it does not specify the research methodology or strategy. Chapter 3 – Research Methods provides a comprehensive overview of the selected research strategy and explains the data collection methods used to gather empirical evidence.

1.5 The Research Value

The experiences of FY1/FY2 resident doctors are of significant academic and practical importance. Gaining insight into their intrinsic and extrinsic motivations can enable more targeted support during this critical phase of professional development. A deeper understanding of their foundation training experiences is also essential for Welsh health boards, as these doctors are potential future contributors to the NHS Wales workforce. Supporting their retention may help NHS Wales reduce consultant shortages (especially in Emergency Medicine and Critical Care Medicine) and mitigate the risk of burnout caused by understaffed shifts and increasing workloads (RCEM Wales, 2023).

The urgency of this investigation is amplified by the lack of research examining junior doctors' career decisions from a business management perspective, as identified by Lock and Carrieri (2022c). By investigating the challenges these doctors face, including increased burnout and lack of support, this study contributes to a broader understanding of workforce instability and attrition within HNS Wales, the reasons behind career breaks, and the outflow of trained professionals from the UK. It also raises awareness among healthcare leaders and policymakers about potential threats to the future availability and quality of patient care in Wales.

This study provides valuable insights into the factors that influence early-career decisions and aims to produce original, context-specific findings on the post-foundation career choices of junior doctors in NHS Wales. It addresses a current knowledge gap and offers evidence-based recommendations to improve resident doctor retention and job satisfaction.

1.6 Dissertation Outline Structure

Chapter 1 – Introduction	This chapter provides background information on the medical profession and its ethical foundations, followed by a discussion of current workforce challenges within NHS Wales. It explains the challenge of recruiting resident doctors and their declining retention, focusing on issues such as pay erosion, burnout, and limited training opportunities, supported by recent data and literature. The rationale for examining the career decisions of FY1–FY2 doctors after postgraduate foundation training is outlined, positioning the research within an investigation of their motivational drivers through the lens of business management theory, while addressing a gap in existing medical and organisational studies. The research focus is clearly defined and justified, with the central research aim and supporting objectives presented. A triangulation approach is introduced as the core methodological framework, accompanied by a six-month research timescale. The chapter emphasises the study's academic and practical value in improving junior doctors' experiences and supporting retention efforts within NHS Wales.

Chapter 2 – Literature Review

This chapter critically explores the theoretical and empirical foundations underpinning junior doctors' post-foundation career decisions in NHS Wales. It begins by defining motivation and examining key organisational theories, including Herzberg's Two-Factor Theory and SCCT, to understand what drives early-career medical professionals.

The chapter then investigates the systemic and region-specific factors that influence junior doctors' career choices, including rota gaps, burnout, and limited training opportunities. It highlights structural challenges within NHS Wales, including underinvestment, regional disparities, and increasing reliance on agency staff. Recent statistical trends and key performance indicators are analysed to show how career decisions impact service provision, workforce stability, and patient outcomes.

Motivational drivers – both intrinsic and extrinsic – are identified and linked to the broader workforce crisis. The chapter concludes by identifying a gap in the literature: the lack of research examining junior doctor retention in Wales through a business and organisational lens. This points to the need for primary data collection to inform context-specific solutions.

Chapter 3 – Research Methods

This chapter outlines the methodological framework used to investigate the career choices of FY1 and FY2 doctors in NHS Wales after completing foundation training. Building on the theoretical foundations and literature gaps identified in Chapter 2, this chapter explains how primary data were collected and analysed to investigate the motivational factors shaping junior doctors' decisions.

Adopting the Research Onion Model, the chapter begins by presenting the research philosophy and justifying the adoption of a mixed-methods design. It introduces the concurrent analytical strategy, where both quantitative and qualitative data are analysed in parallel. The quantitative component, based on structured survey responses, is analysed using Spearman's rank-order correlation and Chi-Square Analysis to identify associations between key motivational variables and career intentions. The qualitative component, derived from interviews with BMA representatives and trainers, is examined using a structured analytical matrix aligned with Herzberg's Two-Factor Theory and SCCT, allowing for both predefined and emergent themes.

Sampling methods and the use of a cross-sectional time horizon, aligned with the six-month research plan, are also discussed. By integrating statistical patterns with contextual insights, this chapter establishes a foundation for a triangulated understanding of the factors influencing junior doctors' career decisions in NHS Wales.

Chapter 4 – Data Analysis

This chapter presents and critically interprets the primary findings from both qualitative interviews and quantitative survey data. It explores the motivational and systemic factors influencing the career decisions of FY1–FY2 doctors in NHS Wales. The qualitative data, derived from semi-structured interviews with trainers and BMA representatives, were analysed thematically through the lens of Herzberg's Two-Factor SCCT. Seven themes emerged, covering foundation training experience, work-life balance, mentorship, supervision quality, career progression clarity, peer attrition, and recommended changes.

Quantitative analysis involved Spearman's Rank-Order Correlation and Chi-Square Tests to explore associations between career intentions and key workplace factors such as workload, training satisfaction, and organisational culture. While statistical significance was limited, conceptual alignment with the theoretical framework was strong, especially when triangulated with qualitative insights. Together, these findings highlight that junior doctors' retention is shaped less by singular measurable factors and more by complex experiential and contextual variables.

Chapter 5 – Conclusions

This final chapter critically discusses the research findings in relation to the original research objectives and theoretical frameworks. It synthesises the key motivational, structural, and organisational challenges identified in Chapters 2 and 4, confirming that FY1–FY2 doctors' career choices are primarily experiential and shaped by contextual factors such as training quality, autonomy, and institutional support.

Despite the weak statistical correlations, triangulated evidence supports the conceptual relevance of Herzberg's motivators and hygiene factors, and SCCT elements like self-efficacy, outcome expectations, and contextual supports. The chapter concludes by outlining targeted recommendations to address dissatisfaction and strengthen career satisfaction, including fairer rota systems, improved mentoring, and clearer career progression. It also presents a summary recommendations table and includes a self-reflection on the research journey.

2. Chapter 2 – Literature Review

2.1 Introduction

Chapter 1 contextualised this research and established three objectives. Chapter 2 – The Literature Review – provides a theoretical foundation for the study by reviewing the existing academic, medical and business management literature sources, comparing different viewpoints and facts through an impartial critical evaluation, thus preparing the necessary groundwork ahead of gaining the insights from the junior doctors' surveys and interviews outlined in the research objectives.

Firstly, to create a structured discussion, a sensible starting point is to define and explore the concept of motivation through the lens of Herzberg's Two-Factor Theory and Social Cognitive Career Theory (SCCT). This is followed by an analysis of the causes of junior doctors' retention issues and their impact on NHS Wales service delivery, with particular attention to the rising trends in workforce burnout statistics.

Recent NHS Wales key performance indicators (KPIs), including physician-to-population ratios, waiting times, and mortality rates, are used to analyse how the low retention of FY1–FY2 doctors relates to these metrics, providing clarity on the current situation.

2.2 Theoretical Framework of Motivation

2.2.1 The Concept of Motivation

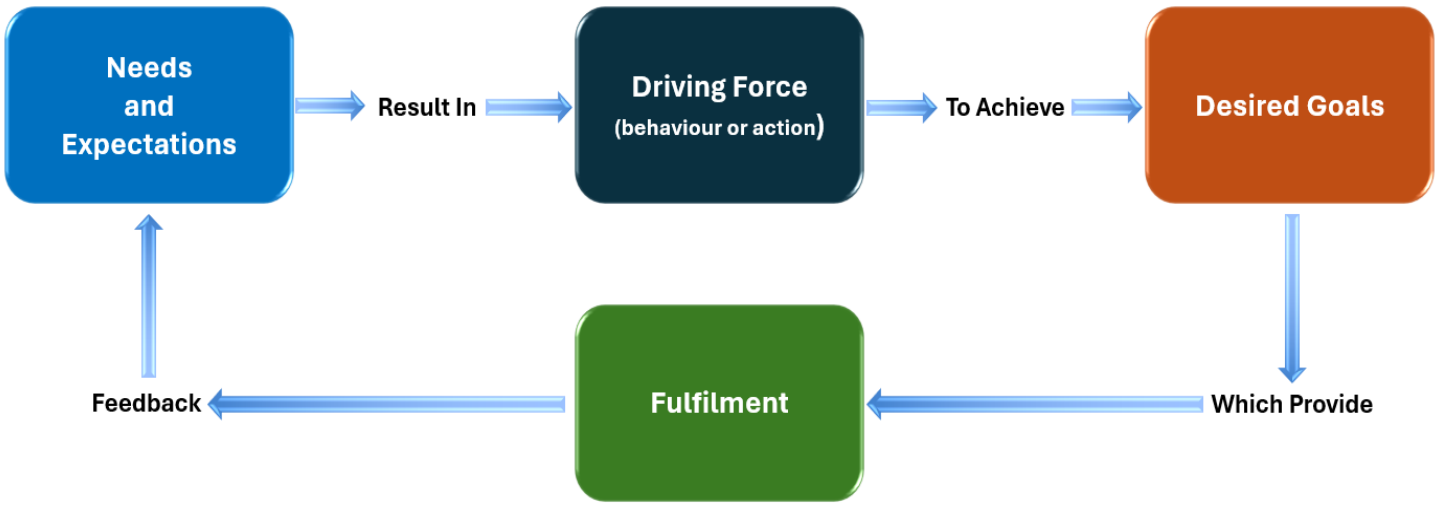
Motivation is one of the most extensively studied constructs of people's behaviour and their responses to external and internal contexts – their interactions with the environment and themselves. People's perception of reality and the influence of different factors shape the strength and direction of their actions, commitment, and engagement with others and the organisation. Armstrong defines motivation as an inner-focused impetus, motive, or reason that alters a person's behaviour pattern (Armstrong and Taylor, 2023, pp.194–196). Similarly, Mullins (2011, pp.184–192) suggests that motivation is the intentional and purposeful effort of the individual to engage in a focused choice of actions in response to external inducement forces. Motivation correlates with individual needs and the likelihood of attaining the expected outcome, valued reward or desired goals.

A particular strength of these definitions lies in their consideration of motivation as an inner energy that fulfils personal ambitions and organisational objectives through goal-directed behaviour, an interplay of internal desires and external pressure – a 'compromise' that a person may accept under certain conditions when their needs are met, and expectations and reality are in balance.

Figure 4 illustrates a basic motivational model that explains the concept of motivation.

Although the model provides a helpful visualisation of the interconnected components, it does not clarify how employees' ability levels, rewards, and motivation relate to individual performance or address how external, uncontrollable factors influence the achievement of their desired goals. Nonetheless, the model emphasises the central importance of employees' needs and expectations in the circular relationship between focused actions, desired goals, and rewards.

Figure 4: Basic Motivational Model



Source: (Mullins, 2006)

The individual needs and expectations in the workplace can be categorised into intrinsic and extrinsic (Vo, Tuliao and Chen, 2022). According to Sarasa (2024), contemporary organisations and businesses employ various structured motivational strategies to address both intrinsic and extrinsic needs, thereby incentivising employee commitment and enhancing workplace morale and employee satisfaction. Muir and Dörnyei (2013) argue that the complex and dynamic nature of human motivation presents a considerable challenge for organisational leadership and management in today's fast-paced business environment, and cannot be deemed static or simplified to a linear cause-and-effect relationship.

Indeed, motivation is highly circumstantial and evolves over time, influenced by personal priorities, professional ambitions, work environment and shifts in organisational culture. Therefore, agile organisations must continuously monitor workforce motivations through planned and well-designed interventions, aligning employees' needs and expectations with the business's strategic objectives to stay profitable and competitive while maintaining a highly productive and satisfied workforce (Conlin, 2019).

This strategic alignment is crucial to NHS Wales's adaptability in the continually evolving operational environment. The initial steps towards an agile organisational model demonstrate NHS Wales's commitment to resolving existing problems to provide sustainable, effective, and efficient patient care (NHS Wales, 2020). However, the motivations behind junior doctors' career decisions (taking a career break after FY2 or progressing to speciality training), as shown in the UK national F2 Career Destinations Survey Report, may present a threat to service continuity, quality and succession planning (UK Foundation Programme, 2020b).

Undoubtedly, well-motivated, inspired, and driven healthcare professionals are more resilient, adaptable to adversity, and change-oriented – qualities that support organisational transformation, reduce absenteeism, and mitigate the financial costs associated with staff turnover (Schooley, 2024). Therefore, it can be said that motivation is considered one of the key strategic components in overcoming the worrying statistics of junior doctors' low progression to speciality training after completing the second year. Understanding how motivation functions specifically within the medical profession can help identify and deploy

the needed incentives and preventive actions to save the capacities of the HNS Wales workforce.

2.2.2 Theoretical Approaches to Motivation

Many theorists have attempted to explain the nature of motivation from various perspectives, ranging from economically driven models, where high wages are considered the primary incentive for productivity and employee satisfaction, to more nuanced approaches that emphasise complex psychological rewards and the fulfilment of the psychological contract beyond mere financial compensation (Reeve, 2018, p.120-140). That said, as widely accepted in psychology and management, motivation theories aim to understand and predict individual behaviour to develop effective motivational strategies, improve job satisfaction, retention, and productivity, and support employee well-being in demanding professional contexts. Hence, in the context of junior doctors, they can help to identify and mitigate dissatisfiers that influence frustration and withdrawal.

Herzberg's Two-Factor Theory

Herzberg's Two-Factor Theory, developed in 1966, is arguably one of the widely recognised and applied content theory frameworks in organisational psychology, with evidence of continuing relevance for today's workplace (Bennett, 2019, p.70-110). In essence, this theory suggests that a high-quality work life enhances employee performance, which subsequently leads to increased job satisfaction. Thus, this implies that the work environment and employment conditions play a critical role in shaping employee motivation.

Frederick Herzberg's critical incident method identified two distinct sets of factors: 'hygiene' and 'motivators' that affect employees' feelings of job satisfaction or dissatisfaction (Herzberg et al., 1957). Additionally, Herzberg theorised that satisfaction and dissatisfaction should be viewed as independent phenomena rather than opposite ends of the same continuum (Barr and Dowding, 2022, p.45-70).

According to Nickerson (2025), hygiene factors are extrinsic and context-related to the job environment; they do not necessarily motivate but can prevent dissatisfaction when fulfilled. In contrast, motivating factors are intrinsic and relate to the job content; they are basic satisfiers that affect the level of satisfaction but not dissatisfaction.

Figure 5 demonstrates the components of Herzberg's Two-Factor Theory and their functional interplay in a simplified manner.

Following Herzberg's theory, monetary reward is not a primary motivator but rather a hygiene factor that supports motivation. Peluso, Innocenti, and Pilati (2017) argue that monetary rewards can cause dissatisfaction when they are insufficient or perceived as unfair. Conversely, Aguinis, Joo, and Gottfredson (2013) argue that merely offering a monetary reward does not produce lasting effects on job satisfaction.

For example, the recent junior doctors' strikes in Wales over salary erosion and improved working conditions, as documented by Ireland (2024), demonstrate the relevance of Herzberg's Two-Factor Theory in medicine. Both industrial action demands are significant hygiene factors that influence motivation and job satisfaction.

Figure 5: Herzberg's Two-Factor Model

Source: Author's creation

Furthermore, research into the individual and organisational factors behind the lack of motivation among doctors and its root causes has shown that work-related stress, often caused by inadequate staffing levels, ongoing structural reforms, and unsupportive organisational policies, significantly undermines staff well-being and job satisfaction, negatively affecting patient care and staff attendance (Ogbeivor, 2021). These findings align closely with Herzberg's Two-Factor Theory, suggesting that the absence of key hygiene factors, such as fair pay, adequate workloads, fair policies, and supportive environments, can lead to chronic dissatisfaction, increased absenteeism, burnout, and resignations.

In contrast, Herzberg's theory is often criticised for its seemingly retrospective and biased methodological limitations, oversimplification, and ambiguous classification of satisfaction and dissatisfaction factors, which do not always consider individual differences (King, 1970).

Similarly, Malik and Naeem (2013) state that some factors, such as salary, recognition, or working conditions, may fall into both categories, depending on how they are experienced or perceived by individual employees. The assumption that satisfaction and dissatisfaction are entirely independent constructs could be questioned, as in practice, they often coexist and influence each other (Yean et al., 2022). Other factors such as age, cultural background, gender, and career stage may also significantly shape what motivates or demotivates an employee, further complicating a binary interpretation (Shaban, 2016).

Despite these objections, Herzberg's motivational model remains relevant and applicable within the medical industry, particularly considering ongoing pay erosion, staffing issues, and improvements in working conditions. Matthews (2024) reports that junior doctors in Wales have clearly expressed dissatisfaction with key hygiene and motivational factors, including work-related stress, excessive workloads, perceived undervaluation, inadequate resources, limited career advancement opportunities, and pay inequity. Moreover, as a research sample, junior doctors represent a relatively homogenous group in terms of education level, age, career stage, and workplace exposure (The Wales Deanery for the Health and Social Care Committee, 2013). This demographic coherence and the clear identification of hygiene and motivating factors mitigate some of Herzberg's known limitations by reducing variance in motivational perceptions and enabling a more consistent interpretation of junior doctors' behavioural patterns. Also, extending Herzberg's model through integration with a complementary framework, such as Social Cognitive Career Theory (SCCT), offers greater analytical depth in explaining their career decision-making processes.

Social Cognitive Career Theory (SCCT)

According to Tierney, Rizvi, and Ercikan (2022, pp. 370–381), SCCT, formulated by Lent, Brown, and Hackett in 1994, is the earliest theory applied to navigating the complexities of forming aspirations in professional development pathways and career choices. It provides a contemporary framework for understanding how employees develop and act upon their career interests and goals. This theory suggests that beliefs related to self-efficacy, outcome expectations, and goal orientations influence career decisions. Rooted in Bandura's Social Cognitive Theory (CST), SCCT emphasises the dynamic interaction between personal factors, environmental factors, and behaviour, narrowing the Reciprocal Determinism of CST to apply in the workplace environment and individual career development (Lent et al., 2017).

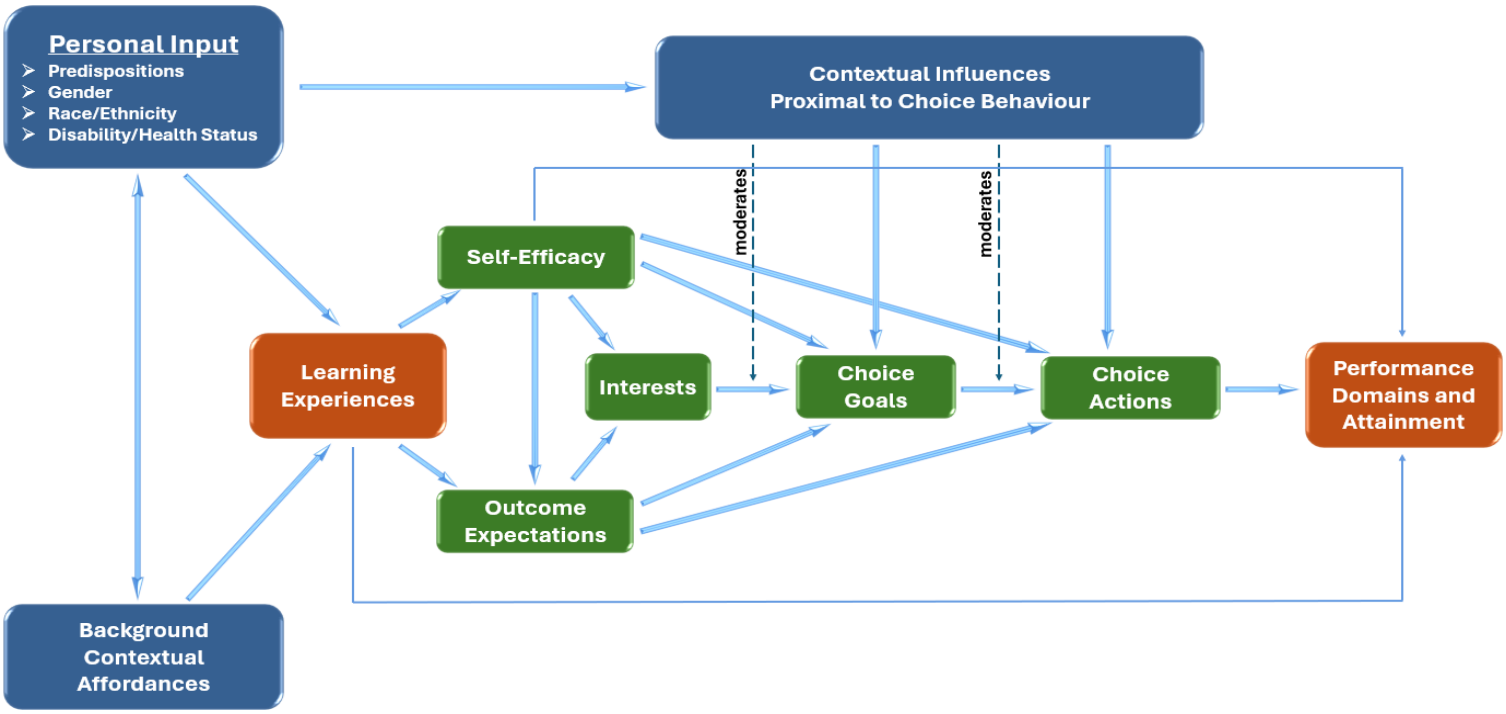
Brown and Lent (2023) explain that, unlike traditional career models, which prioritise personality traits or external conditions in isolation, SCCT recognises that individuals form career intentions based on their confidence in their abilities, expectations of outcomes, and the enabling or limiting conditions within their environment. Therefore, this framework is especially relevant in high-pressure professional settings, such as healthcare, where organisational support, workload expectations, access to mentoring, and clarity of career pathways can greatly influence junior doctors' motivation, resilience, and long-term professional commitment.

Figure 6 represents a simplified model of career choice development based on the SCCT theory.

In the context of NHS Wales, Self-Efficacy refers to junior doctors' confidence in their ability to successfully pursue speciality training without career breaks or delays, confidently manage clinical responsibilities, or transition into alternative career paths. Therefore, their early clinical experiences, supervisor support and feedback, exam outcomes, and exposure to different roles influence this self-belief during Foundation Years 1 and 2.

Following the SCCT model, limited mentoring, high stress levels, or feelings of professional undervaluation may weaken self-efficacy, causing some junior doctors to postpone speciality training or leave NHS Wales altogether.

Figure 6: Simplified representation of how career-related interests and choices develop over time according to SCCT



Source: (Lent, Brown and Hackett, 1994)

Lent, Hackett and Brown (2008, pp. 1628–1631) explain that Outcome Expectations involve beliefs about the consequences of pursuing career options. For example, if junior doctors believe that remaining within NHS Wales will lead to persistent burnout, limited career progression, or poor work-life balance, their likelihood of committing to long-term careers within NHS Wales decreases. Conversely, where doctors see clear pathways, supportive work environments, and meaningful development opportunities, they are more likely to engage with structured training routes.

The third component, Personal Goals, reflects an individual's intentions and plans. Following the same logic, these may include the seamless continuation of professional development within HNS Wales, achieving a healthy work-life balance, or relocating abroad for better opportunities. Therefore, acting on these goals depends on personal ambition, contextual supports, and barriers, such as the adequacy of rotation planning, the availability of speciality training posts in NHS Wales, or institutional flexibility in supporting personal circumstances.

Additionally, SCCT also recognises the influence of environmental factors, both distal (e.g., NHS Wales policies, workforce planning) and proximal (e.g., immediate team dynamics, staff shortages, workload pressures). According to Bandura (1986, pp.134–150), distal factors shape early self-efficacy and outcome expectations, often deriving from an individual's background, personal beliefs, and exposure to organisational values or leadership role models that influence confidence in successful outcomes. Proximal factors, on the other hand, directly impact career decisions through immediate experiences, experience-based knowledge, and contextual realities encountered during the decision-making process.

For example, positive role models within the clinical environment are high-ranking physicians who offer observational learning, inspiration, and a clear example of success in a specific profession or career path. Acting as gatekeepers of professional norms, they influence junior doctors' self-efficacy, career aspirations, and outcome expectations through their behaviour, achievements, and mentorship – a lead-by-example principle that sets the standard for leadership roles within NHS Wales. Conversely, the absence of supportive mentors and sponsors may lead to uncertainty and demotivation among junior doctors (Chua et al., 2024). Additionally, systemic issues within NHS Wales (such as staffing shortages, underinvestment, and a perceived lack of strategic workforce support), as highlighted by the Auditor General for Wales (2025), may act as contextual barriers, affecting junior doctors' career decisions and leading to attrition.

Although SCCT is valuable for exploring cognitive and motivational aspects of career development, it has been criticised for its limited focus on structural constraints, emotional and organisational cultural factors, and longitudinal progression (Lent and Brown, 2008). Given these limitations, it is important to complement SCCT with Herzberg's Two-Factor Theory, which can address some contextual elements and offer a holistic view of junior doctors' retention experiences. While Herzberg's model emphasises the structural conditions that contribute to satisfaction or dissatisfaction, SCCT explains how these conditions interact with personal agency, confidence in abilities, and perceived career control. Together, these theories provide a more comprehensive framework for understanding junior doctors' career motivations and the systemic factors that can support or impede their professional progression within NHS Wales.

2.3 Reasons that Shape Career Choices of Junior Doctors in NHS Wales

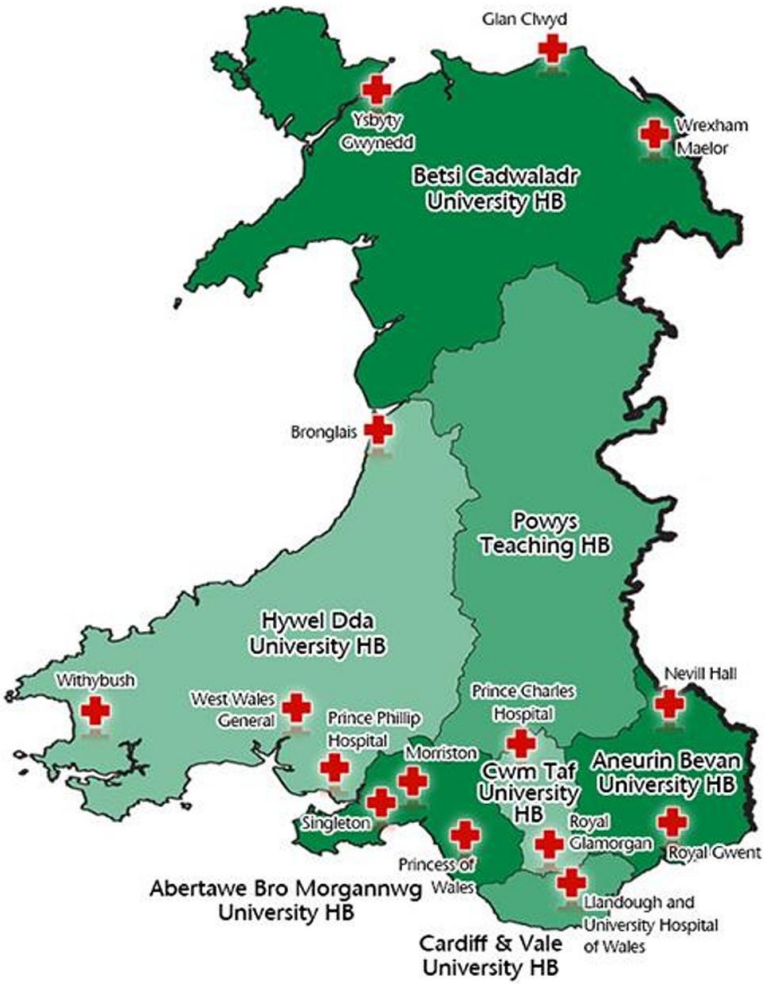
Morgan (2020, pp.27–217) highlights a significant misalignment between workforce supply and long-term retention strategies in NHS Wales. This is especially concerning in the context of ongoing systemic issues, such as pay erosion, delayed training progression, digital underdevelopment, and poor work environments, which may lead to dissatisfaction and attrition among junior doctors. The combined pressure on newly qualified doctors, particularly those moving from Foundation Year 2 into Core or Speciality Training, is considerable and could worsen disengagement, foster career indecision, or encourage decisions to leave NHS Wales entirely. Without comprehensive measures to tackle these problems, NHS Wales risks further depletion of its early-career medical workforce, which could compromise future consultant pipelines and sustainable healthcare provision. The Welsh Government and HEIW have made significant efforts to improve support for doctors in training (Social Care Wales, 2024). Nonetheless, the statistical trends point to an ongoing gap between the number of trained medical graduates and those committing to long-term careers within NHS Wales (General Medical Council, 2024b).

Besides national-level factors, region-specific challenges significantly influence the career choices of junior doctors within NHS Wales. RCP Wales (2022) highlights ongoing difficulties in attracting and retaining doctors in North Wales, where in 2022, only 57% of advertised consultant roles were filled, 82% of medical registrars were asked to cover rota gaps, 80% of units do not meet all the standards for junior staffing, 60% of consultant physicians in Wales experience frequent rota shortages, and 82% of consultants regularly work beyond their contracted hours. Professional isolation, limited peer support, and reduced access to clinical

supervision make these positions considerably less attractive. For many junior doctors, rural and remote locations pose practical and lifestyle challenges, leading them to prefer more urban areas with better infrastructure, career development opportunities, and a higher quality of life (Parry-Jones, 2014).

Figure 7 shows the uneven distribution of training locations, with a significant concentration in South Wales. This imbalance creates a highly competitive and stressful work environment in South Wales, causing notable shortages in North Wales, which negatively impacts the experiences of junior doctors, registrars, and consultants.

Figure 7: Map of Wales – hospitals and health boards



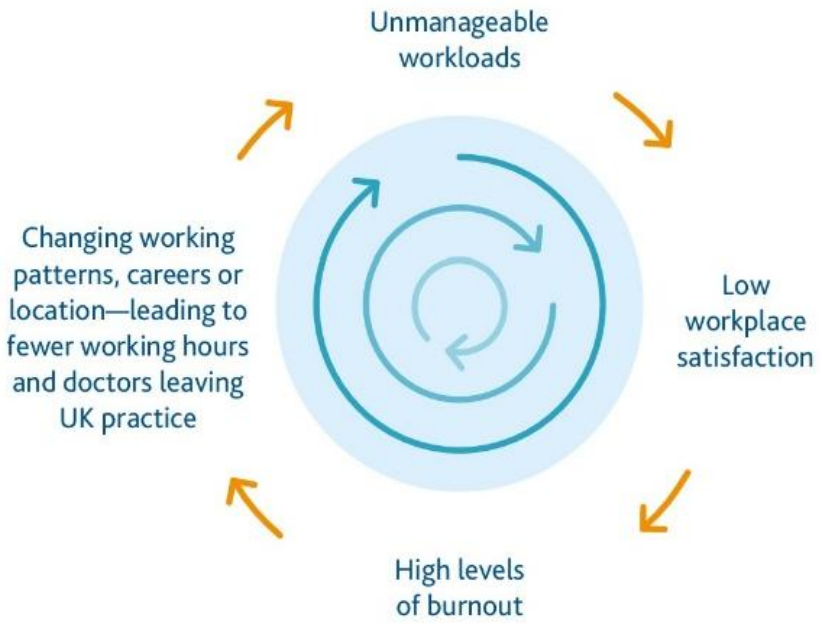
Source: (Parry-Jones, 2014)

Furthermore, high workloads, rota gaps, and the lack of protected time for education and training are frequently reported across NHS Wales (The GMC, 2024). These issues lead to significant hygiene factor deficiencies, causing active dissatisfaction and hindering junior doctors' ability to engage meaningfully in their professional development. This contributes to increased job dissatisfaction, stress, and burnout. The negative impact of these factors is ongoing and can be illustrated by the vicious cycle affecting doctors, as shown in Figure 8.

Concerns about the local workplace culture – including limited access to specialist training, inconsistent clinical supervision, lack of formal mentoring, financial pressures, relocation considerations, and the pursuit of work-life balance – further exacerbate these pressures

(Monrouxe et al., 2018). Based on the aforementioned motivation theories, these environmental deficiencies, along with personal preferences and expectations, can lead to reduced job satisfaction and a weakened sense of professional belonging.

Figure 8: Vicious Cycle Affecting Doctors



Source: (GMC, 2024c).

Moreover, junior doctors frequently cite frustrations with administrative burdens (caused by slow digitalisation), inflexible training structures, and limited opportunities that influence service delivery (Waters, 2022). This perceived lack of autonomy and recognition can also demotivate early-career doctors from staying with NHS Wales.

Indeed, these systemic, personal, and locational issues collectively create a complex environment where factors such as workplace conditions, career development opportunities, personal life considerations, regional pay disparities, and the availability of training placements for specific specialities and locations shape career decisions. Notably, the NHS Wales working environment appears to be a significant factor shaping the career choices of foundation trainees based in Wales, especially those originating from other parts of the UK or diverse ethnic backgrounds (National Health Executive, 2025).

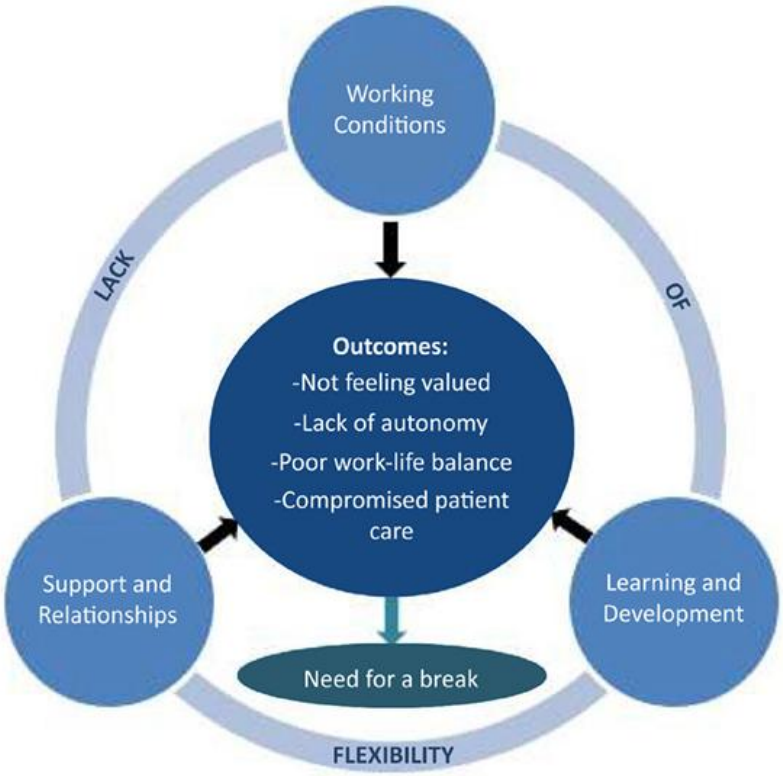
2.4 Key Drivers of Junior Doctors' Motivation and Aspirations

Pathmanathan and Snelling (2023b) found that the main factors causing doctors to leave the NHS UK were related to barriers preventing participants from delivering the desired level of patient care, work-life balance issues, a lack of support, limited control over their working lives, and the appealing pull of careers abroad that offer a break from the NHS UK. GMC (2024d) confirms that the three main barriers to providing high-quality patient care are insufficient staffing, high workload pressure, and excessive time spent on administrative tasks (see Appendix C). These barriers, as push factors, can affect junior doctors' motivations and aspirations.

For instance, between 2012 and 2022, 11,757 doctors who had completed FY2 training held valid licences but had not entered speciality or core training. Among the most common reasons for this attrition were the need for a break from structured training due to burnout and a desire to improve well-being. Furthermore, 60% indicated that this was due to the location of the post, rather than reflecting dissatisfaction or discontent with their training experience to date (UK Foundation Programme, 2020a).

Lock and Carrieri (2022d) discuss the relationship between three extrinsic motivational drivers that can also influence junior doctors (see Figure 9).

Figure 9: Correlation between Three Extrinsic Factors and Doctors' Motivation



Source: (Lock and Carrieri, 2022d)

Following Lock and Carrieri's logic, it could be argued that the main drivers of junior doctors' motivations and aspirations are largely extrinsic factors (aligning with SCCT and Herzberg's motivational theory), such as the ability to deliver good patient care (including access to necessary resources and auxiliary frameworks), feeling valued and supported by leadership, maintaining a good work-life balance, autonomy and flexibility, and receiving appropriate remuneration for their efforts. The capacity to provide quality patient care can also be intrinsic. However, if external support is lacking and this cannot be fulfilled, it will lead to dissatisfaction, causing FY2 junior doctors to take a break from training, seek new opportunities elsewhere, or leave the medical profession entirely.

The extrinsic factors, using Herzberg's theory, rely on NHS Wales's organisational support and concrete actions to help junior doctors train and work without struggles and systemic barriers, with the right resources, necessary knowledge, and tools. It also involves providing meaningful support for their well-being through wise, compassionate leadership committed to creating fair,

sustainable working conditions that will improve the quality of their training experiences and encourage them to pursue further professional development.

Furthermore, it could be argued that receiving fair remuneration is also a tangible intrinsic motivator, as it boosts self-efficacy and supports junior doctors' ability to provide quality patient care. Within the framework of SCCT, it affects outcome expectations, which, if viewed negatively, can become a significant barrier to ongoing career commitment within NHS Wales and act as a primary motivator for seeking opportunities abroad.

For example, GMC (2024d) revealed that in 2023, Australia remained the most popular destination for doctors leaving to practise outside the UK, with 23% of the 5,104 questioned leavers. Additionally, the most common intended destinations in 2023 were: New Zealand (8% of leavers). Most doctors moving to Australia and New Zealand were British nationals (69% and 83%, respectively). Nearly 64% of the 797 British nationals planning to move to Australia in 2023 had completed FY2 training within the last three years. Similarly, 68% of the 345 British nationals planning to move to New Zealand had completed FY2 training over the past three years.

Globe Locums (2025) states that Australia has become an increasingly attractive destination for UK-trained doctors, including those completing the Foundation Programme, due to a combination of push and pull factors. A key motivator is the significantly higher remuneration, with general practitioners (GPs) and consultants often earning two to three times more than their UK counterparts. For instance, the UK's basic salary for an NHS consultant typically starts at approximately £93,666 and can rise to £126,281 per year. In contrast, consultants in the Australian public sector generally earn between AUD 200,000 and AUD 350,000 (equivalent to £95,561 to £167,231.75). Earnings in the private sector can be substantially higher, potentially ranging from AUD 350,000 to over AUD 500,000 (equivalent to £167,231 to over £238,902), depending on the speciality and workload.

Apart from financial incentives, Australia offers considerably better working conditions for medical professionals. Doctors typically work fewer hours – about 35 to 38 hours per week – compared to the NHS average of 48 hours, while also experiencing less administrative workload and working in better-equipped clinical environments (Stanley, 2024). These factors promote a healthier work-life balance and enhance professional morale.

Notably, lifestyle factors could also play a significant role. Australia's high quality of life, favourable climate, and less congested healthcare system collectively reduce occupational stress and enhance overall well-being (Medrecruit Editorial Team, 2023). Indeed, these non-clinical benefits are especially appealing to younger doctors, including FY2 trainees, who often seek personal and professional fulfilment and need secure, protected training time to support their development.

Furthermore, accessible career development pathways, shared cultural and linguistic traits, mutual recognition of medical qualifications, and streamlined visa processes facilitate the smoother transition of UK-trained doctors when relocating to Australia (McArdle, 2024).

Therefore, Australia offers a compelling package of both hygiene factors (higher pay, better conditions) and elements that enhance positive outcome expectations (clear career paths, improved work-life balance). These factors make Australia a highly attractive alternative for doctors dissatisfied with NHS working conditions, providing better remuneration, lifestyle, and

career development opportunities. Conversely, the increasing trend of doctor migration poses a significant challenge for the NHS in the UK (including NHS Wales) and, consequently, underscores the urgent need for targeted and strategic measures to retain early-career doctors within the UK healthcare system.

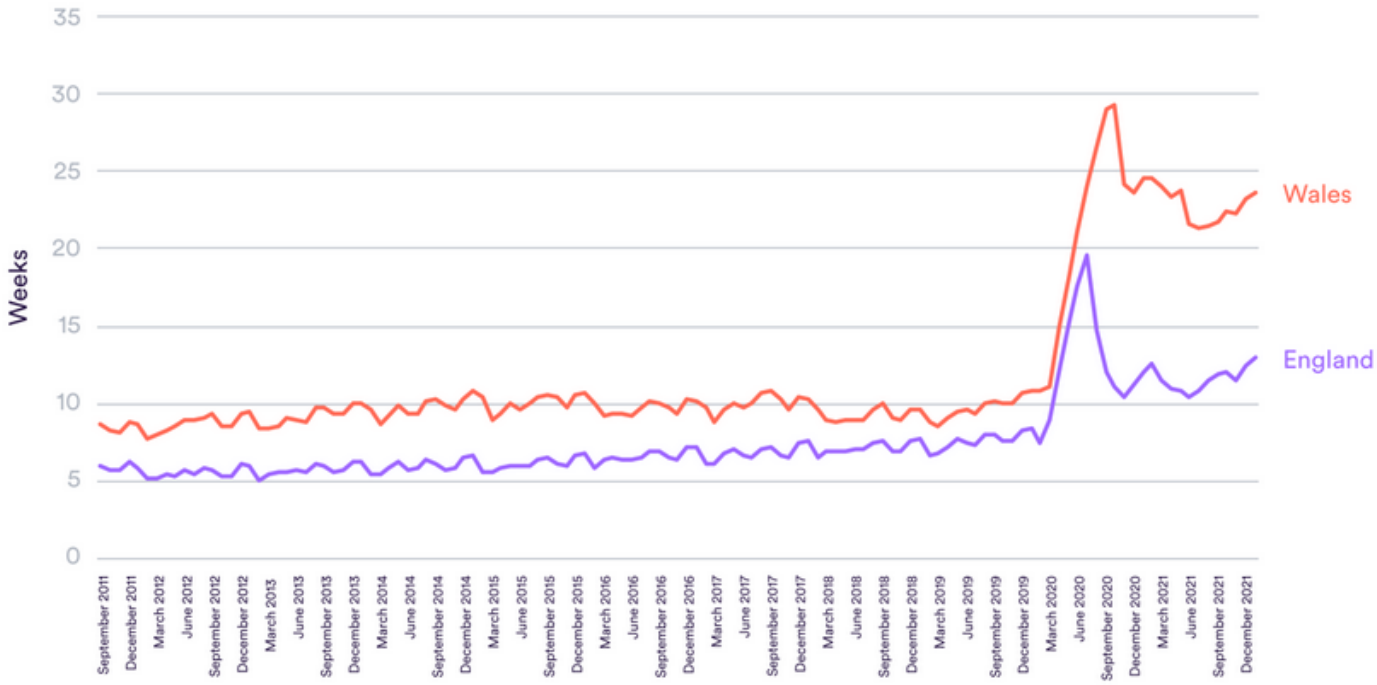
2.5 Career Choices Impact on NHS Wales

Thomas (2023) states that in 2021, Wales had approximately 11,615 licensed doctors. Moreover, the number of doctors per 1,000 people in Wales (4.1) is lower than in England (4.4) and Scotland (4.35). This disparity highlights ongoing issues of understaffing, staff turnover, and attrition within the Welsh healthcare system.

Junior doctor attrition in NHS Wales negatively impacts patient care and financial resources (Warrender, 2025). The departure of these doctors exacerbates existing workforce shortages, resulting in an increased reliance on temporary staff and longer waiting times for patients.

Sinclair (2025) notes that NHS Wales faces persistent challenges in recruitment and retention, particularly in specialist medical fields and general practice. This crisis places additional pressure on the remaining workforce, who must work extended hours in increasingly demanding conditions.

Figure 10: Median Waiting Times for Referral to Treatment



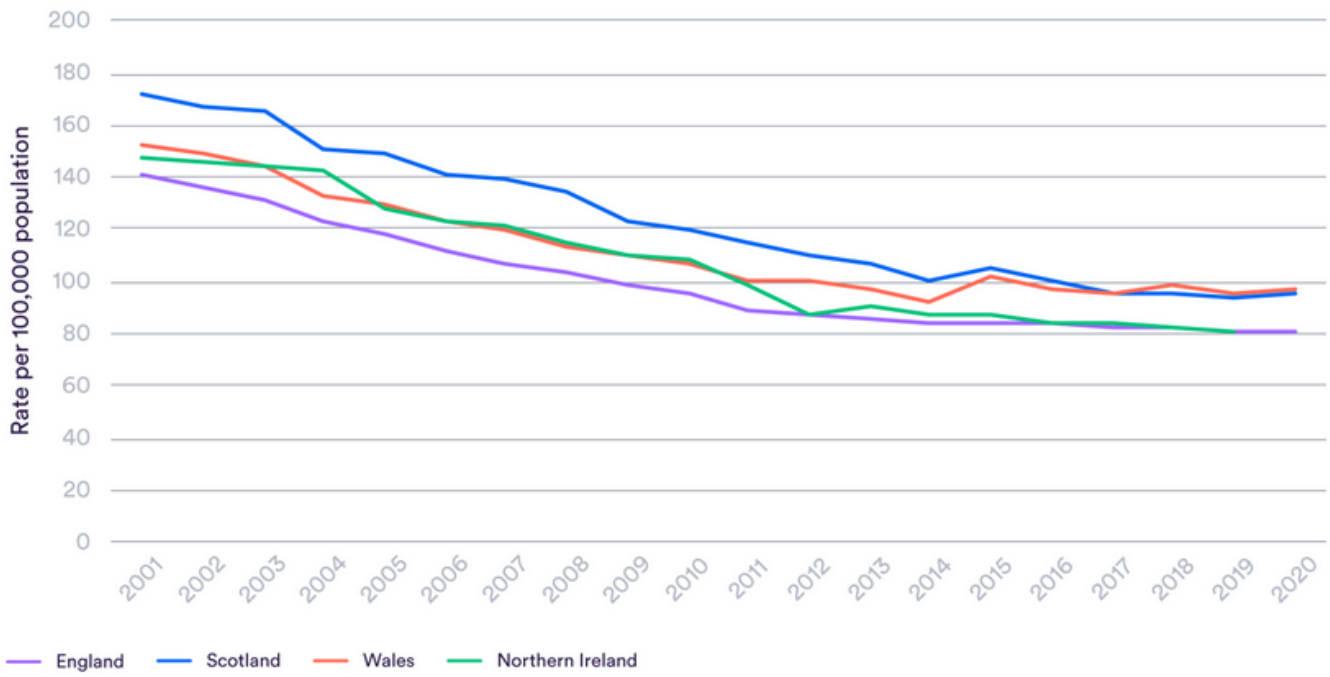
Source: (NHS England, 2022)

The shortage of junior doctors also directly hampers the NHS's ability to meet its planned care recovery targets. For example, referral to treatment (RTT) figures show that, as of April 2022, over 707,000 patient pathways were waiting to start treatment – a 54.8% increase since March 2020. Of these, 53.7% had been waiting up to 26 weeks, while 36.5% had been waiting more than 36 weeks (Hatherley, McCarthy, and Jones, 2022). Additionally, Pike (2024) reports that in August 2024, the median waiting time (indicating the efficiency and accessibility of

healthcare services) rose by 5.4% compared to the previous month, further delaying the target to remove waits of over eight weeks for diagnostic tests by March 2024 (see Figure 10). Similarly, the median waiting time for therapy services in August 2024 was 5.0 weeks, up from 4.3 weeks the month before. The goal to eliminate waits of over 14 weeks for therapy by the same deadline was also not met. As of March 2023, although 58.5% of patient pathways waited less than 26 weeks, nearly 228,000 had been waiting more than 36 weeks, and over 31,700 had been waiting for more than two years (Health and Social Care Committee, 2023).

Consequently, NHS Wales faces challenges in providing treatment and managing waiting times due to shortages of bed spaces and doctors within hospitals, which can negatively affect its mortality rates. In 2020, Wales had a higher age-standardised mortality rate (ASMR) than England but lower than Scotland and Northern Ireland. Specifically, Wales's ASMR was 1,114.6 deaths per 100,000 population, compared to 1,042.7 for England, 1,212.0 for Scotland, and 1,072.4 for Northern Ireland. Overall, Wales, Scotland, and Northern Ireland tend to have higher mortality rates than England. However, despite some improvements since devolution, Wales still records higher mortality rates than England, particularly in treatable mortality (Dayan and Flinders, 2022). A high treatable mortality rate indicates that deaths from avoidable, treatable, or preventable causes, given timely and effective healthcare, in those under 75 years remain elevated (see Figure 11).

Figure 11: Treatable Mortality Rate



Source: (Office for National Statistics, 2022)

These figures highlight the financial and operational pressure caused by the attrition of NHS Wales doctors, including junior doctors, which strains the healthcare system in Wales and diverts resources that could support long-term, sustainable staffing solutions. To address these staffing shortages, NHS Wales is increasingly relying on agency doctors, resulting in considerable costs. In 2023–2024 alone, £21 million was spent on locum doctors to cover sickness absences. Moreover, agency staffing accounts for approximately 5.5% (£325 million)

of NHS Wales's total workforce expenditure (Arthur, 2024). However, as ongoing trends indicate, this approach is ineffective as a long-term solution, since reliance on temporary staff damages continuity of care, increases operational costs, and fails to tackle the root causes of workforce instability – primarily, the lack of motivated and satisfied doctors and other medical professionals.

2.6 Summary

This chapter has thoroughly investigated the key factors influencing junior doctors' career decisions following Foundation training in NHS Wales, grounded in Herzberg's Two-Factor Theory and SCCT. The literature reveals persistent tensions between intrinsic motivations – such as dedication to patient care and professional development – and extrinsic barriers, including roster shortages, insufficient support, administrative burdens, and organisational culture. These stressors contribute to burnout, career indecision, and increasing attrition rates among FY1–FY2 doctors.

Geographical disparities, particularly between North and South Wales, further compound these issues, as do delays in training progression. Emerging themes highlight structural and leadership inefficiencies, as well as NHS Wales' limited capacity to cultivate a meaningful, development-focused environment for junior doctors. Motivation is shown to be highly context-sensitive, shaped by environmental pressures and evolving expectations around career outcomes.

While national reports and workforce statistics offer partial explanations, a notable gap remains: the literature lacks empirical studies applying motivational theory within the specific organisational and business management context of NHS Wales. Existing data often generalise findings from the broader NHS UK, overlooking the nuanced challenges facing early-career doctors in Wales.

To address this, the next chapter outlines the research design and methodology used to collect primary data through a mixed-methods approach. By integrating qualitative interviews with quantitative survey responses, the study aims to triangulate theoretical insight, lived experience, and measurable outcomes – thereby providing practical, evidence-based conclusions and recommendations for improving junior doctor motivation and retention in NHS Wales.

3. Chapter 3 – Research Methods

3.1 Introduction

Chapter 2 – Literature Review emphasised the need for empirical data related to the career choices of FY1–FY2 doctors in NHS Wales. The motivators and dissatisfiers that contribute to their retention and further career progression can be identified in the existing literature (secondary research) and collected data (primary research). These, in combination, can answer the research question:

What primary motivation factors drive the career choices of FY1–FY2 junior doctors in Wales after completing the foundation training programme, and how can these factors be mitigated?

Therefore, the purpose of the Research Methods chapter is to provide details on the overall research design. Additionally, this chapter will consider the study's limitations, potential hurdles, and the mitigation strategies for these challenges, particularly those related to the primary data collection methods.

To structure this study, the Saunders Research Onion model was followed (see Figure 12), from which the appropriate research philosophy, approach, strategy, methodological choices, time horizon, and data collection techniques were selected (Tuffour, 2017). For clarity, the elements relevant to this study are highlighted in red.

According to Mesek (2023), this model is widely used and well-regarded in UK universities due to its comprehensive and logically structured format, with each layer building upon the previous one to demonstrate methodological depth and justification.

3.2 Research Philosophy

According to Saunders, Lewis and Thornhill (2023, p.108), the research philosophy forms the foundation of any academic inquiry, providing a structured set of beliefs, assumptions, and principles that guide methodological choices. It informs the overall approach to data collection, analysis and interpretation.

Among the philosophical paradigms presented in the Research Onion model, Pragmatism was deemed the most appropriate philosophy that organically aligned with the research objectives (see Table 1).

As noted by Creswell and Clark (2017a, pp.25-30), pragmatism values the integration of multiple perspectives and supports the use of diverse methods to address complex, real-world problems. The ongoing dissatisfaction among junior doctors in the UK regarding working conditions and salary levels demonstrates a context where a pragmatic philosophy is particularly relevant. Its adaptable, outcome-oriented approach allows the researcher to select methods best suited for answering the research question, without being constrained by strict philosophical boundaries.

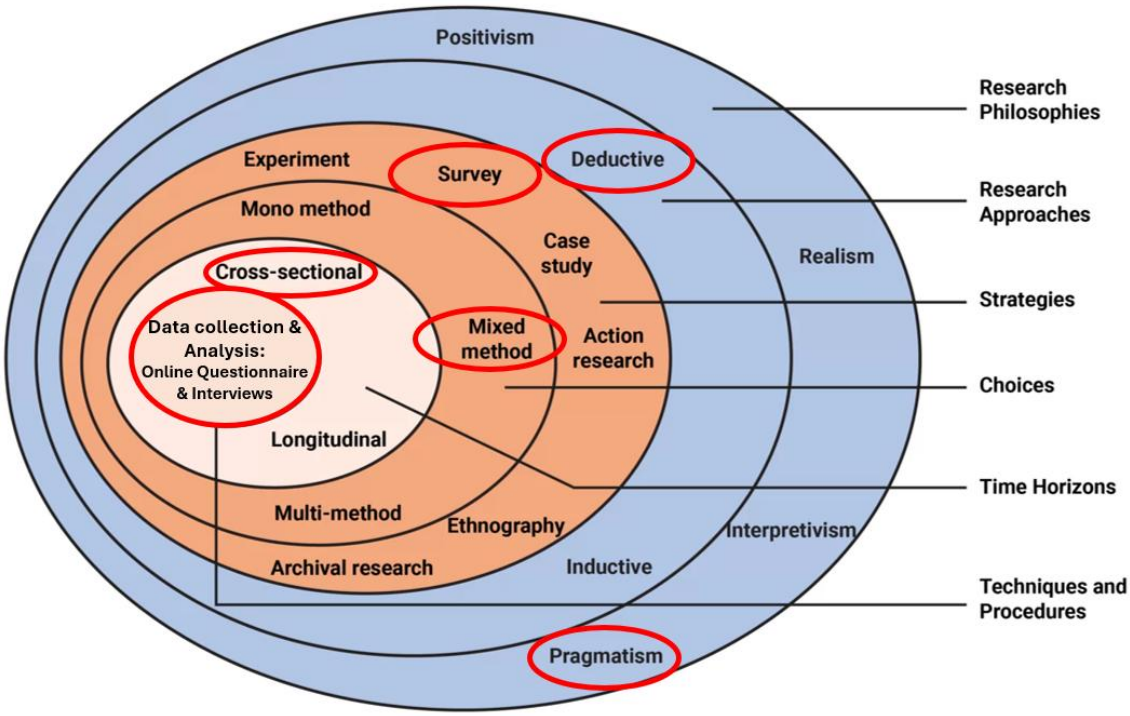
Pragmatism also underpins the study's mixed-methods approach, embracing both objective knowledge (typical of quantitative research) and subjective understanding (central to qualitative inquiry). This dual focus makes pragmatism highly suitable for investigating the nuanced motivations that shape junior doctors' career decisions. By combining statistical data

with personal insights, the pragmatic stance improves the depth and relevance of the research findings.

A key strength of the pragmatic approach is its flexibility, which helps in clearly synthesising and reporting data (Morgan, 2014). It also supports the generalisation of findings and offers a practical framework for responding to unexpected outcomes, especially in dynamic contexts like healthcare workforce management. Moreover, it allows the researcher to incorporate a range of relevant contextual and organisational factors into the analysis.

Nevertheless, despite the merits mentioned above, certain limitations must be acknowledged. Pragmatic research typically requires more time and planning to effectively design and implement both quantitative and qualitative components, particularly when compared to traditional single-method approaches (Hampson and McKinley, 2023). Combining different data types can also present challenges in analysis and interpretation. Additionally, within a limited research timeline, determining whether data collection should occur sequentially or concurrently can be difficult – particularly when practical constraints limit the feasibility of ideal scheduling.

Figure 12: Research Onion



Source: Adopted from Saunders, Lewis and Thornhill (2023, p.108)

3.3 Research Approaches

Academic research reasoning mainly divides into deductive and inductive approaches, each with different epistemological and methodological pathways (Bingham, 2023). Barrett and Younas (2023a) explain that a deductive approach is characterised by a top-down logic, wherein pre-existing theoretical frameworks or hypotheses guide the research process. It

involves obtaining specific, testable propositions from general theories and examining empirical data to confirm, refine, or refute those propositions. Deductive reasoning is typically associated with quantitative research designs and is well-suited to studies aiming to verify relationships between variables within structured paradigms.

Table 1: Comparison of Research Philosophies

Philosophy	Ontology (Nature of Reality)	Epistemology (Nature of Knowledge)	Methodological Approach	Researcher Role	Common Methods
Positivism	Assumes an objective, singular reality that exists independently of human perception.	Knowledge is valid only if it is observable, measurable, and quantifiable. Truth is discovered through empirical observation and logical reasoning.	Deductive approach: hypotheses are derived from theory and tested using structured, controlled methods.	Detached and neutral observer; aims to avoid bias.	Structured surveys, experiments, statistical analysis, quantitative modelling.
Interpretivism	Views reality as multiple and socially constructed through human experience and interaction.	Knowledge is subjective and co-constructed by researcher and participants; meaning is interpreted rather than measured.	Inductive approach: aims to develop theory by exploring rich, contextual insights.	Active participant in the research; acknowledges own influence in meaning-making.	Semi-structured interviews, participant observation, case studies, thematic analysis.
Realism	Believes in a real world that exists independently of human thought, but our understanding of it is always partial and fallible.	Accepts that knowledge can be both objective and subjective. Insights are gained by recognising both observable phenomena and underlying mechanisms.	Often uses a mixed or abductive approach to explore causation and context simultaneously.	Acknowledges the influence of researcher but seeks to approximate reality.	Case studies, interviews, documentary analysis, triangulation of data sources.
Pragmatism	Rejects the debate over one true reality; considers reality as dynamic and shaped by context, practical needs, and consequences of actions.	Knowledge is judged by its practical usefulness and problem-solving capacity. Truth is what works in a given situation.	Uses both inductive and deductive reasoning depending on the research problem.	Flexible, reflexive researcher focused on addressing real-world issues.	Mixed methods, action research, surveys, focus groups, experimental and qualitative tools.

Source: Adopted from Bell, Bryman and Harley (2022, pp.1–40)

Conversely, an inductive approach uses a bottom-up process, starting with data collection to develop theories (Barrett and Younas, 2023b). It is exploratory, allowing patterns and concepts to emerge from empirical data. Connected to qualitative research, it is suitable for investigating inadequate theories or new phenomena.

This study mainly uses a deductive approach, relying on established theoretical frameworks like Herzberg's Two-Factor Theory, SCCT, and Correlation Analysis to inform the research design and guide data interpretation. However, inductive reasoning is also included in the qualitative phase, especially in analysing interviews, where open-ended responses may uncover new concepts that extend beyond the scope of predefined models. This methodological combination clearly reflects the study's pragmatic philosophical stance, emphasising practical understanding of the phenomenon studied.

3.4 Strategies & Methodological Choices

This study adopts a mixed-methods research approach, combining both qualitative and quantitative data collection techniques. This approach aligns with the pragmatic philosophical

stance and supports the use of methodological and data triangulation to improve the validity of the findings. Quantitative data is gathered through surveys, while qualitative insights are obtained via semi-structured interviews, providing a more comprehensive understanding of the research phenomenon.

Triangulation, as defined by Bekhet and Zauszniewski (2012), involves using multiple data collection methods to examine a single research phenomenon from different perspectives. Notably, triangulation functions not only as an effective technique but also as a methodological reflection of the core principles of pragmatism (Creswell and Clark, 2017b).

In this study, methodological triangulation is employed by combining survey data (quantitative) with interview responses (qualitative), while data triangulation is achieved through the inclusion of both primary and secondary sources. The reason for adopting a mixed-methods approach, supported by both methodological and data triangulation, is its ability to gather and cross-validate different data types from multiple sources. This helps reduce the limitations of any single method and enhances the study's internal credibility and analytical rigour.

3.5 Time Horizons

Choosing an appropriate time horizon is a crucial part of research design, ensuring the methodological alignment with the study's objectives (Blagoev et al., 2023). This dissertation uses a cross-sectional time horizon, focusing on collecting data at a single point in time rather than over multiple periods (Wang and Cheng, 2020).

Given the structured six-month research timeline allocated for this study, encompassing design, ethical approval, data collection, analysis, and final write-up, a cross-sectional approach was deemed both practical and methodologically reasonable. Primary data were collected within a defined window – March to May 2025 – allowing for timely analysis while maintaining data relevance and coherence.

While a longitudinal study could provide deeper insights into how junior doctors' motivations change over time, such an approach was not feasible within the scope and timeframe of this research. However, the cross-sectional design allows for a strong analysis of current motivational factors and their connection to early career choices. Overall, the cross-sectional approach fits with the six-month research plan and the dissertation's aim to deliver timely, evidence-based insights into current career decision-making trends among newly trained doctors in Wales.

3.6 Techniques and Procedures

As previously discussed, a mixed-methods approach was chosen for data collection. This type of approach combines both qualitative and quantitative methods within the same study. From this mixed-methods perspective, the selected concurrent triangulation design indicates that quantitative and qualitative data are collected simultaneously, and the results are integrated during analysis (Morse, 1991). Consequently, surveys (for quantitative data) were conducted to identify the main factors influencing career choices, while interviews (for qualitative data) were conducted concurrently to explore the rich, contextual narratives behind those decisions, enabling a comprehensive, triangulated analysis.

3.6.1 Primary Data Collection

The primary research (empirical data) incorporated both qualitative and quantitative data collection and analysis to provide a nuanced investigation of the research topic. Qualitative, non-numerical data were collected through interviews (see related interview question script in Appendix G), as shown in Table 2.

Table 2: Summary of the Qualitative Interview Phase

Stage	Description
Participation Group & Sampling Method	Interviews were conducted with Foundation Programme trainers, consultants, and BMA representatives to explore the underlying reasons, opinions, and motivations of the target audience (FY1-FY2 doctors) from their perspective. Snowball and purposive sampling methods were used to select relevant participants and to expand reach within professional networks.
Method	This phase included structured in-person and online meetings, using a semi-structured format designed to prompt reflective discussion and generate insights into the problem.
Setting	Interviews were held both in-person and online, allowing for flexible participation while ensuring accessibility across different regions and roles.
Purpose	The aim was to generate insights and inform the development of ideas and hypotheses that could support the subsequent quantitative survey phase.
Data Collection	Qualitative data were gathered through 10 semi-structured interviews. No audio or video recordings were made to comply with GDPR and ensure participant anonymity.
Data Saturation	Saturation was considered achieved after the 10th interview when participants began to express repeating themes, confirming that the sample size was sufficient to capture the needed data for the research topic.
Ethics & Confidentiality	To protect participant confidentiality, no recordings were taken. All ethical guidelines were followed in accordance with institutional research standards and GDPR compliance.
Data Handling	The data were captured through contemporaneous notes, later digitised, transcribed into anonymised texts, and labelled R1-R10 for consistency and analysis.

Source: Author's creation

For statistical analysis used to test hypotheses and draw conclusions, quantitative (numerical) data were collected through a survey (see online survey questionnaire in Appendix F), as indicated in Table 3.

The research instruments were designed with consideration of the research objectives, sample size, population characteristics, and the information the questions aimed to gather from FY1–FY2 junior doctors and their trainers. The survey and interview questions were directly linked to the dissertation's theoretical framework – Herzberg's Two-Factor Model and SCCT – where motivation and hygiene questions were transformed into measurable constructs and mapped onto SCCT dimensions (self-efficacy, outcome expectations, and contextual supports/barriers).

Questionnaire items were based on existing literature concerning junior doctors' motivation and, where relevant, informed by sector surveys such as the GMC National Training Survey. New items were developed to address Wales-specific issues, including rota reliability, payslip accuracy, HEIW, and trainer support.

Table 3: Summary of Quantitative Survey Phase

Stage	Description
Participation Group & Sampling Method	The survey targeted FY1–FY2 resident doctors in NHS Wales to gather direct insights into their experiences, motivations, and retention decisions following completion of the Foundation Programme. Purposive sampling was adopted to ensure that only relevant participants were selected based on their training
Method	This phase involved distributing a bespoke online questionnaire via Google Forms. The link was shared across medical communities, professional networks, and social platforms. Collaboration was also sought (unsuccessfully) with the UK Foundation Programme Office, the Foundation Training School (HEIW), and Foundation Programme Directors at Cardiff and Vale University Health Board to ensure broad dissemination across the target audience.
Setting	The survey was conducted online to allow broad geographical coverage and flexible participation. Responses were collected anonymously to ensure honest feedback and data protection compliance.
Purpose	The aim of the quantitative phase was to validate and generalise qualitative findings by statistically measuring how key factors such as pay, work-life balance, supervision, and organisational culture influenced junior doctors' job satisfaction and intentions to stay in or leave NHS Wales.
Instruments	A structured, closed-ended questionnaire was used, including ordinal and Likert-scale items. These captured perceptions of pay importance, administrative burden, organisational support, mentorship, feedback mechanisms, work-life balance, physical environment, perceived training quality, and career development opportunities.
Data Analysis	The quantitative data were downloaded from Google Forms and prepared in spreadsheet format for analysis. Ordinal variables were examined using descriptive statistics, frequency tables, and Spearman's correlation analysis to detect patterns and relationships. Categorical responses were also explored for trends and cross-tabulated against key demographic markers.
Ethical Considerations	Participation was entirely voluntary and anonymous, and respondents were informed of their right to withdraw at any stage. No identifiable personal data was collected. Ethical clearance was obtained in accordance with university ethics policies, and all participants provided informed consent through a pre-survey introduction page.

Source: Author's creation

The survey questions were standardised, closed-ended Likert-type items designed to gather quantifiable prevalence data and testable associations. In contrast, the interview questions were open-ended and semi-structured, created to explore trainers' experiences during their Foundation years and their perspectives on mentorship, supervision quality, workload, and rota pressures. The aim was to compare 'then' and 'now' and to understand how these factors currently influence junior doctors' career intentions. The interview guide was developed from the same construct map, reviewed for clarity by the dissertation supervisor, and lightly refined before fieldwork. This combination of customised, theory-based, purpose-designed

quantitative and qualitative questions offered methodological triangulation and convergent evidence, enhancing the credibility, depth, and practical relevance of the findings.

Primary data was collected simultaneously (concurrently), a strategy that offers both advantages and limitations. Concurrent data collection improves efficiency and facilitates immediate comparison between qualitative and quantitative findings, supporting a more integrated and thorough analysis (Johnson and Onwuegbuzie, 2004). However, it may also restrict the opportunity to adapt one method based on emerging insights from the other and increase the complexity of managing and analysing parallel datasets, as noted by George (2022).

To mitigate these limitations, the researcher conducted detailed procedural planning, pre-tested all instruments, and employed structured coding frameworks to ensure consistency across methods. Additionally, ongoing reflection and the use of researcher memos helped sustain analytical coherence and reduce the risk of interpretive bias during data integration. Nonetheless, despite the challenges, this approach aligns well with the overall research design, which emphasises methodological flexibility in meeting the study's objectives.

3.6.2 Secondary Data Collection

To uphold the academic integrity of the primary research, a comprehensive literature review was carried out, utilising a wide range of scholarly sources. Key databases consulted included PubMed Central (PMC), EMBASE, the Cochrane Library, the Journal of the Royal Society of Medicine, JAMA, The BMJ, The New England Journal of Medicine (NEJM), and databases from the National Library of Medicine (NLM). Additionally, relevant articles from the NHS Knowledge and Library Hub were examined to minimise confirmation bias and to ensure thorough coverage of the research area.

To refine the research focus, core resources that guide FY1–FY2 junior doctors' training experiences and influence their perception of the profession – and, consequently, their career choices – included:

• Health Education and Improvement Wales (HEIW)

• General Medical Council (GMC)

• Foundation School, NHS Wales

• NHS Wales, England, Scotland, and Northern Ireland

• British Medical Association (BMA).

3.7 Sampling Strategy

This study employs purposive sampling, allowing the researcher to deliberately select participants who possess relevant knowledge and experience related to the research objectives (Creswell and Creswell, 2022, pp.145–203). FY1–FY2 junior doctors, their trainers, and institutional stakeholders, including BMA representatives and consultants, were selected based on their direct involvement in foundation medical training within NHS Wales. This approach ensures the inclusion of information-rich cases, enabling a deeper exploration of the motivational factors influencing junior doctors' early-career decisions. Additionally, snowball sampling – a non-probability sampling technique – was used informally to expand survey reach

by encouraging participants to share the study link with eligible peers, particularly within professional and academic networks, as explained by Parker, Scott and Geddes (2019).

Regarding the sampling framework, the intended target population is FY1–FY2 resident doctors currently based in Wales. This sample will encompass a diverse range of demographics, including different genders, age groups, and various ethnic and cultural backgrounds. However, the age range of the participants remains largely homogeneous, mainly represented by two generational groups: Millennials and Generation Z (BBC, 2019).

The total number of doctors in training in Wales is approximately 2,612 (The General Medical Council, 2024). In Wales, the Foundation Programme currently funds 374 FY1 doctors, with a similar number of FY2 posts available (Ingham, 2024). This indicates that around 678 doctors in their first two postgraduate years are active in NHS Wales at any given time, assuming full utilisation of funded positions.

Most of this population is active online in social and professional groups, such as Facebook. The key groups used in this study were:

- Junior Doctors UK (7,100 members)
- UK Doctors Group (30,000 members)
- Junior Doctor Contract: Public Discussion Group (2,200 members)

Based on the estimated population of approximately 678 FY1–FY2 doctors, the recommended sample size for a 95% confidence level and a 5% margin of error is 246 participants (Raosoft, 2025). However, considering practical limitations such as access, time constraints, and the voluntary nature of participation, this study achieved a final sample size of 155 responses. This number falls within the acceptable range of 150–200 participants, as advised by the dissertation supervisor, and provides a sufficiently robust dataset for descriptive and comparative analysis. Although the slightly higher margin of error (~6.5%) may slightly limit generalisability, the sample remains sufficiently representative to support valid inferences about the motivational factors influencing junior doctors' career decisions in NHS Wales. Therefore, to meet the requirements outlined in the UWTSD Dissertation Handbook, the research may be considered successful if 150–200 surveys and 10–12 in-depth interviews are successfully collected, analysed, and presented.

3.8 Data Analysis

3.8.1 Quantitative Analysis

For the quantitative component, survey descriptives were exported from Google Forms to Microsoft Excel, where variables were cleaned and coded. To analyse the relationships between variables, the study uses Spearman's Rank-Order Correlation Coefficient (ρ) (McClenaghan, 2024). This non-parametric technique for ordinal data is well-suited to the ordinal data derived from Likert-scale items and measures the strength and direction of monotonic associations between variables. Spearman's Rank-Order Correlation Matrix (ρ) was computed in Excel using rank transformation functions (RANK.AVG), followed by correlation on ranks (CORREL). Two-tailed p-values were calculated using the standard t-approximation implemented via Excel formulas (T.DIST.2T). This method, as described in more detail by Cheusheva (2023), enables a statistically valid interpretation of how specific factors relate to career intentions, without requiring assumptions about normal distribution or linearity.

However, in some cases where Spearman's Rank-Order Correlation Coefficient cannot be applied (nominal data analysis), the Chi-Square Analysis, as a complementary method, is used to determine the association between categorical, nominal variables (ResearchGate, 2020). The Chi-Square Analyses were performed using an online chi-square calculator, with observed counts obtained from Excel contingency tables (Social Science Statistics, 2025).

3.8.2 Qualitative Analysis

The qualitative aspect of the study relies on semi-structured interviews. These interviews are transcribed, reviewed, coded, and categorised using a structured analytical matrix aligned with Herzberg's Two-Factor Theory and SCCT frameworks. A thematic analysis was conducted using Microsoft Excel. Due to the small sample size, Excel's filtering and sorting functions were suitable for identifying themes from coded transcripts. To maintain consistency, reflexive memos and data cataloguing techniques were employed (Babbie, 2021, pp.384–491). Predefined categories of patterns, derived from the literature, guided the initial coding process. Nonetheless, the thematic analysis remained adaptable enough to capture emerging insights, allowing participants' lived experiences to naturally shape the findings.

3.8.3 Data Integration

Quantitative associations were analysed alongside qualitative themes to explain why and how patterns emerge, explicitly linking the results to the study's theoretical frameworks. The combined use of statistical summaries from the quantitative survey and relational mapping from the qualitative interviews forms the foundation of the study's triangulation strategy. By comparing and cross-validating findings across different data sources, the study aims to develop a more nuanced understanding of the motivational, structural, and interpersonal factors influencing post-foundation career choices. This integrated approach, enabled through a concurrent analytical strategy as described by Snowden and Atkinson (2012), enhances both the internal validity and practical relevance of the findings, supporting evidence-based recommendations for improving retention and workforce planning within NHS Wales.

3.9 Research Limitations

The following expected and encountered limitations do not diminish the study's relevance; instead, they highlight contextual, ethical, and methodological influences that must be acknowledged when interpreting the findings.

3.9.1 Access and Recruitment Constraints

Although support was initially sought from official institutional channels such as the UK Foundation Programme Office, HEIW, and NHS Health Boards, these proved less accessible than expected. Consequently, the researcher used personal contacts and professional networks to recruit participants and share the survey via social media platforms. While this approach successfully reached the desired sample size, it may have influenced the representativeness and control over participant demographics, increasing the risk of selection bias.

3.9.2 Reliability and Validity

Considering the use of an online survey platform for primary data collection, a major limitation involved verifying respondents' affiliation with the target population – FY1–FY2 junior doctors currently working in NHS Wales. This limitation posed a potential risk to data reliability, as unverified participation might distort the representativeness and consistency of the results. To

address this issue, the survey was distributed through targeted medical forums, professional networks, and social groups related to junior doctors across the UK. Each distribution was accompanied by a clear description of the eligibility criteria and a transparent appeal for honest self-selection.

Furthermore, survey reliability was improved through a pre-testing stage involving a small group of FY1–FY2 junior doctors and academic reviewers. Feedback from this pilot led to the refinement of question wording, streamlined logical flow, and reduced ambiguity. Additionally, the use of standardised Likert-type scales ensured internal consistency across key measurement constructs such as job satisfaction and training quality.

Regarding validity, several strategies were implemented to ensure the research accurately captured what it aimed to measure. Content validity was established by aligning both survey and interview instruments with key constructs drawn from the literature and the study's main theoretical frameworks – Herzberg's Two-Factor Theory and SCCT. Construct validity was considered during the development of variables and survey questions, ensuring they reflected the theoretical dimensions of motivation, dissatisfaction, and career intention. Face validity, described by Gravetter and Forzano (2018, pp.167–256) as the most superficial and subjective type, was supported by construct validity and also reviewed and confirmed by academic supervisors and practitioners involved in the foundation training structure.

3.9.3 Cross-Sectional Design Limitation

The study's cross-sectional design limits its ability to examine how motivations and career intentions change over time. While it provides valuable insights into current attitudes and drivers, it cannot observe changes caused by personal development, policy changes, or broader NHS developments. Longitudinal studies would be necessary for such analysis, but are beyond the scope and timeframe of this project. Nevertheless, the current research could lay the groundwork for future longitudinal studies.

3.9.4 Theoretical and Analytical Framework Constraints

While Herzberg's Two-Factor Theory, SCCT, and correlation analysis offer a strong analytical framework, they have limitations in capturing the full complexity of motivational processes. These frameworks may not sufficiently account for broader emotional, cultural, moral, and institutional influences on medical career development. Additionally, correlation analysis cannot establish causality, restricting the study to interpretations of associations rather than definitive conclusions. To address these theoretical limitations, a mixed-methods approach was employed, enabling the triangulation of quantitative survey data with qualitative insights from interviews. This combination allowed participants to elaborate on their motivations and contextual experiences beyond the constraints of predefined theoretical categories, ensuring a more comprehensive understanding of the subject matter.

3.9.5 Ethical Restrictions and Data Sensitivity

To adhere to ethical standards and safeguard participant privacy under GDPR, interviews were not audio recorded but manually transcribed through real-time note-taking. While this method protected data confidentiality, it might have limited the richness of qualitative data by missing subtle expressions or nuanced phrasing. Nonetheless, all research tools – including the survey and interview questions – were reviewed by the dissertation supervisor before dissemination

to ensure ethical compliance and procedural transparency. The copy of the completed Ethics form is included in Appendix D.

3.9.6 Environmental and Temporal Pressures

The research was conducted during a period of intense strain on the UK healthcare system, characterised by strikes among junior doctors and consultants over pay, staffing, and working conditions. This unrest increased participants' motivation to contribute, with many FY1 and FY2 doctors eager to voice concerns and consultants and BMA representatives willing to be interviewed, providing detailed accounts of dissatisfaction and systemic frustration.

However, this context introduces the potential for response bias, as views may reflect immediate grievances influenced by the emotional atmosphere, which could skew findings towards more critical perspectives.

Time constraints during the six-month study, despite flexible scheduling and recruitment efforts, may have limited the range of perspectives, especially from individuals who were neutral or disengaged. Personal, environmental, and temporal factors emphasise the importance of interpreting findings within this context and recognising the exceptional circumstances under which data were collected.

4. Chapter 4 – Research Findings

4.1 Introduction

This chapter presents and critically interprets the primary research findings, describing, analysing, and synthesising the data to investigate the motivational and systemic factors influencing the career decisions of junior doctors in NHS Wales. The collected and analysed data directly address the research question:

What primary motivation factors drive the career choices of FY1–FY2 junior doctors in Wales after completing the foundation training programme, and how can these factors be mitigated?

The findings were obtained from a survey of junior doctors and interviews with foundational programme trainers.

The discussion connects these findings to the theoretical frameworks and analyses them using correlation and statistical analytical tools (Spearman's Rank-Order Correlation Matrix and Chi-square Test for Independence).

The fieldwork was conducted during a period of ongoing nationwide industrial action by junior doctors. As discussed in Chapter 3, this context is crucial for interpreting the findings, as it likely heightened participants' sensitivity to the research topic and may also have introduced attitudinal bias.

The first part of this chapter presents the key themes identified through thematic analysis of the interviews. The second part presents the quantitative results, including descriptive statistics and correlation analysis of potent factors such as perceived workload, organisational culture and training satisfaction.

4.2 Qualitative Findings: The Voice of the Profession

4.2.1 Participant profile

The qualitative data were gathered from 10 experienced NHS Wales professionals (R1–R10), all directly involved in Foundation Training. To ensure a range of viewpoints, the sample included both internal and external stakeholders, with full details provided in Appendix I.

Participants came from diverse geographical settings, ranging from major urban hospitals in South Wales and Carmarthenshire to rural practices in Powys and North Wales (see Table 4).

4.2.2 Presentation of Themes

The thematic analysis of the semi-structured interviews with trainers identified seven main themes. Collectively, these themes reveal the complex relationship between their personal experiences during foundation training, professional ambitions, systemic pressures, and important lifestyle factors that influence junior doctors' career choices.

As outlined in Table 5, each theme has been examined through the perspectives of Herzberg's Two-Factor Theory and SCCT. The following sections will discuss each theme in detail, supported by direct quotes from participants to illustrate the findings.

Table 4: Demographic Information of The Interview Respondents

Participant ID	Current Role (per transcript)	Core Speciality / Department	FY1–FY2 Training Involvement	Years of Experience	Trainer Experience (FY1–FY2)
R1	BMA Representative	BMA (Union) – prior Internal Medicine (clinical supervisor &	Former clinical supervisor; advocacy/representation	10	3
R2	BMA Representative	BMA (Union) – prior General Surgery	Held educational roles; supervision experience	7	3
R3	Clinical Trainer	Emergency Medicine (Morriston Hospital)	Direct supervision, simulation teaching,	12	6
R4	GP Educational Supervisor	General Practice (Rural Powys)	Mentoring FY1–FY2 in community placements;	20	8
R5	Consultant Paediatrician & Clinical Tutor	Paediatrics (Cardiff)	Bedside teaching, simulation, audit	15	4
R6	Consultant General Surgeon & Clinical Supervisor	Surgery (Colorectal, Swansea Bay)	Supervises FY1–FY2 on wards & theatres;	18	10
R7	Clinical Lecturer (Medical Education)	Internal Medicine (North Wales)	Oversees programmes; direct teaching &	23	7
R8	Consultant Anaesthetist & Simulation Lead	Anaesthetics / Critical Care (Cardiff)	Leads simulation-based training; ICU/A&E	11	5
R9	Consultant Orthopaedic Surgeon & Educational Supervisor	Orthopaedics (Carmarthenshire)	Mentors FY1–FY2 in theatres & fracture clinics	21	10
R10	Consultant in Public Health (with academic/policy role)	Public Health (HEIW liaison)	Designs workforce & training policy;	16	6

Source: Author's creation based on the retrieved data

Theme 1: Influence of Foundation Training Experiences on Career Choice.

This theme accentuates the significant impact of the foundation training stage on further career decisions. Participants described how supportive placements with enough autonomy to build confidence were pivotal in confirming their professional directions. A Clinical Trainer in Emergency Medicine (R3) expressed this connection:

"I had a rotation in a busy A&E where I was given responsibility appropriate to my level, but always with backup when needed. That balance helped me grow in confidence without feeling unsafe." (R3)

The importance of building competence through adequate supervision was also confirmed by a GP Educational Supervisor (R4):

"I had a very supportive GP rotation with a mentor who encouraged independence while providing safety nets. I was trusted to manage my own patient lists under supervision, which built both competence and confidence." (R4)

These experiences are the motivators within Herzberg's theory, directly fulfilling intrinsic needs for achievement, recognition from supervisors, and satisfaction derived from the work itself – the main drivers of professional fulfilment (Herzberg, 1976).

Table 5: Mapping of Identified Themes to Herzberg's Two-Factor Theory and SCCT

#	Theme	Herzberg's Two-Factor Theory	SCCT	Illustrative Quote (with Respondent ID)
1	**Influence of Foundation Training Experiences on Career Choice**	**Motivator** – Meaningful work, recognition, personal growth opportunities	**Learning Experiences** – shaping self-efficacy and outcome expectations	*"I had a rotation in a busy A&E where I was given responsibility appropriate to my level, but always with backup when needed. That balance helped me grow in confidence without feeling unsafe." – **R3*** *"I was trusted to manage my own patient lists under supervision, which built both competence and confidence." – **R4***
2	**Work–Life Balance, Personal Priorities, and Well-being**	**Hygiene Factor** – workload, scheduling, work-life balance	**Contextual Barriers/Supports** – family needs, lifestyle preferences, burnout prevention	*"Honestly, they played a huge part. Long hours, shift fatigue, and the emotional toll of medicine started affecting my family life." – **R2*** *"Significantly. I realised early in my clinical career that poor work-life balance leads to burnout and disengagement." – **R1***
3	**Satisfaction with Training Environment (Supervision, Workload, Support)**	**Hygiene Factor** – quality of supervision, organisational policies	**Contextual Barriers/Supports** – mentorship, access to resources, workplace culture	*"Supervision was consistent, and I knew who to approach for clinical or pastoral support." – **R3*** *"Honestly, mixed at best. I had some amazing, knowledgeable and experienced supervisors, but the broader system often undermined the learning environment. The rota gaps, under-resourcing, and pressure to prioritise service over training diminished job satisfaction and learning quality for most." – **R1***
4	**Impact of Clinical Rotations on Speciality Preference**	**Motivator** – achievement, meaningful experiences	**Learning Experiences** – exposure shaping interests and self-efficacy	*"Yes. My A&E rotation was the single biggest factor in my choice to enter emergency medicine." – **R3*** *"Without a doubt. My general surgery rotation was dynamic, with exposure to both elective and emergency cases. That variety confirmed my desire to specialise..." – **R6***
5	**Perceptions of Career Progression Opportunities**	**Motivator** – advancement opportunities	**Outcome Expectations** – perceived ability to progress within NHS Wales	*"In my opinion, yes; however, it is not clear enough. Many juniors feel lost between FY2 and speciality training." – **R1*** *"Career progression pathways are there, but they're not always well signposted, especially for those considering less traditional routes like academic or portfolio careers." – **R3***
6	**Observed Attrition and Colleagues Switching Specialities**	**Hygiene Factor** – job security, pay, working conditions	**Contextual Influences** – observing others' experiences affecting own expectations	*"It's hard to stay motivated when you see peers walking away disheartened, changing to non-full-time or simply on long sick leave." – **R2*** *"I've seen several colleagues move abroad, mentioning better pay and work-life balance, especially in Australia and New Zealand." – **R5***
7	**Suggested Changes to Improve Retention**	**Hygiene & Motivator Mix** – pay reform (hygiene), leadership development & recognition (motivators)	**Outcome Expectations** – belief that system changes will lead to better career satisfaction	*"The answer is simple despite the complexity: increase transparency in career progression, address pay erosion, mandate protected learning time, and provide dedicated mentorship for each FY1 and FY2 doctor." – **R1*** *"Competitive pay that reflects the demands of the role is a starting point, but it's not the whole picture. Better rota management, guaranteed access to leave, and protected teaching time would make a big difference." – **R3***

Source: Author's creation based on the retrieved data

In SCCT, these learning placements are "mastery experiences" – the most important source of self-efficacy (Bandura, 1997). Being empowered with responsibility (R4) and succeeding with sufficient autonomy (R3) clearly demonstrates competence, reinforcing their expectations of a future career in that speciality through a positive experience.

Therefore, the quality of foundational placements is a vital element in shaping career paths. These experiences are arguably the most important points for intervention in influencing long-term career commitment, acting as a strong retention tool by building the professional identity and confidence needed for a FY1-FY2 to commit to a speciality within NHS Wales.

Theme 2: Work-Life Balance, Personal Priorities, and Well-being.

The importance of work-life balance and well-being has become a non-negotiable element for sustaining a successful career (Li, 2025). Participants described how the intense pressure of the job often resulted in burnout and directly affected their career decisions. One BMA Representative (R2) was clear about the work-life conflict:

"Honestly, they played a huge part. Long hours, shift fatigue, and the emotional toll of medicine started affecting my family life." (R2)

Another BMA Representative (R1) reinforced this, identifying the direct link between a poor work-life balance and doctors disengaging from their roles:

"Significantly. I realised early in my clinical career that poor work-life balance leads to burnout and disengagement." (R1)

Work-life balance is a fundamental hygiene factor in Herzberg's theory (Robbins and Judge, 2018, pp.112–268). Its absence causes significant dissatisfaction that diminishes any motivation derived from the work itself. When basic conditions such as manageable hours and predictable schedules are not met, they become strong dissatisfiers. From the SCCT perspective, it is a higher-level contextual factor that can override all other career considerations. A doctor may have high self-efficacy and enthusiasm for a field, but if the role presents insurmountable contextual barriers to their personal and family well-being, their career ambitions will be forcibly altered.

Ultimately, the data reveal a clear shift where personal well-being becomes the main reason for retention, rather than merely a secondary benefit. The failure to align professional with personal life goals is a key reason for attrition, indicating that modern medical careers are judged as much on their sustainability as on their professional prestige.

Theme 3: Satisfaction with Training Environment (Supervision, Workload and Support).

The quality of supervision, workload intensity, and informal support were identified as major factors influencing learning quality and psychological safety. Trainers shared that the same rotation could be motivating or discouraging, depending on the local team's culture and support

levels. Clinical Trainer (R3) emphasised that a supportive supervisor could help alleviate heavy workloads:

"Supervision was consistent, and I knew who to approach for clinical or pastoral support." (R3)

However, this support consistency was often sabotaged by systemic issues:

"Honestly, mixed at best. I had some amazing, knowledgeable and experienced supervisors, but the broader system often undermined the learning environment. The rota gaps, under-resourcing, and pressure to prioritise service over training diminished job satisfaction and learning quality for most." (R1)

The training environment aligns with Herzberg's hygiene factors, where good supervision and interpersonal relationships are vital in preventing dissatisfaction. However, systemic issues such as poor work organisation can create a negative atmosphere, causing dissatisfaction. In SCCT, a supportive supervisor provides essential contextual support by role modelling, which boosts a trainee's self-efficacy. Conversely, a solely "service provision" environment (R1) is an apparent contextual barrier, affecting these learning opportunities and reducing confidence. Consequently, the inconsistency of the training environment across NHS Wales results in a "postcode lottery" of junior doctor experience. This variation affects job satisfaction and erodes trust in the system's ability to reliably support its trainees, impacting their long-term commitment.

Theme 4: Impact of Clinical Rotations on Speciality Preference.

The importance of clinical rotations in influencing speciality choices was often mentioned among the participants. A Clinical Trainer in Emergency Medicine (R3) stated:

"Yes. My A&E rotation was the single biggest factor in my choice to enter emergency medicine." (R3)

A Consultant General Surgeon (R6) also pointed to the variety and dynamism of a placement as a considerable influencing factor:

"Without a doubt. My general surgery rotation was dynamic, with exposure to both elective and emergency cases. That variety confirmed my desire to specialise." (R6)

Theoretically, these rotations are powerful motivators (Herzberg) – intrinsic impulses strong enough to direct an entire career – providing a direct sense of achievement, belonging and deep engagement with the work itself. Within SCCT, these versatile placements are indeed the most effective way to build self-efficacy.

Essentially, the quality of clinical rotations plays a key role in influencing junior doctors' long-term career choices (Schoon and Kötter, 2024). This suggests that providing engaging, well-supported, hands-on placements is not just part of training but also a highly effective way to channel talent into the specialities where it is most needed across NHS Wales.

Theme 5: Perceptions of Career Progression Opportunities.

The perception of clear and accessible career pathways is a tangible factor in long-term commitment. A common belief was that a lack of transparency and guidance left many trainees feeling uncertain about their future, as expressed by BMA Representative (R1):

"In my opinion, yes; however, it is not clear enough. Many juniors feel lost between FY2 and speciality training." (R1)

A Clinical Trainer (R3) states that the information provided is often vague:

"Career progression pathways are there, but they're not always well signposted, especially for those considering less traditional routes like academic or portfolio careers." (R3)

A lack of clear advancement opportunities is a demotivator in Herzberg's model, as the potential for future growth is a strong driver of current job satisfaction. In SCCT terms, this lack of clarity creates ambiguous and negative outcome expectations. Junior doctors cannot set clear career goals or feel confident in their ability to achieve them if the pathway is obscured or unsupported. Therefore, the absence of coherent career mapping results in a "decision vacuum" for many junior doctors after FY2. This uncertainty makes them highly susceptible to external opportunities offering more transparent and accessible career paths, becoming a significant factor in attrition.

Theme 6: Observed Attrition and Colleagues Switching Specialities.

Several trainers reflected on how witnessing peers leave the NHS, take sabbaticals, or move abroad damages morale. The clear trend of colleagues departing NHS Wales became a significant psychological factor, confirming participants' own concerns. A BMA Representative (R2) described this effect:

"It's hard to stay motivated when you see peers walking away disheartened, changing to non-full-time or simply on long sick leave." (R2)

As a Consultant Paediatrician (R5) mentioned, appealing international opportunities also contributed to their colleagues' departure:

"I've seen several colleagues move abroad, mentioning better pay and work-life balance, especially in Australia and New Zealand." (R5)

This emphasises how poor Herzberg's hygiene factors, such as pay and working conditions, affect doctors. Seeing others' actions on this dissatisfaction provides social proof that the issues are systemic rather than personal. From the SCCT perspective, this is a powerful form of social influence through vicarious learning (Lent and Brown, 2019). Watching peers leave and achieve seemingly better outcomes directly reduces the outcome expectations of those who remain, leading them to question whether staying is wise.

Hence, attrition is not just a statistical issue but also a social contagion (Riggio and Riggio, 2023). The departure of colleagues provides strong, real-time evidence of systemic failures, which can undermine the morale, resilience, and long-term commitment of the remaining junior doctors, making retention a collective rather than solely an individual challenge.

Theme 7: Suggested Changes to Improve Retention.

Nearly all respondents proposed methods to reduce attrition and improve career satisfaction – from drastic structural reforms to incremental day-to-day steps. A BMA Representative (R1) suggested the required remedial actions:

"The answer is simple despite the complexity: increase transparency in career progression, address pay erosion, mandate protected learning time, and provide dedicated mentorship for each FY1 and FY2 doctor." (R1)

This view was supported by a Clinical Trainer (R3):

"Competitive pay that reflects the demands of the role is a starting point, but it's not the whole picture. Better rota management, guaranteed access to leave, and protected teaching time would make a big difference." (R3)

These suggestions align perfectly with theory, providing a clear example of Herzberg's model: first, address the hygiene factors (pay, rota management) to reduce dissatisfaction, then build on that stable base with true motivators (mentorship, protected learning) to increase satisfaction (Franco, Bennett and Kanfer, 2002). In SCCT, these suggestions offer a blueprint for establishing a system of strong contextual supports. The aim is that these supports would systematically promote higher self-efficacy and more positive outcome expectations regarding a sustainable and fulfilling career in NHS Wales.

The remarkable consistency of these suggestions across participants provides a clear guideline for policymakers. These proposed solutions are not radical; instead, they promote a balanced approach that addresses both the root causes of dissatisfaction and the main drivers of professional fulfilment. The fact that trainers suggest practical, evidence-based improvements demonstrates their deep commitment and understanding of what motivates junior doctors to stay or leave. Listening to their insights is not only a sign of respect – it also presents a cost-effective strategy for workforce planning.

4.3 Quantitative Findings: Validating the Scale of the Issues

4.3.1 Descriptive Statistics and Sample Profile

As shown in Appendix H, a total of 152 responses were received from FY1 and FY2 doctors currently working in NHS Wales, out of 155 solicited. Of these respondents, 64.5% identified as female, 35.5% as male, with a small proportion choosing not to disclose or selecting alternative gender identities. Regarding age, most fell within the 20–25 (40.8%) and 26–30 (40.8%) brackets, with fewer in the 31–35 (15.8%) and 36+ (2.6%) age groups.

In terms of nationality, respondents most identified with Wales (34.2%), followed by England (20.4%), India (3.9%), and a range of others across the UK and abroad. A significant 90.3% obtained their primary medical qualification (PMQ) in the UK, with a small minority trained in the EEA or outside the UK.

Regarding training level, 65.5% were FY2 doctors, with 33.8% identifying as FY1. Employment was predominantly full-time (75.7%), while 21.1% worked part-time.

Respondents covered a variety of specialities, with the largest groups working in General Medicine (26.5%) and Surgery (17.2%), followed by smaller groups across Paediatrics, Psychiatry, Obstetrics and Gynaecology, Cardiology, Neurology, and other fields.

4.3.2 Chi-Square Tests of Independence

This test investigated potential relationships between key workplace experiences and FY1–FY2 doctors' intentions to remain in NHS Wales post-foundation training. Specifically, associations were tested for perceived workload, training satisfaction, and organisational culture. The test is suitable for determining whether two categorical variables are independent or associated. Each variable was derived from survey questions using Likert-type responses, and frequencies were tabulated from the reconstructed dataset based on the responses collected through Google Forms.

Correlation Analysis: Perceived Workload – Intention to Stay

Crosstabulations revealed that junior doctors who reported heavier-than-expected workloads tended to express lower retention intentions (see Table 6).

Table 6: Observed Frequency Counts for Perceived Workload - Intention to Stay

Perceived Workload	Very Likely to Stay	Somewhat Likely	Unlikely to Stay
Much Heavier than Expected	10	20	30
About as Expected	15	25	20
Lighter than Expected	5	10	25

Source: Author's creation based on the retrieved data

A chi-square test produced the following result:

χ^2 (4) = 8.75, p = 0.068

Although the result was not statistically significant at the conventional $p < 0.05$ threshold, it nearly reached significance. This indicates a potential relationship that could become more significant with a larger sample size or adjusted variable categories (see Table 7).

Table 7: Expected Frequency Counts under the Null Hypothesis (Workload - Intention to Stay)

Perceived Workload	Very Likely to Stay	Somewhat Likely	Unlikely to Stay
Much Heavier than Expected	11.25	20.63	28.13
About as Expected	11.25	20.63	28.13
Lighter than Expected	7.5	13.75	18.75

Source: Author's creation based on the retrieved data

Similarly, associations were explored with training satisfaction and perceived organisational culture (see Appendix E). A cross-tabulation revealed that respondents who expressed satisfaction with their training were more inclined to remain in NHS Wales. Those who reported a positive organisational culture also reported higher intention to stay.

These findings align with Herzberg's Two-Factor Theory. Perceived workload is a hygiene factor – when excessive or misaligned with expectations, it creates dissatisfaction, which in Herzberg's model directly contributes to attrition. Conversely, training satisfaction and a supportive organisational culture, while not purely intrinsic motivators, are critical "satisfaction-maintaining" factors that buffer against demotivation and burnout.

All three variables in SCCT can be seen as contextual supports or barriers. An excessive workload or unsupportive training environments decrease self-efficacy and outcome expectations, which then diminish trainees' confidence in their ability to succeed within NHS Wales. In contrast, a supportive culture and quality training reinforce these core beliefs, encouraging a more positive perspective on their medical practice in Wales.

To summarise, the Chi-Square test for perceived workload did not reach statistical significance; its conceptual and practical relevance remains strong. The observed patterns closely coincide with both Herzberg's and SCCT frameworks. They are supported by qualitative findings in Section 4.2.2, where burnout, rota instability, and cultural misalignment were frequently cited as attrition drivers. While statistical evidence is mixed, triangulated data from surveys and interviews strongly indicate that modifiable experiential factors – particularly training satisfaction and organisational culture – are central to the retention challenges facing NHS Wales.

4.3.3 Spearman's Rank-Order Correlation Matrix Analysis

The Spearman's Matrix (see Table 8) explored ordinal relationships between six core Likert-style survey variables: workload and rota pressures, training satisfaction, administrative burden, organisational culture, career development support, and the intention to stay in NHS Wales. These variables were selected based on their conceptual relevance to the research aim and their alignment with Herzberg's Two-Factor Theory and SCCT. Each item represented either a known motivator or dissatisfier identified in earlier qualitative interviews and the literature.

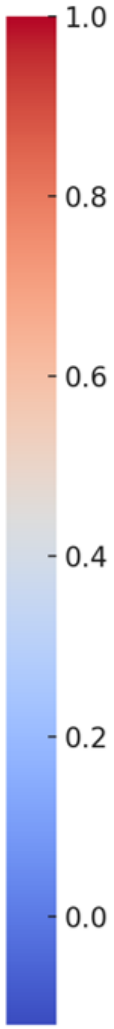
The Spearman analysis revealed very weak correlations across all predictor variables in relation to intention to stay in NHS Wales, with all coefficients falling well below the ±0.30 threshold typically used to indicate moderate relationships (Hair et al., 2019).

Career development support demonstrated the strongest (but still weak) positive correlation with retention intention (ρ = +0.17). This implies a slight tendency for FY1–FY2 doctors who perceived greater developmental support to express stronger intent to stay.

Administrative burden also showed a weak positive correlation (ρ = +0.10), suggesting that administrative workload, while commonly viewed as a stressor, did not decisively affect exit intentions in this sample.

Table 8: Spearman's Rank-Order Correlation Matrix

	Workload & Rota	Training Satisfaction	Administrative Burden	Organisational Culture	Career Development	Intention to Stay
Workload & Rota	1	0.13	–0.05	–0.12	–0.09	0.05
Training Satisfaction	0.13	1	0.09	–0.05	–0.12	–0.10
Administrative Burden	–0.05	0.09	1	–0.10	0.09	0.1
Organisational Culture	–0.12	–0.05	–0.10	1	–0.02	–0.05
Career Development	–0.09	–0.12	0.09	–0.02	1	0.17
Intention to Stay	0.05	–0.10	0.1	–0.05	0.17	1



Source: Author's creation based on the retrieved data

Training satisfaction was feebly negatively correlated with intention to stay (ρ = –0.10), a surprising and counterintuitive result, indicating a need to investigate potential confounding variables such as external opportunities or personal factors.

Workload and rota pressures showed virtually no correlation (ρ = +0.05) with retention intention, suggesting a disconnect between perceived workload intensity and actual career planning outcomes. Organisational culture had a similarly negligible negative correlation (ρ = –0.05).

These results highlight a general lack of statistically or practically significant bivariate relationships between the investigated predictors and the stated career intentions of junior doctors, at least within the scope and size of this dataset.

While the statistical associations were weak, these findings are still analytically meaningful when viewed through the dissertation's theoretical frameworks and in triangulation with qualitative data in Section 4.2.2.

Herzberg's Two-Factor Theory partly explains the observed patterns. Motivators such as career development showed the strongest, yet still weak, link with retention intention – reinforcing their role in long-term commitment. Conversely, Hygiene factors like rota pressure and administrative burden did not stand out as decisive push factors in this sample, although they might affect broader morale or job satisfaction. SCCT helps contextualise the weak but positive correlation between career development and intention to stay. This reflects the theory's focus on contextual supports that enhance self-efficacy and improve outcome expectations. Even if weak at the bivariate level, such supports could be influential when combined with other factors.

From a practical perspective, the weak correlations suggest that junior doctors' career decisions are multifactorial, influenced not solely by workload or training satisfaction, but by the cumulative interplay of opportunities, culture, role clarity, external alternatives, and personal values. This justifies the dissertation's mixed methods approach, allowing qualitative insights to complement and explain the low correlation strength observed here.

To recapitulate, while this Spearman analysis did not find significant statistical predictors of intention to stay, it reinforces a key message of this study: no single-variable metric can capture the complex, multidimensional motivations behind career decisions in medical settings. The weak yet directionally aligned trends offer insight into areas that, if improved systematically and visibly, could positively impact retention in NHS Wales.

5. Chapter 5 – Discussion

5.1 Introduction

As a cyclical closure, this concluding chapter critically discusses empirical and literature review findings (RO1–RO2), their meaning and significance in relation to each stated research objective.

The dissertation ends with recommendations (RO3) and a personal reflection on the overall research journey and experiences.

5.2 RO 1: Identify the primary reasons and main drivers influencing junior doctors' career choices after foundation training in NHS Wales and understand their motivations, aspirations, and personal and professional priorities

The literature and empirical evidence have shown that the main career influential drivers for FY1–FY2 doctors in NHS Wales are predominantly experiential. Their motivation derives from the quality of training and their interactions with the organisational culture during placement. Trainees' positive or negative experiences are entirely subjective and depend on factors such as placement location, department, support received, and relationships with colleagues and trainers. The interviews confirmed that organisational support, interpersonal relationships and guided autonomy are important in the formation of trainees' competence and perceptions of their future careers within a specific speciality in NHS Wales.

The literature review affirmed that the ongoing strikes are a manifestation of the widening gap between NHS Wales' remedial actions and statistical realities. While the Welsh Government and HEIW have made concerted efforts to enhance support for doctors in training, statistical trends continue to show a divergence between the number of trained medical graduates and those who pursue long-term careers within NHS Wales.

The identified core problems affecting FY1-FY2 career choices are structural complexity, uneven geographical distribution, and the overall bulkiness of NHS Wales. These issues impede streamlined, standardised, and transparent control over the quality of training and healthcare services. Also, evidence showed that the Welsh Government's authority over NHS Wales often lacks industry-specific foresight, is ineffective, and financially detrimental. This has led to a strategic discrepancy between doctors and NHS Wales's non-medical administration regarding long-term workforce planning, operational priorities, and the realities of frontline service delivery.

From a management theoretical perspective, despite their merits and limitations, Herzberg's Two-Factor Theory and SCCT have been validated as effective frameworks for understanding and supporting the motivations of FY1–FY2 trainees. However, these motivational theories are only impactful when organisations are willing and able to implement them in practice. Also, the motivations of the FY1–FY2 do not exist in a vacuum and cannot be simplified to only theoretical models when addressing retention challenges. The sophisticated psychological modus operandi of human beings determines the complexity of junior doctors' behaviour. This complexity originates from nuanced psychological responses to a multitude of interacting internal and external factors. These contextual variables must be continuously monitored to

keep abreast of retention dynamics and to remain responsive to emerging trends and behaviour shifts. Although the correlation between hygiene and motivation factors, as well as self-efficacy and outcome expectations, was not statistically significant in this study, a clear conceptual and practical alignment was observed in the findings, proving the relevance and credibility of both theoretical models.

5.3 RO 2: Analyse the impact of these career choices on the overall performance of the NHS Wales healthcare system

The statistics in the literature review chapter demonstrated the negative impact of junior doctors' career choices on NHS Wales's overall performance. The connection between doctor shortages and NHS Wales's key performance indicators was discussed in Chapter 2 and is well shown in the GMC's annual reports from 2011 onwards – NHS Wales has the lowest ability to attract and retain foundational trainees in the UK, indicating poor succession planning and a lack of workforce continuity.

The empirical findings, conversely, did not reach statistical significance and therefore cannot be used to analyse the impact of trainees' career choices on overall NHS Wales performance. However, the Spearman's rank correlation and Chi-Square test results were verified four times, with each iteration showing, within an acceptable margin of error, similar results. These findings, indeed, provide an extra layer of credibility and, therefore, can be used to inform further improvements in FY1–FY2 training experiences in NHS Wales.

5.4 RO 3: Develop a deeper understanding of the factors that attract and retain junior doctors in NHS Wales to synthesise potential strategies to improve workforce planning and retention efforts

5.4.1 Conclusion and Recommendations

In conclusion, this research can be regarded as successful as it identified (RO1) and analysed (RO2) the factors influencing the career choices of junior doctors in NHS Wales. The synthesis (RO3) of potential strategies for workforce planning and retention improvements is based on empirical evidence and the integration of theoretical frameworks, providing a strong foundation for practical recommendations.

Given the scale and duration of retention challenges, it is suggested that NHS Wales's long-term workforce strategy is misaligned with current realities and requires a complete overhaul. However, as this study was not intended to formulate detailed long-term strategic reforms, such recommendations are outside its immediate scope.

Instead, the findings provide targeted actions to address dissatisfaction (Herzberg's Hygiene factors) and enhance satisfaction (Herzberg's Motivators), while implementing measures that boost self-efficacy, clarify outcome expectations, reduce contextual barriers, and foster goal-directed career planning (SCCT), as detailed in Table 9.

Table 9: Recommendations for Improvements

	Action	Herzberg Factor & Explanation	SCCT Elements & Explanation	Intended Impact
1	**Guarantee rota fairness & Predictability**	***Hygiene*** : Fair rotas, timely publication, and fewer last-minute changes prevent dissatisfaction from poor working conditions.	***Supports, Barriers Reduction*** : Removes structural obstacles and gives trainees control over personal time, reducing perceived barriers to career continuity.	Builds trust in management, reduces burnout, and improves work–life balance.
2	**Protected education time that really happens**	***Motivator*** : Recognition of professional development needs; provides growth opportunities beyond clinical duties.	***Self-efficacy, Outcome Expectations*** : Regular teaching and portfolio time improve confidence in competence and expectations for career success.	Increases satisfaction through skill development and visible investment in training quality.
3	**On-call basics (available food, rest facilities and free parking)**	***Hygiene*** : Basic workplace conditions affect morale; poor facilities cause dissatisfaction even if other motivators exist.	***Supports, Barriers Reduction*** : Reliable rest and sustenance resources remove stress factors that detract from learning and career planning.	Improves daily well-being, reduces fatigue, and signals organisational care.
4	**Mentor on day one for every FY1–FY2**	***Motivator*** : Direct personal development, feedback, and role modelling drive intrinsic motivation and professional identity formation.	***Self-efficacy, Supports*** : Mentorship boosts confidence, normalises challenges, and builds coping strategies to achieve career goals.	Strengthens early-career confidence, career planning, and retention through supportive relationships.
5	**Learning & Exam support with funding**	***Motivator*** : Recognition and material support for advancement reduce barriers to postgraduate progression.	***Self-efficacy, Outcome Expectations*** : Financial and time support increase belief in capability and expected career outcomes.	Promotes professional achievement and strengthens long-term commitment to NHS Wales.
6	**Stability in rotations & Site preference bidding**	***Hygiene*** : Predictability in location and workload minimises dissatisfaction linked to work–life disruptions.	***Supports, Goals*** : Enables goal-setting for personal life and career development while reducing uncertainty-related stress.	Improves retention by aligning training with personal circumstances and reducing relocation fatigue.
7	**Targeted rural incentives & Relocation bursaries**	***Hygiene*** : Material benefits prevent dissatisfaction in less popular posts, where lifestyle costs and isolation could deter candidates.	***Outcome Expectations, Goals*** : Incentives positively shape expectations about rural career viability and long-term planning.	Increases uptake of rural posts and strengthens workforce distribution.
8	**Maintain pay competitiveness & Transparent communication**	***Hygiene*** : Salary fairness directly influences dissatisfaction if below expectations; pay clarity reduces mistrust and uncertainty.	***Outcome Expectations*** : Transparent communication of pay uplifts links effort, performance, and financial outcomes.	Builds organisational credibility and demonstrates value for work performed.
9	**Retention bonuses tied to education outputs**	***Motivator*** : Recognition for quality improvement and teaching achievements rewards growth, achievement, and responsibility.	***Goals, Outcome Expectations*** : Tangible rewards for completing developmental outputs reinforce goal-oriented career behaviours.	Encourages engagement in organisational improvement and links retention to achievement milestones.
10	**Visible career pathways (research, teaching, leadership)**	***Motivator*** : Clear promotion routes provide intrinsic motivation through growth, responsibility, and achievement.	***Goals, Outcome Expectations*** : Transparency over career options supports planning and sustained engagement in NHS Wales careers.	Builds commitment by showing attainable, rewarding future opportunities.
11	**Workforce planning & Welsh-domiciled expansion**	***Hygiene*** : Stable workforce pipelines reduce insecurity about service sustainability and individual job stability.	***Supports, Goals*** : Aligning training capacity with workforce needs enables trainees to plan long-term careers in Wales confidently.	Provides security for future roles, reducing uncertainty-driven attrition.

Source: Author's creation based on the research findings

5.5 Self-Reflection

This research was indeed challenging; however, it was also interesting and insightful, demanding new skills, knowledge, and sometimes actions outside of the comfort zone to complete it. The reflection-on-action section can be found in Appendix J with a personal narrative on the dissertation journey.

6. References

Aguinis, H., Joo, H. and Gottfredson, R.K. (2013). What Monetary Rewards Can and Cannot do: How to Show Employees the Money. *Business Horizons*, [online] 56(2), pp.241–249. doi:https://doi.org/10.1016/j.bushor.2012.11.007.

Ajaz, I. (2024). *Role of a Resident Doctor in the NHS*. [online] RoadToUK Blog. Available at: https://blog.roadtouk.com/continuing-professional-development/role-of-a-resident-doctor-in-the-nhs/ [Accessed 4 May 2025].

Armitage, R. (2023). Junior Doctors Leaving the NHS: What Would It Mean for General Practice? *British Journal of General Practice*, [online] 73(728), pp.126–127. doi:https://doi.org/10.3399/bjgp23x732189.

Armstrong, M. and Taylor, S. (2023). *Armstrong's Handbook of Human Resource Management Practice*. 16th ed. London: Kogan Page, pp.194–196.

Arthur, H. (2024). *Agency Workforce Reduction Programme and Control Framework 2024 to 2025 (WHC/2024/031) [HTML] | GOV.WALES*. [online] GOV.WALES. Available at: https://www.gov.wales/agency-workforce-reduction-programme-and-control-framework-2024-2025-whc2024031-html [Accessed 6 Jun. 2025].

Audit Wales (2025). *Addressing Workforce Challenges in NHS Wales | Audit Wales*. [online] Available at: https://www.audit.wales/publication/addressing-workforce-challenges-nhs-wales [Accessed 30 May 2025].

Auditor General for Wales (2025). *Addressing Workforce Challenges in NHS Wales*. [online] Available at: https://www.audit.wales/sites/default/files/publications/Addressing_Workforce_Challenges_in_NHS_Wales_English.pdf [Accessed 25 May 2025].

Babbie, E. (2021). *The Practice of Social Research*. 15th ed. S.L.: Cengage Learning, pp.384–491.

Bandura, A. (1986). *Social Foundations of Thought and action: a Social Cognitive Theory*. 1st ed. Englewood Cliffs, NJ: Prentice-Hall, pp.134–150.

Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. 1st ed. [online] New York: W.H.Freeman & Co Ltd. Available at: https://www.academia.edu/28274869/Albert_Bandura_Self_Efficacy_The_Exercise_of_Control_W_H_Freeman_and_Co_1997_pdf [Accessed 3 Sep. 2025].

Barr, J. and Dowding, L. (2022). *Leadership in Health Care*. 5th ed. London: SAGE, p.45-70.

Barrett, D. and Younas, A. (2023a). Induction, Deduction and Abduction. *Evidence-Based Nursing*, [online] 27(1), pp.6–7. doi:https://doi.org/10.1136/ebnurs-2023-103873.

Barrett, D. and Younas, A. (2023b). Induction, Deduction and Abduction. *Evidence-Based Nursing*, [online] 27(1), pp.6–7. doi:https://doi.org/10.1136/ebnurs-2023-103873.

BBC (2019). *Millennials, Baby Boomers or Gen Z: Which One Are You and What Does It Mean?* [online] BBC Bitesize. Available at: https://www.bbc.co.uk/bitesize/articles/zf8j92p [Accessed 24 Aug. 2025].

Bebb, H. and Bryer, N. (2020). *Mid-point Evaluation of 'A Healthier Wales' Transformation Fund*. [online] Available at: https://www.gov.wales/sites/default/files/publications/2020-09/mid-point-evaluation-of-a-healthier-wales-transformation-fund_0.pdf [Accessed 26 May 2025].

Bekhet, A.K. and Zauszniewski, J.A. (2012). Methodological triangulation: an Approach to Understanding Data. *Nurse Researcher*, [online] 20(2), pp.40–3. doi:https://doi.org/10.7748/nr2012.11.20.2.40.c9442.

Bell, E., Bryman, A. and Harley, B. (2022). *Business Research Methods*. 6th ed. Oxford: Oxford University Press, pp.1–40.

Bennett, R. (2019). *Organisational Behaviour*. London: Pitman, pp. 70-110.

Bevan, G., Karanikolos, M., Exley, J., Nolte, E., Connolly, S. and Mays, N. (2014). *The Four Health Systems of the United Kingdom: How Do They Compare? Source Report*. [online] *nuffieldtrust.org.uk*. Available at: https://www.nuffieldtrust.org.uk/sites/default/files/2017-01/4-countries-report-web-final.pdf [Accessed 26 May 2025].

Bingham, A.J. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. *International Journal of Qualitative Methods*, 22(22), pp.1–11. doi:https://doi.org/10.1177/16094069231183620.

Blagoev, B., Hernes, T., Kunisch, S. and Schultz, M. (2023). Time as a Research Lens: a Conceptual Review and Research Agenda. *Journal of Management*, 50(6). doi:https://doi.org/10.1177/01492063231215032.

BMA (2024). *When a Doctor Leaves: Tackling the Cost of Attrition in the UK's Health Services*. [online] *bma.org.uk*. Available at: https://www.bma.org.uk/media/gsmfle1o/tackling-the-cost-of-attrition-uks-health-services.pdf?utm_source=chatgpt.com [Accessed 4 May 2025].

Briggs, A.R.J. and Coleman, M. (2012). *Research Methods in Educational Leadership and Management*. 3rd ed. Los Angeles: Sage Publications.

British Medical Association (2024a). *'Junior' Doctors Change Name to 'Resident' Doctors - BMA Media Centre - BMA*. [online] The British Medical Association is the Trade Union and Professional Body for Doctors in the UK. Available at: https://www.bma.org.uk/bma-media-centre/junior-doctors-change-name-to-resident-doctors [Accessed 5 Apr. 2025].

British Medical Association (2024b). *Tackling Medical Attrition in the UK's Health Services*. [online] The British Medical Association is the Trade Union and Professional Body for Doctors in the UK. Available at: https://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/workforce/tackling-medical-attrition-in-the-uk-s-health-services [Accessed 20 Apr. 2025].

British Medical Association (2025). *Contract Reform for Resident Doctors in Wales*. [online] The British Medical Association is the Trade Union and Professional Body for Doctors in the UK. Available at: https://www.bma.org.uk/our-campaigns/resident-doctor-campaigns/pay-in-wales/contract-reform-for-resident-doctors-in-wales [Accessed 4 May 2025].

Brown, S. (2024). *NHS Wales: under Pressure | HFMA*. [online] www.hfma.org.uk. Available at: https://www.hfma.org.uk/articles/nhs-wales-under-pressure [Accessed 30 May 2025].

Brown, S.D. and Lent, R.W. (2023). Social Cognitive Career theory. *American Psychological Association*, [online] pp.37–57. doi:https://doi.org/10.1037/0000339-003.

Campbell, D. (2023). Junior Doctors Are the Workhorses – the Backbone – of Hospitals. *The Guardian*. [online] 13 Mar. Available at: https://www.theguardian.com/society/2023/mar/13/junior-doctors-backbone-of-hospitals-the-secret-health-boss [Accessed 4 May 2025].

Cheusheva, S. (2023). *Spearman Rank Correlation in Excel: Formula and Graph*. [online] ablebits.com. Available at: https://www.ablebits.com/office-addins-blog/spearman-rank-correlation-excel/ [Accessed 6 Sep. 2025].

Chua, J.L., Mougammadou, Z., Lim, R.B.T., Tung, J.Y.M. and Sng, G.G.R. (2024). In the Shoes of Junior Doctors: A Qualitative Exploration of Job Performance Using the Job-Demands Resources Model. *Frontiers in Psychology*, [online] 15(3). doi:https://doi.org/10.3389/fpsyg.2024.1412090.

Conlin, C. (2019). *How to Foster Motivation and Purpose through Agility*. [online] Scrum.org. Available at: https://www.scrum.org/resources/blog/how-foster-motivation-and-purpose-through-agility [Accessed 16 May 2025].

Creswell, J.W. and Clark, V.L.P. (2017a). *Designing and Conducting Mixed Methods Research*. 3rd ed. Thousand Oaks Sage Publications, pp.25–30.

Creswell, J.W. and Clark, V.L.P. (2017b). *Designing and Conducting Mixed Methods Research*. 3rd ed. Thousand Oaks Sage Publications.

Creswell, J.W. and Creswell, D. (2022). *Research design: Qualitative, quantitative, and Mixed Methods Approaches*. 6th ed. London: SAGE Publications, Inc, pp.145–203.

Dayan, M. and Flinders, S. (2022). *How Well Is the NHS in Wales performing?* [online] The Nuffield Trust. Available at: https://www.nuffieldtrust.org.uk/news-item/how-well-is-the-nhs-in-wales-performing [Accessed 22 Jun. 2025].

De Jong, C.A.J.D.J., Wang, L., van Rijn, L.C., Iskandar, S., Jokūbonis, D. and van der Laan, M.J. (2025). Is the Desire to Help People the Main Motivation for Entering a Medical Profession? A Cross-Cultural, Phenomenological Study. *Academia Mental Health and Well-Being*, [online] 2(1). doi:https://doi.org/10.20935/mhealthwellb7531.

Dichoso, E. (2024). *Alternative Careers for Doctors: the Ultimate List*. [online] Medic Footprints. Available at: https://medicfootprints.org/alternative-careers-for-doctors-the-ultimate-list/ [Accessed 24 Jan. 2025].

Figueroa, C.A., Harrison, R., Chauhan, A. and Meyer, L. (2019). Priorities and Challenges for Health Leadership and Workforce Management globally: a Rapid Review. *BMC Health Services Research*, [online] 19(1), pp.1–11. Available at: https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-019-4080-7 [Accessed 14 Apr. 2025].

Foundation Training Doctors Survey (2025). *Foundation Training Doctors Survey*. [online] Google Docs. Available at: https://docs.google.com/forms/d/e/1FAIpQLSd_3njLroGZMmggvQcvKllcJLEWpyn928CZIuGCtjw0OZqNrg/viewform?usp=header [Accessed 2 Sep. 2025].

Franco, L.M., Bennett, S. and Kanfer, R. (2002). Health Sector Reform and Public Sector Health Worker motivation: a Conceptual Framework. *Social Science & Medicine*, [online] 54(8), pp.1255–1266. doi:https://doi.org/10.1016/s0277-9536(01)00094-6.

Gammie, J. (2023). *How Do Junior Doctors' Pay Demands Compare with MPs' Recent Salary Rises?* [online] Full Fact. Available at: https://fullfact.org/health/pay-inflation-mps-junior-doctors/ [Accessed 14 Apr. 2025].

General Medical Council (2024a). *National Training Survey 2024 Results*. [online] *gmc-uk.org*. Available at: https://www.gmc-uk.org/-/media/documents/national-training-survey-summary-report-2024_pdf-107834344.pdf [Accessed 4 May 2025].

General Medical Council (2024b). *National Training Survey: Wales Summary Report.* [online] *GMC*. Available at: https://www.gmc-uk.org/-/media/documents/national-training-survey-summary-report-2024_pdf-107834344.pdf [Accessed 11 Jul. 2025].

George, T. (2022). *An Introduction to Mixed Methods Research*. [online] Scribbr. Available at: https://www.scribbr.co.uk/research-methods/mixed-methods/ [Accessed 29 Jul. 2025].

Globe Locums (2025). *Why UK and Irish Doctors Are Heading to Australia*. [online] Globe Locums. Available at: https://www.globelocums.co.uk/news/article/why-uk-and-irish-doctors-are-heading-to-australia [Accessed 1 Jun. 2025].

GMC (2023). *national-training-survey-2023*. [online] https://www.gmc-uk.org/. Available at: https://www.gmc-uk.org/-/media/documents/national-training-survey-2023-initial-findings-report_pdf-101939815.pdf [Accessed 14 Sep. 2025].

GMC (2024a). *Full Registration*. [online] Gmc-uk.org. Available at: https://www.gmc-uk.org/registration-and-licensing/our-registers/a-guide-to-our-registers/full-registration [Accessed 5 Apr. 2025].

GMC (2024b). *The State of Medical Education and Practice in the UK Workforce Report*. [online] Available at: https://www.gmc-uk.org/-/media/documents/somep-workforce-report-2024-full-report_pdf-109169408.pdf [Accessed 5 Apr. 2025].

GMC (2024c). *The State of Medical Education and Practice in the UK Workforce Report*. [online] *https://www.gmc-uk.org*. Available at: https://www.gmc-uk.org/-/media/documents/somep-workforce-report-2024-full-report_pdf-109169408.pdf [Accessed 1 Jun. 2025].

GMC (2024d). *The State of Medical Education and Practice in the UK Workforce Report*. [online] *https://www.gmc-uk.org*. Available at: https://www.gmc-uk.org/-/media/documents/somep-workforce-report-2024-full-report_pdf-109169408.pdf [Accessed 1 Jun. 2025].

GMC (2024e). *Workplace Experiences 2024*. [online] Gmc-uk.org. Available at: https://www.gmc-uk.org/about/what-we-do-and-why/data-and-research/the-state-of-medical-education-and-practice-in-the-uk/workplace-report [Accessed 31 May 2025].

GMC (2024f). *Workplace Experiences 2024*. [online] Gmc-uk.org. Available at: https://www.gmc-uk.org/about/what-we-do-and-why/data-and-research/the-state-of-medical-education-and-practice-in-the-uk/workplace-report [Accessed 31 May 2025].

GMC (2025). *Licence to Practise*. [online] www.gmc-uk.org. Available at: https://www.gmc-uk.org/registration-and-licensing/managing-your-registration/information-for-doctors-on-the-register/licensing [Accessed 25 Mar. 2025].

GOV.UK (2025). *National Pay Scales for Eligible Healthcare Occupation Codes*. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/national-pay-scales-for-eligible-healthcare-jobs/national-pay-scales-for-eligible-healthcare-occupation-codes [Accessed 16 Apr. 2025].

Grace, J. (2024). *Critical: Why the NHS Is Being Betrayed and How We Can Fight for It*. Macken House, 39/40 Mayor Street, Upper Dublin 1, D01C9W8, Ireland: HarperCollinsPublishers, pp.69–95.

Gravetter, F.J. and Forzano, L.-A.B. (2018). *Research Methods for the Behavioral Sciences*. 6th ed. Boston, MA: Cengage Learning Inc., pp.167–256.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2019). *Multivariate Data Analysis*. 8th ed. [online] Andover, Hampshire, United Kingdom: Cengage Learning Emea. Available at: https://eli.johogo.com/Class/CCU/SEM/_Multivariate%20Data%20Analysis_Hair.pdf [Accessed 3 Sep. 2025].

Hampson, T. and McKinley, J. (2023). Problems Posing as Solutions: Criticising Pragmatism as a Paradigm for Mixed Research. *Research in Education*, [online] 116(1), pp.124–138. doi:https://doi.org/10.1177/00345237231160085.

Hatherley, S., McCarthy, J. and Jones, H. (2022). *Access delayed: the Waiting Times Backlog in NHS Wales*. [online] Senedd.wales. Available at: https://research.senedd.wales/research-articles/access-delayed-the-waiting-times-backlog-in-nhs-wales/?utm_source=chatgpt.com [Accessed 6 Jun. 2025].

Health and Social Care Committee (2023). *NHS Wales Waiting Times –Termly Monitoring Report*. [online] Business.Senedd.Wales. Available at: https://business.senedd.wales/documents/s137567/?utm_source=chatgpt.com [Accessed 6 Jun. 2025].

Herzberg, F. (1976). One More Time: How Do You Motivate Employees? In: *Job Satisfaction — A Reader*. [online] Harvard Business Review, pp.17–32. doi:https://doi.org/10.1007/978-1-349-02701-9_2.

Herzberg, F., Mausner, B., Peterson, R. and Capwell, D. (1957). *Job Attitudes*. [online] Pittsburgh, Pennsylvania: Psychological Service of Pittsburgh. Available at: https://archive.org/details/jobattitudesrevi0000fred/mode/2up [Accessed 20 May 2025].

House of Commons (2021). *Workforce Burnout and Resilience in the NHS and Social Care Second Report of Session 2021-22 Report, Together with Formal Minutes Relating to the Report*. [online] House of Commons. Available at: https://committees.parliament.uk/publications/6158/documents/68766/default/ [Accessed 5 Apr. 2025].

Ingham, A. (2024). *DLlB/FOI/15/11/2024*. [online] Health Education and Improvement Wales (HEIW). Available at: https://heiw.nhs.wales/files/foi-15112024/ [Accessed 26 Jul. 2025].

Ireland, B. (2024). *Junior Doctors in Wales Begin First Strike of Pay Restoration Campaign*. [online] The British Medical Association is the Trade Union and Professional Body for Doctors in the UK. Available at: https://www.bma.org.uk/news-and-opinion/junior-doctors-in-wales-begin-first-strike-of-pay-restoration-campaign?utm_source=chatgpt.com [Accessed 14 Apr. 2025].

Javid, S. and Chapa, A. (2014). *When Money Is Not a Motivating Force in the Work Place*. [online] Available at: https://globaljournals.org/GJHSS_Volume14/1-When-Money-is-not-a-Motivating.pdf [Accessed 14 Jan. 2025].

Johnson, R.B. and Onwuegbuzie, A.J. (2004). Mixed Methods research: a Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), pp.14–26. doi:https://doi.org/10.3102/0013189X033007014.

Jones, K.C., Weatherly, H., Birch, S., Castelli, A., Chalkley, M., Dargan, A., Forder, J.E., Gao, J., Hinde, S., Markham, S., Ogunleye, D., Premji, S. and Roland, D. (2023). *Unit Costs of Health and Social Care 2022 Manual*. [online] www.pssru.ac.uk. Available at: https://kar.kent.ac.uk/100519/ [Accessed 12 Apr. 2025].

King, N. (1970). Clarification and Evaluation of the two-factor Theory of Job satisfaction. *Psychological Bulletin*, [online] 74(1), pp.18–31. doi:https://doi.org/10.1037/h0029444.

Lent, R.W. and Brown, S.D. (2008). Social Cognitive Career Theory and Subjective Well-Being in the Context of Work. *Journal of Career Assessment*, [online] 16(1), pp.6–21. doi:https://doi.org/10.1177/1069072707305769.

Lent, R.W. and Brown, S.D. (2019). Social Cognitive Career Theory at 25: Empirical Status of the interest, choice, and Performance Models. *Journal of Vocational Behavior*, [online] 115(103316). doi:https://doi.org/10.1016/j.jvb.2019.06.004.

Lent, R.W., Brown, S.D. and Hackett, G. (1994). Toward a Unifying Social Cognitive Theory of Career and Academic interest, choice, and Performance. *Journal of Vocational Behavior*, [online] 45(1), pp.79–122. doi:https://doi.org/10.1006/jvbe.1994.1027.

Lent, R.W., Hackett, G. and Brown, S.D. (2008). *Encyclopedia of Counseling*. *Encyclopedia of Counseling*, Thousand Oaks: SAGE Publications, Inc., pp.1628–1631. doi:https://doi.org/10.4135/9781412963978.n585 Chapter Title: 'Social Cognitive Career Theory'.

Lent, R.W., Ireland, G.W., Penn, L.T., Morris, T.R. and Sappington, R. (2017). Sources of self-efficacy and Outcome Expectations for Career Exploration and decision-making: a Test of the Social Cognitive Model of Career self-management. *Journal of Vocational Behavior*, [online] 99(3), pp.107–117. doi:https://doi.org/10.1016/j.jvb.2017.01.002.

Li, A. (2025). *Why Work-life Balance Is Non-Negotiable for Young Professionals*. [online] Jobsolv.com. Available at: https://www.jobsolv.com/blog/why-work-life-balance-is-non-negotiable-for-young-professionals [Accessed 1 Sep. 2025].

Lock, F.K. and Carrieri, D. (2022a). Factors Affecting the UK Junior Doctor Workforce Retention Crisis: an Integrative Review. *BMJ Open*, [online] 12(3), pp.1–12. doi:https://doi.org/10.1136/bmjopen-2021-059397.

Lock, F.K. and Carrieri, D. (2022b). Factors Affecting the UK Junior Doctor Workforce Retention Crisis: an Integrative Review. *BMJ Open*, [online] 12(3), pp.1–12. doi:https://doi.org/10.1136/bmjopen-2021-059397.

Lock, F.K. and Carrieri, D. (2022c). Factors Affecting the UK Junior Doctor Workforce Retention Crisis: an Integrative Review. *BMJ Open*, [online] 12(3), pp.1–12. doi:https://doi.org/10.1136/bmjopen-2021-059397.

Lock, F.K. and Carrieri, D. (2022d). Factors Affecting the UK Junior Doctor Workforce Retention Crisis: an Integrative Review. *BMJ Open*, [online] 12(3), pp.1–12. doi:https://doi.org/10.1136/bmjopen-2021-059397.

Malik, M.E. and Naeem, B. (2013). Towards Understanding Controversy on Herzberg Theory of Motivation. *World Applied Sciences Journal*, [online] 24(8), pp.1031–1036. doi:https://doi.org/10.5829/idosi.wasj.2013.24.08.2442.

Matthews, A. (2024). Junior Doctors on Strike in Wales Say They Feel Undervalued. *BBC News*. [online] 15 Jan. Available at: https://www.bbc.co.uk/news/uk-wales-67981311 [Accessed 23 May 2025].

McArdle, J. (2024). *Working as a Doctor in Australia*. [online] The British Medical Association is the Trade Union and Professional Body for Doctors in the UK. Available at: https://www.bma.org.uk/advice-and-support/career-progression/working-abroad/working-as-a-doctor-in-australia [Accessed 1 Jun. 2025].

McClenaghan, E. (2024). *Spearman Rank Correlation*. [online] Technology Networks. Available at: https://www.technologynetworks.com/tn/articles/spearman-rank-correlation-385744 [Accessed 29 Jul. 2025].

Medrecruit Editorial Team (2023). *UK Vs Australia: Which Is Better for Doctors?* [online] Medrecruit. Available at: https://medrecruit.medworld.com/articles/uk-vs-australia-which-is-better-for-doctors [Accessed 1 Jun. 2025].

Mesek, M. (2023). *How to Understand the Language of Business Research Methods*. [online] *SAGE Publications Ltd eBooks*. SAGE Publications Ltd. doi:https://doi.org/10.4135/9781529668476.

Monrouxe, L.V., Bullock, A., Gormley, G., Kaufhold, K., Kelly, N., Roberts, C.E., Mattick, K. and Rees, C. (2018). New Graduate Doctors' Preparedness for practice: a multistakeholder, Multicentre Narrative Study. *BMJ Open*, [online] 8(8), p.e023146. doi:https://doi.org/10.1136/bmjopen-2018-023146.

Morgan, D.L. (2014). Pragmatism as a Paradigm for Social Research. *Qualitative Inquiry*, 20(8), pp.1045–1053. doi:https://doi.org/10.1177/1077800413513733.

Morgan, M. (2020). *Critical: Stories from the Front Line of Intensive Care Medicine*. S.L.: Simon & Schuster Ltd, pp.27–217.

Morse, J. (1991). Approaches to Qualitative-Quantitative Methodological Triangulation. *Nursing Research*, 40(2), pp.120–123. doi:https://doi.org/10.1097/00006199-199103000-00014.

Muir, C. and Dörnyei, Z. (2013). Directed Motivational Currents: Using Vision to Create Effective Motivational Pathways. *Studies in Second Language Learning and Teaching*, [online] 3(3), pp.357–375. doi:https://doi.org/10.14746/ssllt.2013.3.3.3.

Mullins, L.J. (2006). *Essentials of Organisational Behaviour*. Harlow, England ; New York: Financial Times/Prentice Hall.

Mullins, L.J. (2011). *Essentials of Organisational Behaviour*. Harlow, England; New York: Financial Times/Prentice Hall, pp.184–192.

Murphy, C. (2024). *Junior Doctors in Wales Announce New Strike Dates in Fight to Restore pay. - BMA Media Centre - BMA*. [online] The British Medical Association is the Trade Union and Professional Body for Doctors in the UK. Available at: https://www.bma.org.uk/bma-media-centre/junior-doctors-in-wales-announce-new-strike-dates-in-fight-to-restore-pay [Accessed 25 Apr. 2025].

National Health Executive (2025). *NHS Wales Faces Workforce Challenges despite Positive Developments | National Health Executive*. [online] National Health Executive. Available at: https://www.nationalhealthexecutive.com/articles/nhs-wales-faces-workforce-challenges-despite-positive-developments [Accessed 1 Jun. 2025].

NHS (2015). *Foundation Training*. [online] Health Careers. Available at: https://www.healthcareers.nhs.uk/explore-roles/doctors/training-doctor/foundation-training [Accessed 5 Apr. 2025].

NHS Confederation (2024). *How Is the NHS Structured in Wales?* [online] NHS Confederation. Available at: https://www.nhsconfed.org/articles/how-nhs-structured-wales [Accessed 25 Mar. 2025].

NHS England (2022). *Statistics: Consultant-led Referral to Treatment Waiting Times Data 2021-22*. [online] www.england.nhs.uk. Available at: https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2021-22/ [Accessed 22 Jun. 2025].

NHS Wales (2020). *Health Education and Improvement Wales Agile Working Policy*. [online] NHS.Wales. Available at: https://heiw.nhs.wales/files/key-documents/policies/human-resources-policies/heiw-agile-working-policy/ [Accessed 18 May 2025].

Nickerson, C. (2025). *Herzberg's two-factor Theory of motivation-hygiene*. [online] Simply Psychology. Available at: https://www.simplypsychology.org/herzbergs-two-factor-theory.html [Accessed 21 May 2025].

OECD (2016). *OECD Reviews of Health Care Quality: United Kingdom 2016*. [online] OECD. Available at: https://www.oecd.org/en/publications/oecd-reviews-of-health-care-quality-united-kingdom-2016_9789264239487-en.html [Accessed 26 May 2025].

Office for National Statistics (2022). *Avoidable Mortality in Great Britain - Office for National Statistics*. [online] www.ons.gov.uk. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/avoidablemortalityinenglandandwales/2020 [Accessed 22 Jun. 2025].

Ogbeivor, C. (2021). Lack of Motivation among Healthcare Professionals in the National Health Service. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, [online] 10(6), pp.45–54. doi:https://doi.org/10.9790/1959-1006024554.

Parker, C., Scott, S. and Geddes, A. (2019). Snowball Sampling. *SAGE Research Methods Foundations*, [online] 1(1). doi:https://doi.org/10.4135/9781526421036831710.

Parry-Jones, J. (2014). *Regional Workforce Engagement Report: Wales*. [online] *FFICM*. Available at: https://www.ficm.ac.uk/sites/ficm/files/documents/2021-10/ficm-workforce-regional-engagment-report-wales.pdf [Accessed 1 Jun. 2025].

Pathmanathan, A. and Snelling, I. (2023a). Exploring Reasons behind UK Doctors Leaving the Medical profession: a Series of Qualitative Interviews with Former UK Doctors. *BMJ Open*, [online] 13(9):e068202. doi:https://doi.org/10.1136/bmjopen-2022-068202.

Pathmanathan, A. and Snelling, I. (2023b). Exploring Reasons behind UK Doctors Leaving the Medical profession: a Series of Qualitative Interviews with Former UK Doctors. *BMJ Open*, [online] 13(9):e068202. doi:https://doi.org/10.1136/bmjopen-2022-068202.

Peluso, A.M., Innocenti, L. and Pilati, M. (2017). Pay Is Not Everything. *Evidence-based HRM: a Global Forum for Empirical Scholarship*, [online] 5(3), pp.311–327. doi:https://doi.org/10.1108/ebhrm-07-2015-0031.

Pike, R. (2024). *NHS Activity and Performance Summary: August and September 2024 [HTML] | GOV.WALES*. [online] GOV.WALES. Available at: https://www.gov.wales/nhs-activity-and-performance-summary-august-and-september-2024-html?utm_source=chatgpt.com [Accessed 6 Jun. 2025].

Raosoft (2025). *Sample Size Calculator*. [online] Raosoft. Available at: http://www.raosoft.com/samplesize.html [Accessed 23 Jul. 2025].

RCEM Wales (2023). *Wales' Emergency Medicine Workforce Census 2023 Acknowledgments*. [online] *The Royal College of Emergency Medicine*. Available at: https://rcem.ac.uk/wp-content/uploads/2023/01/Wales_Emergency_Medicine_Workforce_Census_2023.pdf [Accessed 11 May 2025].

RCP Wales (2022). *More than a Career: What is the UK Census of Consultant Physicians?* [online] Available at: https://rcp.ac.uk/media/qtslvaah/more-than-a-career_0-1.pdf [Accessed 1 Jun. 2025].

Rees, J. (2024). NHS Wales Head Warns of Junior Doctors Strike Disruption. *BBC News*. [online] 2 Jan. Available at: https://www.bbc.co.uk/news/uk-wales-67867428 [Accessed 7 Apr. 2025].

Rees, J. and Aitken, C. (2023). NHS Wales: Junior Doctors to Go on Three-Day Strike. *BBC News*. [online] 18 Dec. Available at: https://www.bbc.co.uk/news/uk-wales-67752312 [Accessed 14 Apr. 2025].

Rees, J. and Pigott, P. (2024). NHS Wales: Doctors Call off Strike after Significant Proposal. *BBC News*. [online] 9 Apr. Available at: https://www.bbc.co.uk/news/uk-wales-68766553 [Accessed 7 Apr. 2025].

Reeve, J. (2018). *Understanding Motivation and Emotion*. 7th ed. John Wiley & Sons, Inc., pp. 120-140.

ResearchGate (2020). *What is the Difference between the Spearman rank-order Correlation and Chi-sq Test for Independence? | ResearchGate*. [online] ResearchGate. Available at: https://www.researchgate.net/post/What-is-the-difference-between-the-Spearman-rank-order-correlation-and-Chi-sq-test-for-Independence [Accessed 10 Aug. 2025].

Riggio, R.E. and Riggio, C.R. (2023). *Social Contagion - an Overview | ScienceDirect Topics*. [online] www.sciencedirect.com. Available at: https://www.sciencedirect.com/topics/psychology/social-contagion [Accessed 17 Aug. 2025].

Robbins, S.P. and Judge, T.A. (2018). *Organizational Behavior*. 18th ed. New York, New York: Pearson, pp.112–268.

Sarasa, A. (2024). *6 Strategies for Boosting Workplace Motivation in 2025*. [online] Meditopia.com. Available at: https://meditopia.com/en/forwork/articles/strategies-for-boosting-workplace-motivation#section3 [Accessed 16 May 2025].

Saunders, M., Lewis, P. and Thornhill, A. (2023). *Saunders Research Methods.* 9th ed. S.L.: Pearson Education Limited, p.108.

Schooley, S. (2024). *Beyond the clock: the Benefits of Highly Motivated Employees*. [online] business.com. Available at: https://www.business.com/articles/the-benefits-of-highly-motivated-employees/ [Accessed 17 May 2025].

Schoon, B. and Kötter, T. (2024). Intracurricular Factors Influencing Medical Students' Specialty Choice: a Systematic Review. *Advances in Medical Education and Practice*, [online] 15, pp.1127–1140. doi:https://doi.org/10.2147/AMEP.S491008.

Shaban, A. (2016). Managing and Leading a Diverse Workforce: One of the Main Challenges in Management. *Procedia - Social and Behavioral Sciences*, [online] 230(1), pp.76–84. doi:https://doi.org/10.1016/j.sbspro.2016.09.010.

Shuttleworth, K. and Nicholson, E. (2020). *Devolution and the NHS*. [online] Institute for Government. Available at: https://www.instituteforgovernment.org.uk/explainer/devolution-and-nhs [Accessed 19 Jun. 2025].

Sinclair, T. (2025). *NHS Wales Workforce Crisis: Audit Wales Report Highlights Key Challenges*. [online] The Pembrokeshire Herald. Available at: https://pembrokeshire-herald.com/107130/nhs-wales-workforce-crisis-audit-wales-report-highlights-key-challenges/?utm_source=chatgpt.com [Accessed 6 Jun. 2025].

Snowden, A. and Atkinson, J. (2012). Concurrent analysis: a Pragmatic Justification. *Nursing Philosophy*, [online] 13(2), pp.126–141. doi:https://doi.org/10.1111/j.1466-769x.2011.00523.x.

Social Care Wales (2024). *A Healthier Wales - a Workforce Strategy for Health and Social Care: Phase One achievements.* [online] Social Care Wales. Available at: https://socialcare.wales/phase-one-achievements-workforce-strategy [Accessed 11 Jul. 2025].

Social Science Statistics (2025). *Chi Square Calculator*. [online] Socscistatistics.com. Available at: https://www.socscistatistics.com/tests/chisquare2/default2.aspx [Accessed 10 Aug. 2025].

SoMEP (2024a). *The State of Medical Education and Practice in the UK Workforce Report*. [online] *gmc-uk.org*. Available at: https://www.gmc-uk.org/-/media/documents/somep-workforce-report-2024-full-report_pdf-109169408.pdf [Accessed 28 May 2025].

SoMEP (2024b). *The State of Medical Education and Practice in the UK Workforce Report*. [online] *gmc-uk.org*. Available at: https://www.gmc-uk.org/-/media/documents/somep-workforce-report-2024-full-report_pdf-109169408.pdf [Accessed 28 May 2025].

SoMEP (2024c). *The State of Medical Education and Practice in the UK Workforce Report*. [online] *gmc-uk.org*. Available at: https://www.gmc-uk.org/-/media/documents/somep-workforce-report-2024-full-report_pdf-109169408.pdf [Accessed 28 May 2025].

Stanley, M. (2024). *GP Salary UK - General Practitioners Salary in United Kingdom*. [online] Alecto Australia. Available at: https://www.alectoaustralia.com/gp-salary-uk/ [Accessed 1 Jun. 2025].

The General Medical Council (2024). *National Training Survey 2024 Results*. [online] *gmc-uk.org*. Available at: https://www.gmc-uk.org/-/media/documents/national-training-survey-summary-report-2024_pdf-107834344.pdf [Accessed 24 Jan. 2025].

The GMC (2024). *The State of Medical Education and Practice in the UK: Workplace Experiences 2024*. [online] Gmc-uk.org. Available at: https://www.gmc-uk.org/about/what-we-do-and-why/data-and-research/the-state-of-medical-education-and-practice-in-the-uk/workplace-experiences-260724 [Accessed 1 Jun. 2025].

The Wales Deanery for the Health and Social Care Committee (2013). *HSC(4)-27-13 Paper 2*. [online] Senedd.Wales. Available at: https://business.senedd.wales/documents/s20475/HSC4-27-13_Paper_2.html?CT=2 [Accessed 23 May 2025].

Thomas, C. (2023). *General Practice workforce: as at 30 September 2022 [HTML] | GOV.WALES*. [online] GOV.WALES. Available at: https://www.gov.wales/general-practice-workforce-30-september-2022-html?utm_source=chatgpt.com [Accessed 6 Jun. 2025].

Tierney, R., Rizvi, F. and Ercikan, K. eds., (2022). *International Encyclopedia of Education*. 4th ed. Elsevier Science, pp.370–381.

Tuffour, I. (2017). A Critical Overview of Interpretative Phenomenological Analysis: a Contemporary Qualitative Research Approach. *Journal of Healthcare Communications*, [online] 2(4), pp.1–5. doi:https://doi.org/10.4172/2472-1654.100093.

UK Foundation Programme (2020a). *F2 Career Destinations Survey*. [online] UK Foundation Programme. Available at: https://foundationprogramme.nhs.uk/resources/reports/ [Accessed 2 Jun. 2025].

UK Foundation Programme (2020b). *Reports*. [online] UK Foundation Programme. Available at: https://foundationprogramme.nhs.uk/resources/reports/ [Accessed 17 May 2025].

Vo, T.T.D., Tuliao, K.V. and Chen, C.-W. (2022). Work Motivation: The Roles of Individual Needs and Social Conditions. *Behavioral Sciences*, [online] 12(2), p.49. doi:https://doi.org/10.3390/bs12020049.

Wang, X. and Cheng, Z. (2020). Cross-sectional studies: Strengths, weaknesses, and Recommendations. *Chest*, [online] 158(1), pp.65–71. doi:https://doi.org/10.1016/j.chest.2020.03.012.

Warrender, E. (2025). *Longer Lives and Bigger Challenges: UK Healthcare Trends for 2025*. [online] Open Access Government. Available at: https://www.openaccessgovernment.org/longer-lives-and-bigger-challenges-uk-healthcare-trends-for-2025/187591/ [Accessed 13 Apr. 2025].

Waters, A. (2022). A Third of Junior Doctors Plan to Leave NHS to Work Abroad in Next 12 Months. *BMJ*, [online] 3, p.o3066. doi:https://doi.org/10.1136/bmj.o3066.

Welsh Government (2023). *National Workforce Implementation Plan: Addressing NHS Wales Workforce Challenges*. [online] Available at: https://www.gov.wales/sites/default/files/publications/2023-01/national-workforce-implementation-plan.pdf?utm_source=chatgpt.com [Accessed 30 May 2025].

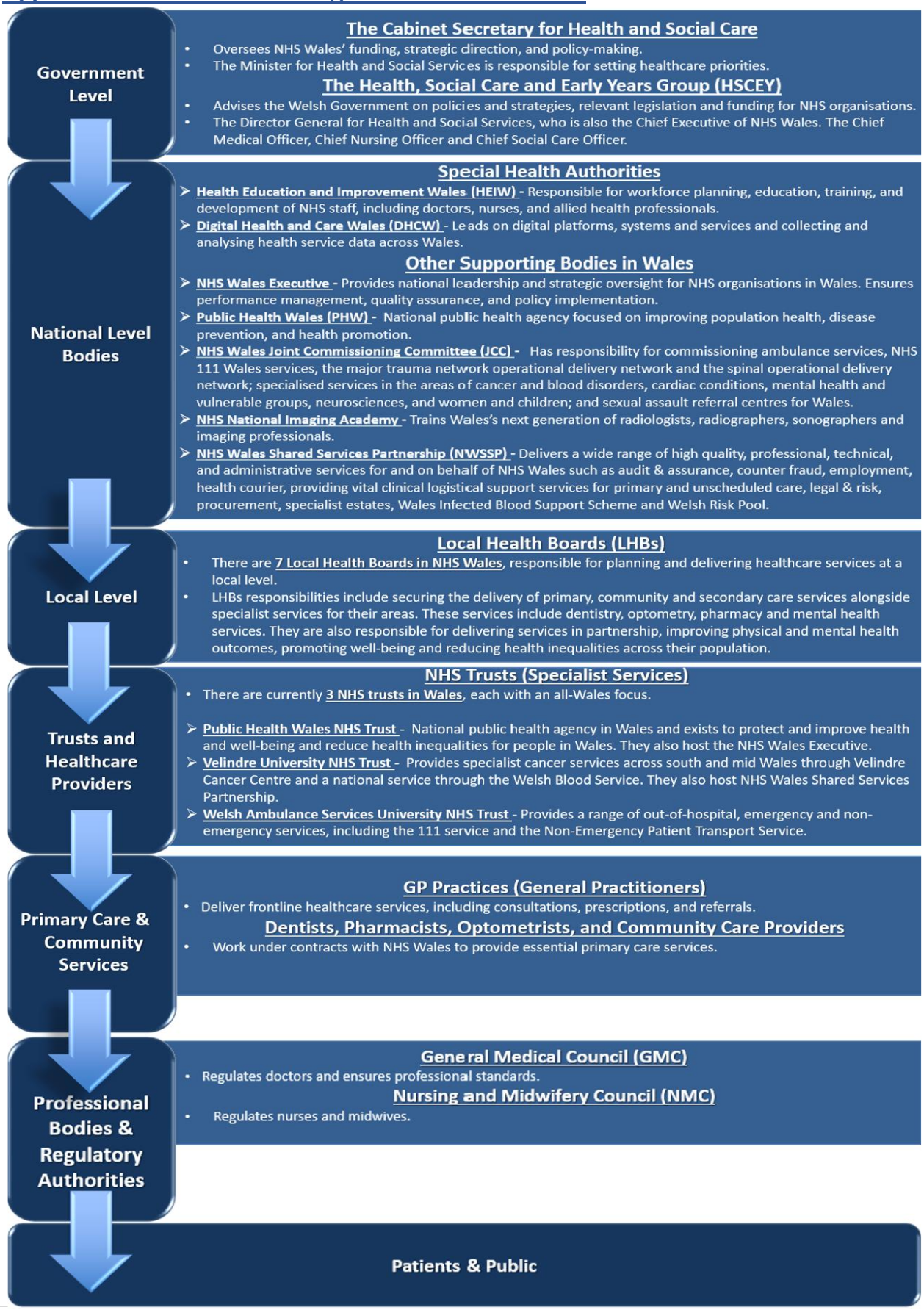
Welsh Government (2024). *Medicines Shortages | GOV.WALES*. [online] gov.wales. Available at: https://www.gov.wales/medicines-shortages [Accessed 24 Jan. 2025].

Wightwick, A. (2025). *The NHS in Wales spent £262m on 'expensive' Agency Staff to Plug the Gaps*. [online] Wales Online. Available at: https://www.walesonline.co.uk/news/health/nhs-wales-spent262m-expensive-agency-31030343 [Accessed 6 Jun. 2025].

Yean, T.F., Johari, J., Yahya, K.K. and Chin, T.L. (2022). Determinants of Job Dissatisfaction and Its Impact on the Counterproductive Work Behavior of University Staff. *SAGE Open*, [online] 12(3), p.215824402211232. doi:https://doi.org/10.1177/21582440221123289.

7. Appendices

Appendix A – NHS Wales Organisational Structure



Source: Author's creation

Appendix B – Medical Training & Professional Development Path in the UK

Standard Undergraduate Medical Degree (MBBS or MBChB)

- Duration: **5 – 6 years** (depending on the medical school and course structure)
- Direct entry from secondary school (usually after A-levels or equivalent)
- Includes both pre-clinical (theoretical) and clinical (practical) training
- Students receive a medical degree (MBBS, MBChB) and provisional registration with the General Medical Council (GMC)
- They then enter the 2-year Foundation Programme (FY1 and FY2) as junior/resident doctors.

Postgraduate Medical Education

- Duration: **5 – 10+ years** (depending on the specialty a doctor chooses to pursue)

Foundation Training

- Duration: **2 years** (FY1 & FY2)
- Mandatory stage - provides general clinical training across various specialties
- Medical graduates must complete foundation training to obtain full GMC registration and practice medicine independently in the UK.

Core Training or Internal Medical Training (CT or IMT)

- Duration: **2 to 3 years**
- Core Training (CT1–CT2) for specialties like surgery or psychiatry
- Internal Medicine Training (IMT1–IMT3) for physicians pursuing medical specialties (e.g., cardiology, respiratory, etc.)

Specialty Training (ST and SpR)

- Duration: **3 to 8 years** (duration depends on the chosen specialty)
- General Practice (GP): **~ 3 years**
- Hospital Specialties (e.g., surgery, radiology, cardiology): **~ 5 to 8+ years**
- Leads to a Certificate of Completion of Training (CCT), allowing one to become a consultant or GP.

Consultant

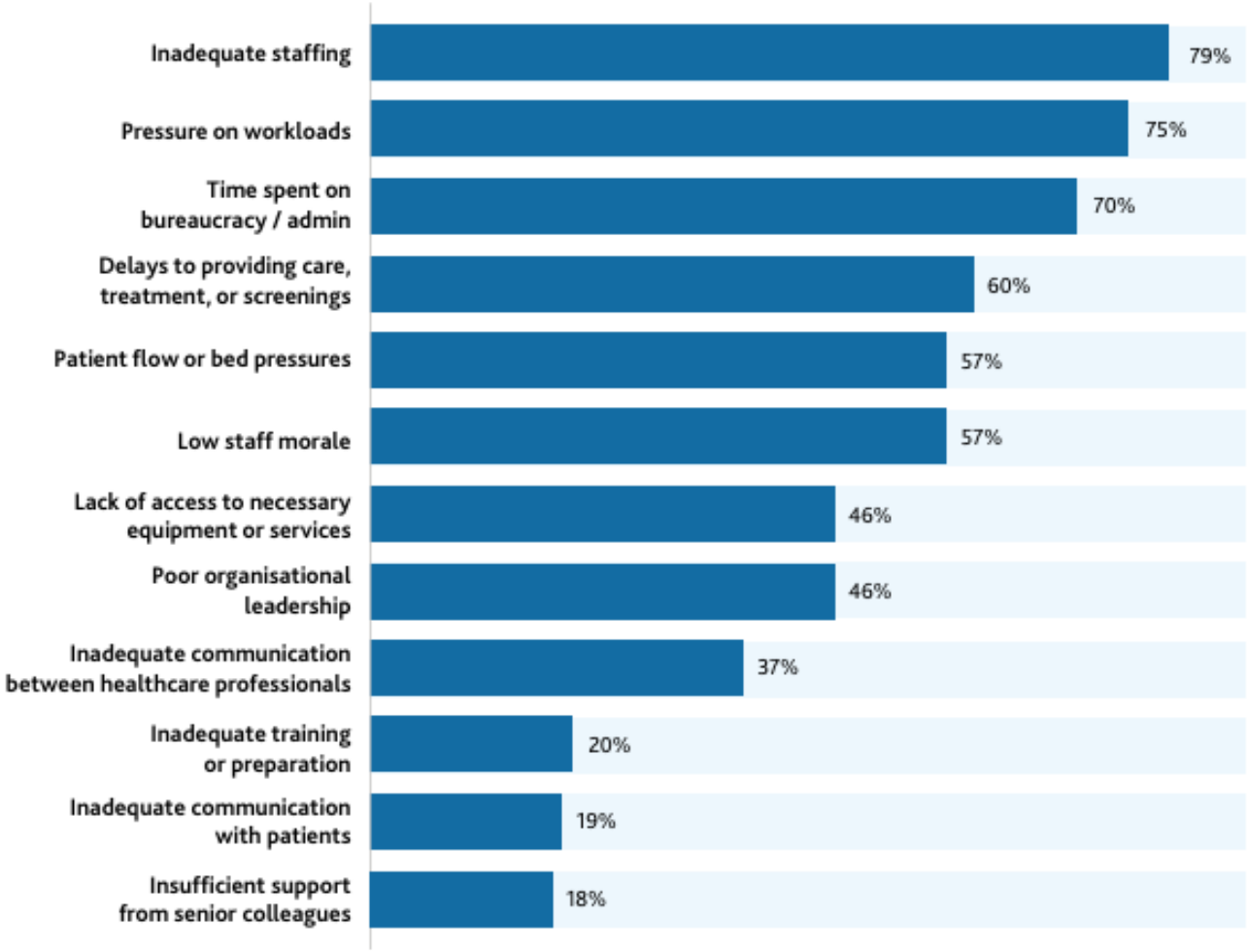
- The most senior grade of doctor in the UK hospital system
- After completing all required training and passing relevant Royal College exams, they are awarded a Certificate of Completion of Training (CCT)
- This allows them to be entered onto the GMC's Specialist Register and apply for consultant posts.

Their responsibilities are:

- Supervise junior doctors, registrars, and medical students
- Make final decisions on diagnosis, treatment plans, and patient management
- Participate in teaching, research, and departmental leadership
- Often work in hospital departments (e.g., Consultant Cardiologist, Consultant Surgeon, Consultant Psychiatrist).

Source: Author's creation

Appendix C – Barriers to providing good patient care



Source: (GMC, 2024f)

Appendix D – Ethics Approval Form

APPLICATION FOR ETHICAL APPROVAL

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

This form must be completed and approved prior to undertaking any research activity.

SECTION A: About You (Principal Researcher)

1	Full Name:	*Pavlo Gladkyi*
2	Student Number:	*1918831*
3	Email address:	*1918831@student.uwtsd.ac.uk*
4	Programme of Study:	*Master of Business Administration*
5	Supervisor:	*Dr Helen Lee*

SECTION B: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	**UWTSD Research Ethics & Integrity Code of Practice**	☒
2	**UWTSD Research Data Management Policy**	☒

SECTION C: Details of Research Activity

1	Indicative title:	***Post Foundation Training Careers Choices of Junior Doctors in NHS Wales: The Investigation Into Cause-Consequence Analysis.***

2	Proposed start date:	***28/02/2025***	Proposed end date:	***26/09/2025***

Introduction to the Research (maximum 300 words in each section)

Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the three points below:

- *Purpose of Research Activity*
- *Proposed Research Question*
- *Aims of Research Activity*
- *Objectives of Research Activity*

Demonstrate, briefly, how **<u>Existing Research</u>** has informed the proposed activity and explain

- *What the research activity will add to the body of knowledge*
- *How it addresses an area of importance.*

3

Purpose of Research Activity

The primary purpose of this research is to investigate the motivational factors that influence the career choices of F1/F2 junior doctors in NHS Wales after completing their foundation training. The data collected through interviews and surveys can provide valuable insights, helping to understand the causality of their career choices. The results obtained from the research and cause-consequence analysis of their motivations from the business management perspectives could fill the knowledge gap and provide recommendations on F1/F2 junior doctors' retention and career satisfaction improvements within NHS Wales.

The significance of this study lies in its academic approach and use of a business management theoretical base to investigate the phenomenon of F1/F2 post-foundational career choices, analysing implicit and explicit factors, existing evidence and assumptions to create a factual representation of the current situation.

(this box should expand as you type)

4

Research Question

What primary motivation factors drive F1/F2 junior doctors' career choices after completing the foundation training program, and how can they be mitigated?

(this box should expand as you type)

5

Aims of Research Activity

The research activity aims to investigate the reasons behind the career choices of junior doctors in NHS Wales after they complete the two-year Foundation Training. The research aims to understand the intrinsic and extrinsic factors influencing career decisions, as well as how mediating variables — such as aspirations, professional experiences during foundational training, and personal priorities —motivate long-term career trajectories and speciality preferences.

(this box should expand as you type)

6

Objectives of Research Activity

	1. ***Identify the primary reasons and main drivers influencing junior doctors' career choices after foundation training in NHS Wales and understand their motivations, aspirations, and personal and professional priorities.*** 2. ***Analyse the impact of these career choices on the overall healthcare system performance of NHS Wales.*** 3. ***Develop a deeper understanding of the factors that attract and retain junior doctors in NHS Wales to synthesise potential strategies to improve workforce planning and retention efforts.*** (this box should expand as you type)
	Proposed data collection methods (maximum 600 words) Provide a summary of all the methods that **may** be used in the research activity to collect data, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	***A triangulation approach will be implemented to establish the research's academic robustness and ensure the validity and reliability of findings, involving cross-validation of data derived from diverse primary and secondary research methodologies. From this mixed-methods perspective and in accordance with recommendations, Surveys (Quantitative data collection) will be conducted first to identify the main reasons, followed by Interviews (Qualitative data collection) to verify the consistency of the survey findings.*** ➢ ***Interviews will be conducted with F1/F2 junior doctors, supervisors/consultants, and BMA representatives to explore the target audience's underlying reasons, opinions, and motivations. This phase will consist of organised in-person and online meetings. Theoretically, it should provide insights into the problem and help develop ideas and hypotheses to support subsequent quantitative research. The interview data collection will be manually recorded via real-time notes to avoid privacy concerns and violations of the GDPR Act.*** ➢ ***Survey – a specifically designed questionnaire with closed-ended questions will be disseminated to collect primary data from respondents (F1/F2 junior doctors. This phase will be conducted through the sharing of a Google Forms link online among different medical communities and social networks. Additionally, support will be sought from the UK Foundation Programme Office, Foundation Training School (HEIW), Cardiff and Vale University Health Board Foundation Programme Directors to ensure greater reach of the desired audience.*** (this box should expand as you type)

SECTION D: Scope of Research Activity

	Will the research activity include:	**YES**	**NO**
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☐	☒
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☐	☒
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		
	Details of any other primary data collection method: (this box should expand as you type)	☐	☒

If you have ticked NO to every question then the research activity is (ethically) low risk and you may skip section E and continue to section F.

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION E: Intended Participants

	Who are the intended participants:	**YES**	**NO**
1	Students or staff at the University?	☐	☒

2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☒
	Details of any other participant groups: (this box should expand as you type)		

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected?	***Access to the samples is planned to be achieved through the official and unofficial channels, with an estimated 150-200 surveys and 10-12 in-depth interview participants to meet the typical expected requirements indicated in the provided Dissertation handbook.*** *(this box should expand as you type)*
11	Who will the participants be?	***The F1/F2 junior doctors, consultants, and BMA representatives.*** *(this box should expand as you type)*
12	How will you identify the participants?	***Non-probability sampling methods will be used to identify the research participants, such as snowball sampling, convenience sampling, and purposive sampling.*** *(this box should expand as you type)*

	Information for participants:	**YES**	**NO**	**N/A**
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒

18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☐	☐	☐
22	If NO to any of above questions, please give an explanation			
	(this box should expand as you type)			

	Information for participants:	**YES**	**NO**	**N/A**
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☒
28	If YES to any question, please provide full details			
	(this box should expand as you type)			

SECTION F: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.	
1	**Risks to participants** For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information. If you have identified in section D that there are no participants then enter N/A and go skip to question 3.	
	Risk to participants: ***1. Confidentiality and Privacy Risks***	***How will you mitigate the risk to participants:*** ***1. All collected data will be anonymised to protect the identities of participants. Any identifying information will be removed from the research data. Secure tools will be used for data collection and storage, with clear explanations provided to participants about how their information will be kept confidential. Explicit informed consent will be***

	2. ***Psychological Stress or Discomfort*** 3. ***Perceived Pressure or Influence*** *(this box should expand as you type)*	***obtained, ensuring participants know their data privacy rights.*** 2. ***The participants will be informed that they can skip any questions they feel uncomfortable with. The option to withdraw from the interview will be provided at any point.*** 3. ***It will be emphasised that participants' responses will not affect their careers in any way. Their participation is voluntary, and they can withdraw without consequence. They will be reassured that their answers will be kept private and not shared with their employers or colleagues.***
2	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	N/A *(this box should expand as you type)*	
3	**Risks to the investigator** For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: 1. ***Data Collection and Integrity Issues*** 2. ***Ethical Concerns***	***How will you mitigate the risk to the investigator:*** 1. ***A well-structured interview guide will be prepared to ensure consistency in collecting data from all participants. Triangulation (cross-checking data from different sources) will be deployed to verify the accuracy of findings. The participants will be explained the importance of honest responses and reminded that their data will remain confidential.*** 2. ***The ethical guidelines from UWTSD will be followed to ensure research purpose and process transparency, and ethical approval will be requested. The neutrality of data collection will be assured to eliminate the researcher's***

	3. *Time and Resource Constraints* 4. *Researcher Bias* *(this box should expand as you type)*	*view influences on participants' responses. The objectivity and rigour will be maintained throughout the analysis process.* 3. *The research timeline will be carefully planned, with adequate time allocation for each study stage. Effective communication will be used to ensure participants' availability and coordination of the chosen activities (interviews). If needed, UWTSD support will be requested to manage scheduling and resource allocation efficiently.* 4. *Throughout the research process, reflective practice will be employed to identify any biases that may arise. Systematic and rigorous methods for data analysis will be utilised to ensure that the findings are grounded in evidence rather than subjective interpretations. Additionally, the involvement of a dissertation supervisor will be sought to review data interpretations and conclusions, ensuring impartiality.* *(this box should expand as you type)*
4	**University/institutional risks** For example: adverse publicity, financial loss, data protection	
	Risk to the University: 1. *Institutional Approval Delays* 2. *Lack of Institutional Support* *(this box should expand as you type)*	***How you will mitigate the risk to the University:*** 1. *All the required approval documentation will be submitted well in advance. Communication with the interview participants and their permission for the interview will be established and obtained before the beginning of data collection. Regular communication with the university ethics committee and relevant institutional departments will be established to follow up on approval processes.* 2. *Effective communication with Dr Helen Lee will be established to mitigate any risks of delays or miscommunication and ensure support in all stages of the dissertation.*

5	**Environmental risks** For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: 1. ***Access to Participants*** 2. ***Environmental Disruptions (e.g., Epidemics or Other Crises)*** 3. ***Environmental Factors Impacting Data Quality*** *(this box should expand as you type)*	***How you will mitigate the risk to environment:*** 1. ***Prior planning of the interviews is necessary to align them with the F1/F2 work schedules. Provision of flexibility in timing and multiple methods for participation (e.g., online surveys, telephone interviews, or face-to-face meetings).*** 2. ***A contingency plan for development might be required to ensure remote data collection options are available. The contingency plan will be actuated to adjust the research design in case of any environmental shifts. Adaptation to suitable research methods might be needed to remediate any unforeseen restrictions.*** 3. ***All participants will be informed about the interview process in advance, allowing them to choose a suitable environment for their interview. The interviews will take place in a quiet, distraction-free setting, either virtually or in person. To prevent any technical issues, the equipment (laptop) will be checked beforehand to ensure a reliable internet connection and good video and audio quality.*** *(this box should expand as you type)*

SECTION G: Feedback, Consent and Confidentiality

If you have identified in section D that there are no participants then enter skip this section and continue to section H.

1	**Feedback** What de-briefing and feedback will be provided to participants, how will this be done and when?

	A dedicated email will be set up (gm.limited@aol.com) to provide a point of contact for further details/results of the research. *(this box should expand as you type)*
2	**Informed consent** Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	Regarding the online questionnaire, the first screen will act as a consent form, informing participants that they are providing their consent by clicking the NEXT button. Where feasible, the physical consent form will be provided to participants for the interviews. However, digital consent will be obtained during the online interviews by having participants confirm their agreement through an "I Agree" checkbox before the interview begins. *(this box should expand as you type)*
3	**Confidentiality / Anonymity** Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	As a crucial ethical and legal consideration, ensuring anonymity and confidentiality in this research will be prioritised to the maximum possible. The following control measures will be taken to comply with data protection regulations, achieve the expected ethical standards, and safeguard participants' personal information and privacy: ***Anonymity:*** ➢ ***Participants will be assigned unique identifiers or pseudonyms instead of using their names, ensuring that no personally identifiable information (PII) is collected or linked to the data.*** ➢ ***Personal information (e.g., names and contact details) will not be included in the data collection process.*** ➢ ***During the analysis and reporting stages, all data will be anonymised. Any direct quotes from participants will be attributed to their pseudonyms to avoid identification.*** ***Confidentiality:*** ➢ ***All data will be stored securely in password-protected digital files, with access limited to authorised personnel only.*** ➢ ***Participants will be informed about the data storage, usage, and access protocols in the informed consent form. They will also be reassured that their data will only be used for research purposes and that their privacy will be maintained.*** ➢ ***The consent form will also explain that, although efforts will be made to maintain confidentiality, if any personal data is collected (e.g., for follow-up), it will be securely handled and only shared with authorised and explicit participants' permission.*** *(this box should expand as you type)*

SECTION H: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	**YES**	**NO**
1	***"Personal data"*** *means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.*	☐	☒
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	***N/A*** *(this box should expand as you type)*		
	Does it involve special category data (as defined by the GDPR)?	**YES**	**NO**
3	***"Special category data"*** *means sensitive personal data consisting of information as to the data subjects' –* *(a) racial or ethnic origin,* *(b) political opinions,* *(c) religious beliefs or other beliefs of a similar nature,* *(d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992),* *(e) physical or mental health or condition,* *(f) sexual life,* *(g) genetics,* *(h) biometric data (as used for ID purposes),*	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	***N/A*** *(this box should expand as you type)*		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	**YES**	**NO**
5	Manual files (i.e. in paper form)?	☐	☒

6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☒	☐
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☐	☒
10	"Cloud" storage or websites?	☐	☒
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	➢ ***All data will be kept in a password-protected folder on the personal computer and will not be shared. Audio/visual data will be transcribed during the interviews and will be shown to participants to check the accuracy of reporting.*** ➢ ***No USB sticks or other additional digital storage means will be used to eliminate the potential risk of a GDPR breach.*** ➢ ***All participants will be given a unique identifier to ensure confidentiality, and this list will be kept securely in a password-protected folder.*** *(this box should expand as you type)*		

	Data Protection		
	Will the research activity involve any of the following activities:	**YES**	**NO**
13	Electronic transfer of data in any form?	☐	☒
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and/or any international equivalent):		
	N/A *(this box should expand as you type)*		
20	List all who will have access to the data generated by the research activity:		
	Data access will be limited to the principal researcher. The dissertation supervisor, external examiner, or second marker may access the data only with the explicit consent of the principal researcher. *(this box should expand as you type)*		

21	List who will have control of, and act as custodian(s) for, data generated by the research activity:	
	The principal researcher – Pavlo Gladkyi. *(this box should expand as you type)*	
22	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form.	
	All data will be encrypted and kept in a password-protected folder on a personal computer with authorised access only (Face ID and password). No USB sticks or other additional digital storage means will be used to store research data. The data will be stored until the completion of the project and then deleted. *(this box should expand as you type)*	
22	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	☒
23	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	☒

SECTION I: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	**Signature of applicant:**	***Pavlo Gladkyi***	**Date:** ***01/03/2025***
2	Director of Studies/Supervisor:	***Dr Helen Lee***	**Date:**
3	Signature:		

FOR INTERNAL USE ONLY:

	Ethical approval given		
1	**Signature of assessor:**		**Date:**
2	Name:		
3	Role:		

Appendix E – Chi-Square Analysis Results

Correlation Analysis: Organisational Culture – Intention to Stay

Observed Frequency Table				
Organisational Culture	**I have not decided**	**Not in NHS Wales**	**Yes, elsewhere**	**Yes, in NHS Wales**
Generally supportive, but some challenges	15	17	21	17
Lacks support and collaboration	2	5	8	1
Neutral – neither particularly supportive nor unsupportive	18	16	21	6
Very supportive and collaborative	0	0	0	5

Expected Frequency Table (Under Null Hypothesis of Independence)				
Organisational Culture	**I have not decided**	**Not in NHS Wales**	**Yes, elsewhere**	**Yes, in NHS Wales**
Generally supportive, but some challenges	16.12	17.5	23.03	13.36
Lacks support and collaboration	3.68	4	5.26	3.05
Neutral – neither particularly supportive nor unsupportive	14.05	15.25	20.07	11.64
Very supportive and collaborative	1.15	1.25	1.64	0.95

Source: Author's creation

A chi-square test produced the following result:

χ^2 (9) = 30.22, p = 0.0004

The p-value is way below the standard threshold of 0.05 (the null hypothesis is rejected). There is a statistically significant relationship between how junior doctors perceive the organisational culture of NHS Wales and their intention to stay after foundation training.

Correlation Analysis: Training Satisfaction – Intention to Stay

Observed Frequency Table					
Training Satisfaction	**No**	**Unlikely**	**Neutral**	**Likely**	**Yes**
Very Dissatisfied	6	3	4	1	0
Dissatisfied	2	3	8	4	0
Neutral	1	1	6	13	8
Satisfied	0	0	3	3	8

Expected Frequency Table (under Null Hypothesis of Independence)					
Training Satisfaction	**No**	**Unlikely**	**Neutral**	**Likely**	**Yes**
Very Dissatisfied	1.70	1.32	3.97	3.97	3.03
Dissatisfied	2.07	1.61	4.82	4.82	3.68
Neutral	3.53	2.74	8.23	8.23	6.27
Satisfied	1.70	1.32	3.97	3.97	3.03

Source: Author's creation

A chi-square test produced the following result:

χ^2 (12) = 43.77, p = 0.000017

Since the p-value < 0.001, this result is statistically significant (the null hypothesis was rejected), indicating a significant association between training satisfaction and doctors' intention to stay in NHS Wales after Foundation training.

Appendix F – Online Survey Questionnaire

Introduction

Thank you for taking the time to participate in this voluntary survey.

This study aims to investigate the career choices of junior/resident doctors in NHS Wales after completing Foundation Training and to explore the factors influencing these decisions.

This quantitative data collection will help produce primary research for a student's master's in business administration dissertation.

Your responses will remain completely anonymous and confidential. The data collected will be stored and used solely for the purpose of this research in accordance with the Data Protection Act 2018 and the General Data Protection Regulation requirements.

The estimated completion time for the following 34 closed-ended questions is approximately 10 – 15 minutes. However, please take your time to answer the questions. There are no right or wrong answers – your honest answer is valuable and appreciated.

If you are unsure of an answer, feel free to skip the question or choose the option that best represents your experience.

By clicking the "Next" button to proceed with the survey, you certify that you are 18 years old and indicate your willingness to participate voluntarily, providing consent for your responses to be used in this study.

Qualifying Question

Are you currently enrolled in FY1 or FY2 of postgraduate medical training as a junior/resident doctor?

- **Yes - Please proceed with the survey**
- **No - Thank you for your time. You may exit the survey.**

Part 1 – Demographic Data (7 questions)

1. **What is your gender?**
   a. Male
   b. Female
   c. Non-binary
   d. I prefer not to say
2. **What is your age group?**
   a. 20 – 25
   b. 26 – 30
   c. 31 – 35
   d. 36 and above
3. **Which of the UK home nations do you identify with as your country of origin?**

a. Wales
b. Scotland
c. England
d. Northern Ireland
e. Other background (please specify):
f. Prefer not to say

4. **Where did you obtain your primary medical qualification (PMQ)?**
   a. United Kingdom
   b. European Economic Area (excluding the UK)
   c. Outside the UK and EEA
   d. Prefer not to say
5. **Which medical speciality are you currently working in?**
   a. General Medicine
   b. Surgery
   c. Paediatrics
   d. Psychiatry
   e. Obstetrics and Gynaecology
   f. Other (please specify):
6. **Are you currently an FY1 or FY2 junior/resident doctor?**
   a. FY1
   b. FY2
   c. Other (please specify):
7. **What is your current employment status in NHS Wales?**
   a. Full-time
   b. Part-time
   c. Other (please specify):

Part 2 – Career Motivations and Drivers (14 questions)

1. **Please select the top 3 reasons you chose to pursue a medical career and rank them in order of importance.**

(1 = The most important reason, 3 = The least important reason):

☐ Personal interest in science and healthcare

☐ Desire to help others

☐ Financial stability and job security

☐ Family influence or expectations

☐ Professional development and mastery

☐ Other (please specify):

2. **As a junior/resident doctor, how often do you feel stressed, tired and overwhelmed?**
   a. Never

b. Not often
c. Often
d. Always

3. **To what extent do you feel your Health board administration adequately supports your mental well-being?**
   1. Not supported at all
   2. Not well supported
   3. Neutral / No opinion
   4. Somewhat supported
   5. Very well supported
4. **What level of influence do the following factors have on your decision to stay or leave NHS Wales after Foundation Training?**

Please rate each factor on a scale of 1 to 5 (1 = Not influential at all, 5 = Extremely influential):

Factor	**1** Not Influential	**2** Slightly Influential	**3** Moderately Influential	**4** Very Influential	**5** Extremely Influential
Salary and benefits	☐	☐	☐	☐	☐
Work-life balance	☐	☐	☐	☐	☐
Career progression	☐	☐	☐	☐	☐
Mentorship and support	☐	☐	☐	☐	☐
Personal life circumstances	☐	☐	☐	☐	☐
Other (please specify):	☐	☐	☐	☐	☐

5. **Do you want to continue your professional career in NHS Wales and apply for speciality training after completing your foundational training?**
   a. Yes, in NHS Wales
   b. Yes, elsewhere
   c. Not in NHS Wales
   d. Not in the NHS UK
   e. I have not decided yet
6. **How would you describe the overall organisational culture in NHS Wales regarding teamwork support and collaboration among staff?**
   1. Unsure
   2. Lacks support and collaboration
   3. Neutral – neither particularly supportive nor unsupportive
   4. Generally supportive, but some challenges
   5. Very supportive and collaborative

7. How important is salary in your decision to stay in NHS Wales after Foundation Training?

Please select the option that best reflects your view:

1 Not important at all	2 Slightly important	3 Moderately important	4 Important	5 Extremely important
☐	☐	☐	☐	☐

8. How frequently do you encounter errors in your payslips?

Please rate the frequency using the scale below (1 = Never, 5 = Extremely frequent):

1 Never	2 Rarely	3 Occasionally	4 Often	5 Extremely Frequent
☐	☐	☐	☐	☐

9. How much does the relationship with your colleagues affect your job satisfaction?

Please rate the level of influence using the scale below (1 = Does not affect at all, 5 = Extremely strongly affects):

1 Does not affect at all	2 Slightly affects	3 Moderately affects	4 Strongly affects	5 Extremely strongly affects
☐	☐	☐	☐	☐

10. How would you rate the effectiveness of NHS Wales's current policies and procedures for addressing discrimination, harassment, bullying or promoting equity, diversity and inclusion?

a. Not effective
b. Somewhat effective
c. Very effective
d. I am unaware of any policies or procedures
e. Prefer not to answer

11. Have you considered pursuing a different or alternative career path within or outside healthcare?

a. Yes, within healthcare
b. Yes, outside healthcare
c. No

12. Do you feel that Health Education and Improvement Wales (HEIW)/trainers/supervisors provide adequate support through meaningful engagement and constructive feedback to enhance your learning?

a. Yes
b. No
c. Other (please specify):

13. How satisfied are you with the recognition and rewards you receive for your work in NHS Wales?

Please select the response that best reflects your current level of satisfaction:

1 Very Dissatisfied	2 Dissatisfied	3 Neutral / No Opinion	4 Satisfied	5 Very Satisfied
☐	☐	☐	☐	☐

14. To what extent do personal life circumstances (e.g., work-life balance, family, or relationships) influence your post-foundation career choices?

Please select the response that best describes your experience:

1 Does not influence at all	2 Slightly influences	3 Moderately influences	4 Strongly influences	5 Extremely strongly influences
☐	☐	☐	☐	☐

Part 3 – Impact on Workforce and Staff Retention (7 questions)

1. **Are you aware of the current vacancy rates within your desired speciality in NHS Wales?**
   a. Yes
   b. No
2. **Do you believe your post-foundation training choices will contribute to staffing shortages in NHS Wales?**
   a. Yes
   b. No
3. **How does your current workload compare to how you imagined it would be when you were a medical student?**

Please rate your experience using the scale below:

1 Much lighter than expected	2 Slightly lighter	3 About as expected	4 Slightly heavier	5 Much heavier than expected
☐	☐	☐	☐	☐

4. **Do you think NHS Wales provides enough support to retain junior/resident doctors in the long term?**
   a. Yes
   b. No
   c. Unsure
5. **What impact do workforce shortages in NHS Wales have on your job satisfaction?**

Please select the response that best reflects your experience:

1 Significantly negative impact	2 Moderate negative impact	3 No impact	4 Positive impact	5 Significantly positive impact
☐	☐	☐	☐	☐

6. **How likely are you to leave NHS Wales for another healthcare provider or a role outside of medicine after completing Foundation Training?**

Please rate your likelihood on the following scale:

1 Very Unlikely	2 Unlikely	3 Neutral / Undecided	4 Likely	5 Very Likely
☐	☐	☐	☐	☐

7. What would make you more likely to stay in NHS Wales after Foundation Training?

Please rank 4 important factors (1 = The most important factor; 4 = The least important factor):

- ☐ Higher salary
- ☐ Improved work-life balance
- ☐ Better career progression opportunities
- ☐ Improved leadership and management
- ☐ Routine optimisation and comprehensive digitalisation
- ☐ Better benefits package
- ☐ Other (please specify):

Part 4 – Career Progression and Retention Strategies (6 questions)

1. What role should mentorship, coaching and career guidance play in retaining junior/resident doctors in NHS Wales?

Please select the level of importance you believe these factors hold:

1 Not important at all	2 Slightly important	3 Moderately important	4 Important	5 Extremely important
☐	☐	☐	☐	☐

2. How could the leadership in NHS Wales improve in supporting junior/resident doctors' professional development?

Please rank 4 important improvements (1 = The most important improvement; 4 = The least important improvement):

- ☐ Establish formalised mentorship programmes
- ☐ Enhance regular informal, confidential, outside-of-the-portfolio record feedback
- ☐ Better open communication channels
- ☐ Increased leadership opportunities
- ☐ Secured time for training
- ☐ Adequately addressing burnout
- ☐ Other (please specify):

3. **Do you think salary improvements alone will be sufficient to retain junior/resident doctors in NHS Wales?**
   a. Yes
   b. No
   c. Maybe
4. **How much does the administrative burden and bureaucracy (e.g., paperwork, ad hoc meetings, etc.) affect your job satisfaction?**

Please select the response that best reflects your experience:

1 No impact at all	2 Slight impact	3 Moderate impact	4 Strong impact	5 Extremely strong impact
☐	☐	☐	☐	☐

5. **How much does your current workload affect your decision to stay in NHS Wales?**
   a. Does not affect
   b. Moderately affects
   c. Strongly affects
6. **To what extent does the physical work environment influence your overall job satisfaction?** *Please rate the level of impact using the scale below (1 = Does not impact at all, 5 = Extremely strongly impacts):*

Physical Environment Factors	1 Does not impact	2 Slightly impacts	3 Moderately impacts	4 Strongly impacts	5 Extremely strongly impacts
Office space (size, layout, privacy of your workspace)	☐	☐	☐	☐	☐
Hospital layout (design of facility, ease of navigation)	☐	☐	☐	☐	☐
Availability of equipment (adequate tools and technology)	☐	☐	☐	☐	☐
Lighting (quality and adequacy of illumination in work areas)	☐	☐	☐	☐	☐
Noise levels (degree of quiet or noise in the workplace)	☐	☐	☐	☐	☐
Housekeeping (overall hygiene and cleanliness of facilities)	☐	☐	☐	☐	☐
Staff rest areas (availability, comfort of break rooms and selection of food/snacks/drinks)	☐	☐	☐	☐	☐

Closing Statement

Thank you for your time and valuable input. Your responses and participation are greatly appreciated.

If you have any questions or are interested in following up on this study's findings, please feel free to email gm.limited@aol.com.

Appendix G – Interview Question Script

Introduction for Participants:

Thank you for taking the time to participate in this interview. This discussion aims to better understand the intrinsic and extrinsic factors influencing career decisions after Foundation Training, particularly within NHS Wales. Your insights will contribute to recommendations that could improve junior/resident doctors' career progression support and advise NHS Wales on effective retention strategies. Due to the specifics of this interview and in line with the legal requirements of the DGPR and Data Protection Act 2018, all responses will be anonymised and treated confidentially, eliminating any identity exposure of the participants.

Also, please note that this interview is voluntary, meaning you can withdraw from the discussion at any point or skip any question you are uncomfortable with.

Introductory Question

To begin, could you please describe your current role within NHS Wales?

Section 1: Personal and Professional Motivations

1. *Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?*

2. *How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?*

3. *How do work-life balance, personal priorities, and well-being influence your career decisions?*

Section 2: Working Conditions and Environment

1. *How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?*

Section 3: Exposure, Career Progression, and Turnover

1. *Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?*

2. *Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?*

3. *Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?*

4. *Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?*

Section 4: Retention Strategies

1. *What specific changes or support mechanisms do you believe would encourage more junior doctors to remain within NHS Wales long-term?*

Closing Statement

Thank you once again for sharing your thoughts and experiences. Your input is invaluable for understanding the current situation in NHS Wales from the perspectives of junior/resident doctors, their training supervisors and senior peers. These insights can help formulate remedial actions to improve the retention strategy of NHS Wales, positively impacting trainees' experiences. Ultimately, this will enhance the quality of medical services and foster a motivated and resilient workforce within NHS Wales.

If you have any additional thoughts to share or would like to have a follow-up regarding the research, please feel free to contact me via email at gm.limited@aol.com.

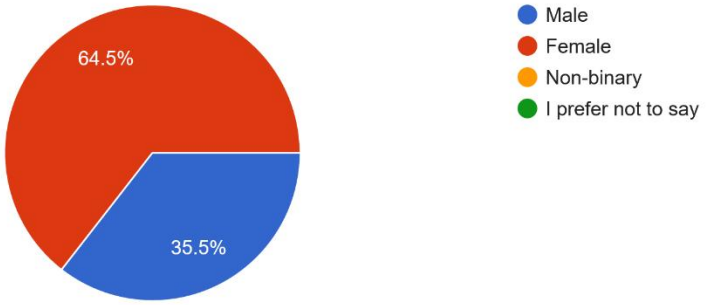
Thank you for your time.

Appendix H – Survey Results

Part 1 – Demographic Data (7 questions)

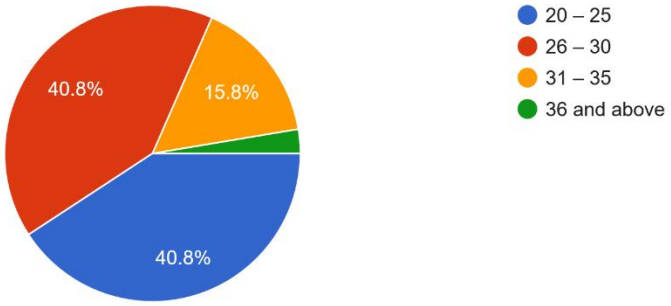
1. What is your gender?

152 responses



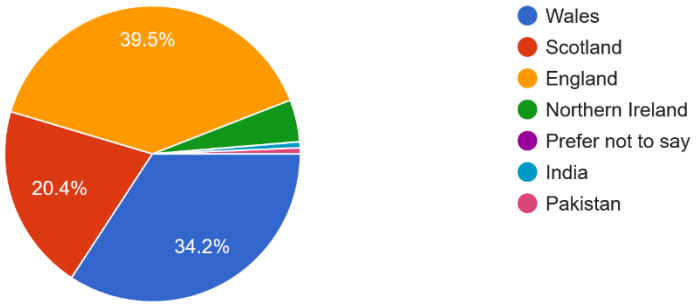
2. What is your age group?

152 responses



3. Which of the UK home nations do you identify with as your country of origin?

152 responses

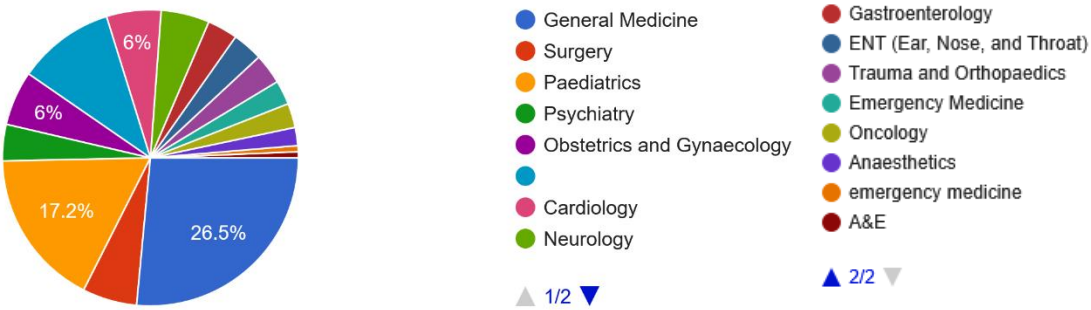


4. Where did you obtain your primary medical qualification (PMQ)?

145 responses

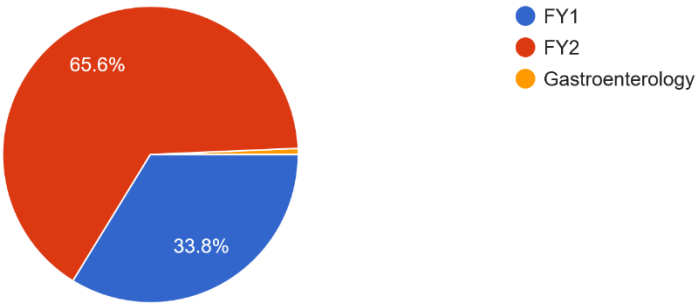
5. Which medical speciality are you currently working in?

151 responses



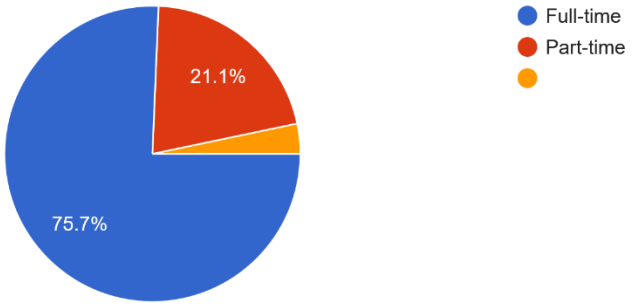
6. Are you currently an FY1 or FY2 junior/resident doctor?

151 responses



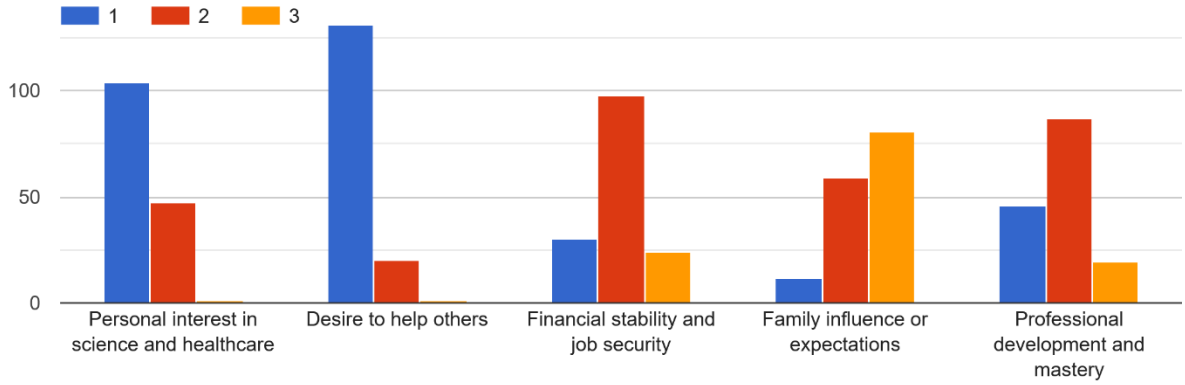
7. What is your current employment status in NHS Wales?

152 responses



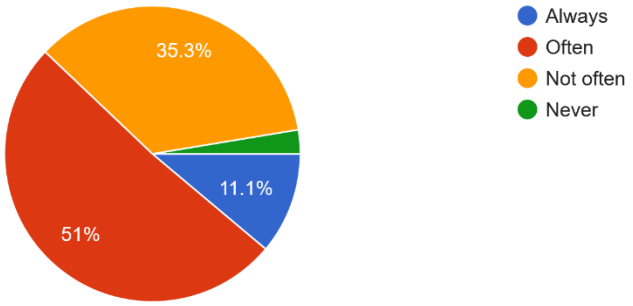
Part 2 – Career Motivations and Drivers (14 questions)

1. Please select the top 3 reasons you chose to pursue a medical career and rank them in order of importance. (1 = The most important reason, 3 = The least important reason):



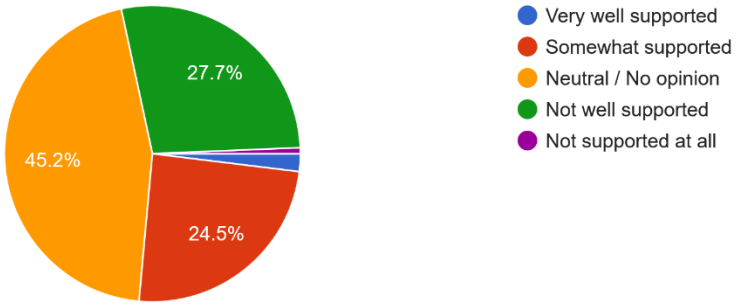
2. As a junior/resident doctor, how often do you feel stressed, tired and overwhelmed?

153 responses

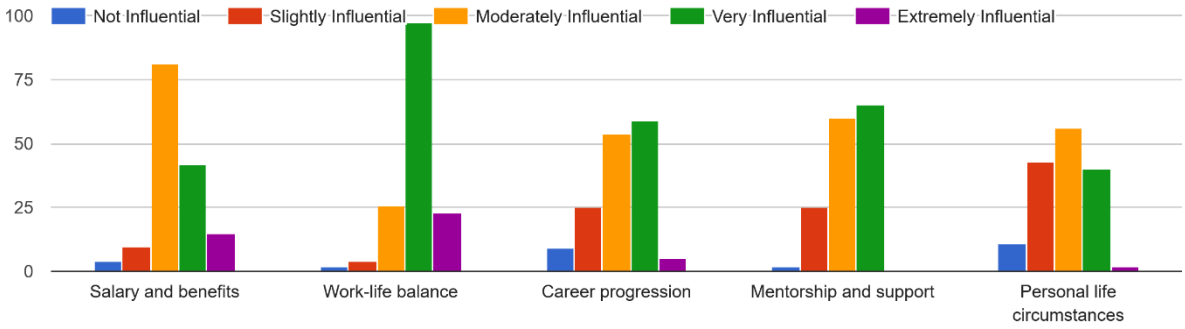


3. To what extent do you feel your Health board administration adequately supports your mental well-being?

155 responses

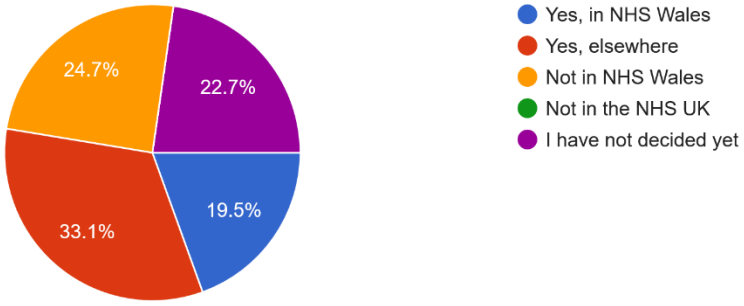


4. What level of influence do the following factors have on your decision to stay or leave NHS Wales after Foundation Training? Please rate each factor on a scale of 1 to 5 (1 = Not influential at all, 5 = Extremely influential):



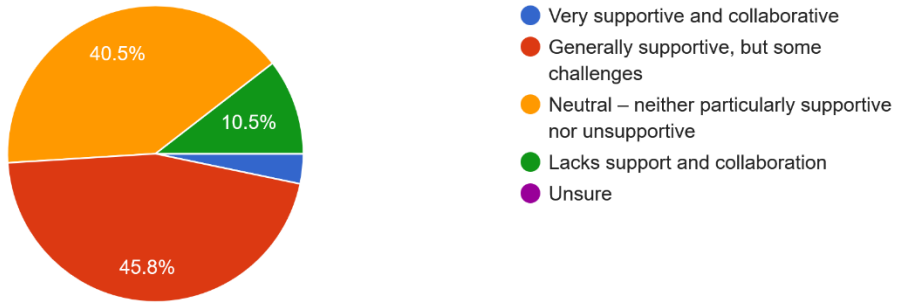
5. Do you want to continue your professional career in NHS Wales and apply for speciality training after completing your foundational training?

154 responses

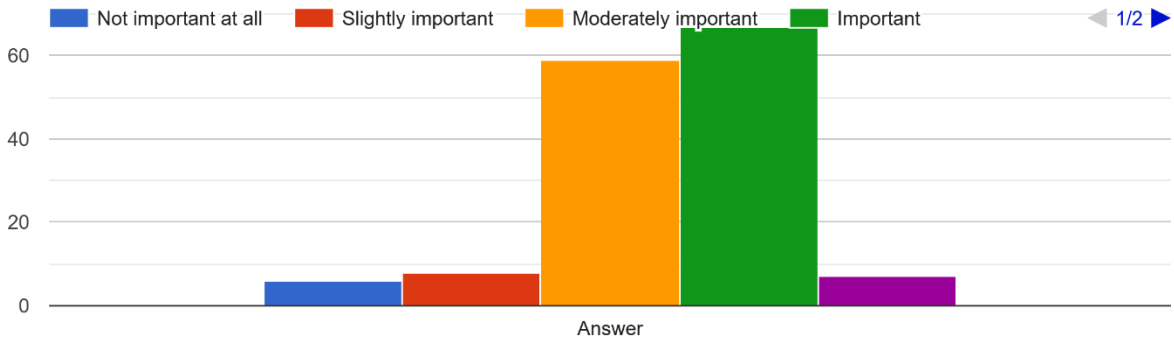


6. How would you describe the overall organisational culture in NHS Wales regarding teamwork support and collaboration among staff?

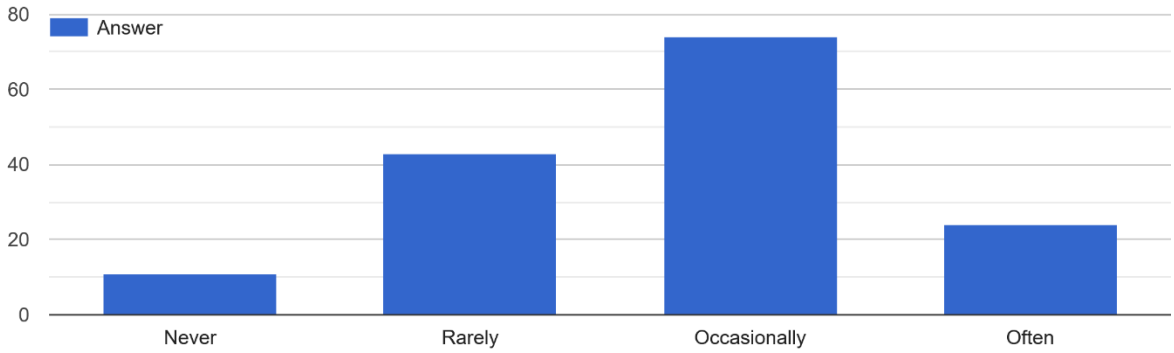
153 responses



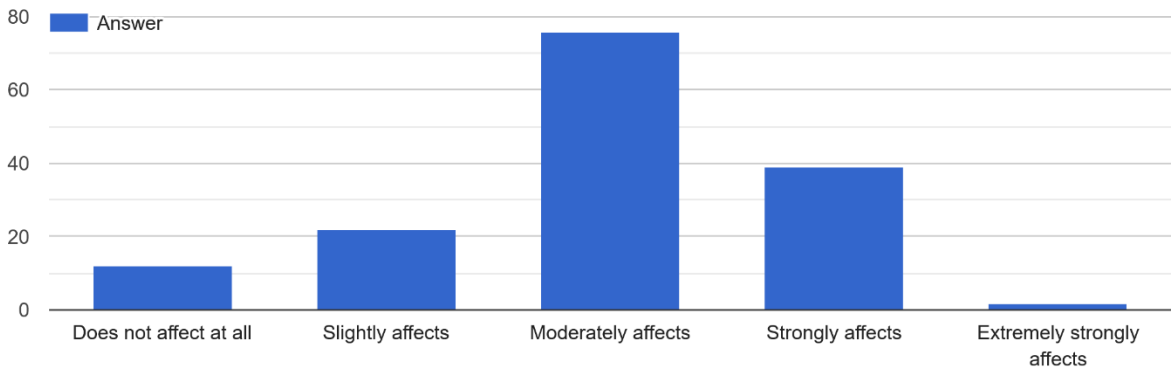
7. How important is salary in your decision to stay in NHS Wales after Foundation Training? Please select the option that best reflects your view:



8. How frequently do you encounter errors in your payslips?

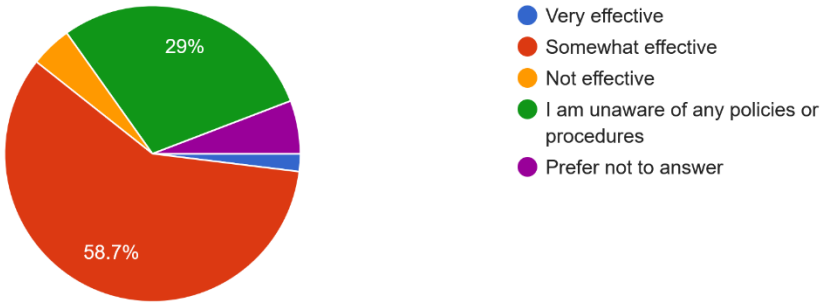


9. How much does the relationship with your colleagues affect your job satisfaction? Please rate the level of influence using the scale below (1 = Does not affect at all, 5 = Extremely strongly affects):



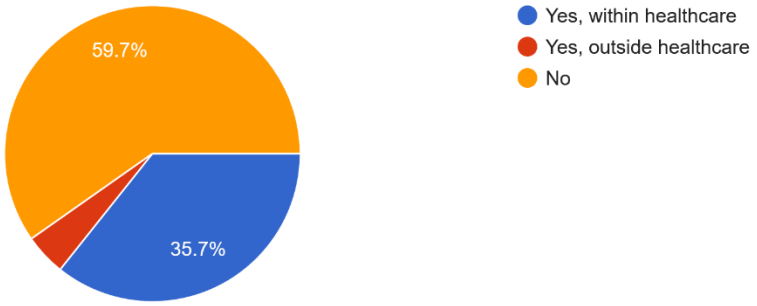
10. How would you rate the effectiveness of NHS Wales's current policies and procedures for addressing discrimination, harassment, bullying or promoting equity, diversity and inclusion?

155 responses



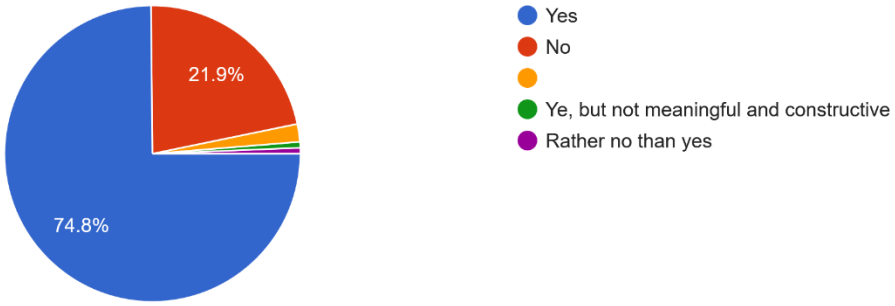
11. Have you considered pursuing a different or alternative career path within or outside healthcare?

154 responses

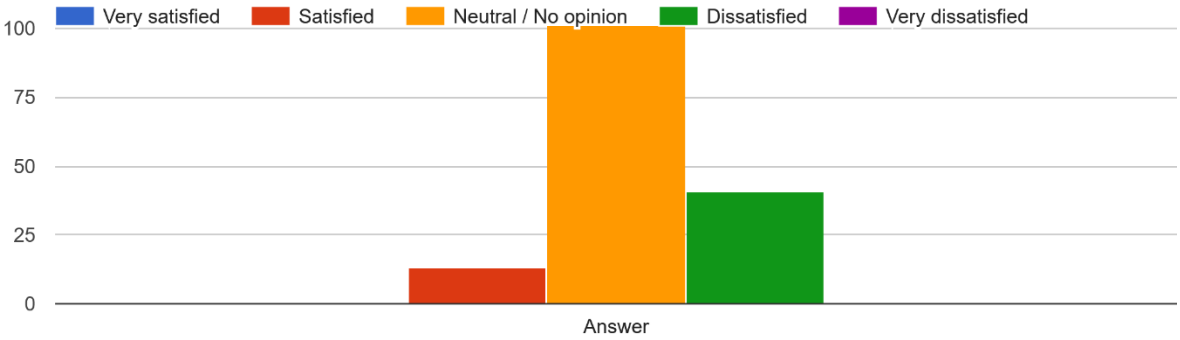


12. Do you feel that Health Education and Improvement Wales (HEIW)/trainers/supervisors provide adequate support through meaningful enga... constructive feedback to enhance your learning?

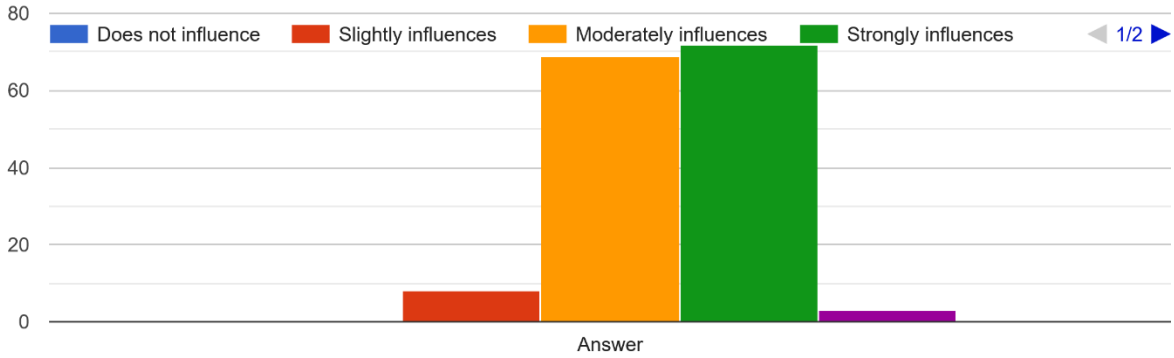
155 responses



13. How satisfied are you with the recognition and rewards you receive for your work in NHS Wales?



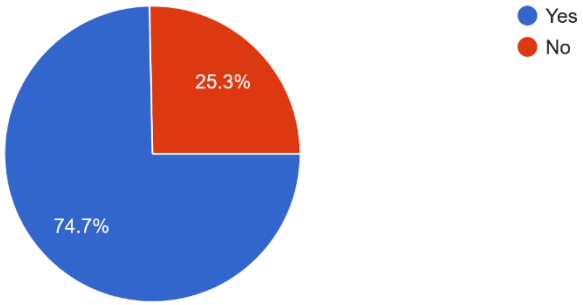
14. To what extent do personal life circumstances (e.g., work-life balance, family, or relationships) influence your post-foundation caree... the response that best describes your experience:



Part 3 – Impact on Workforce and Staff Retention (7 questions)

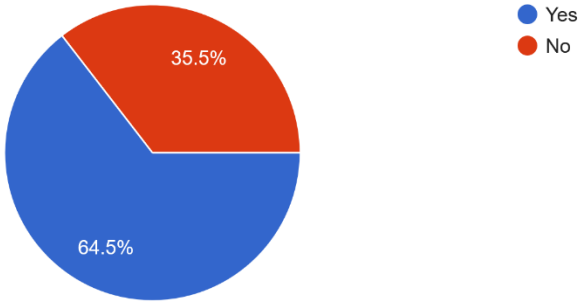
1. Are you aware of the current vacancy rates within your desired speciality in NHS Wales?

154 responses



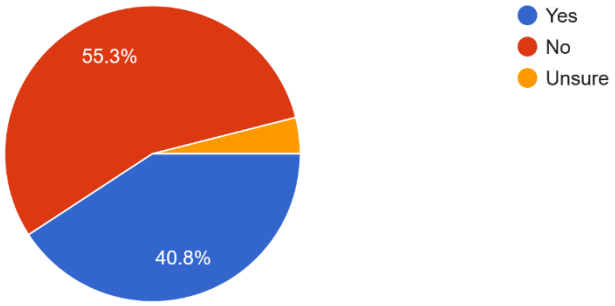
2. Do you believe your post-foundation training choices will contribute to staffing shortages in NHS Wales?

155 responses

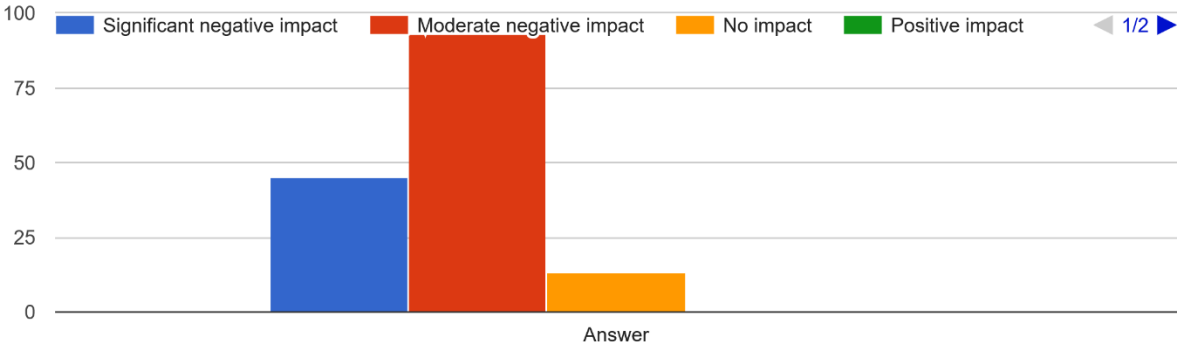


4. Do you think NHS Wales provides enough support to retain junior/resident doctors in the long term?

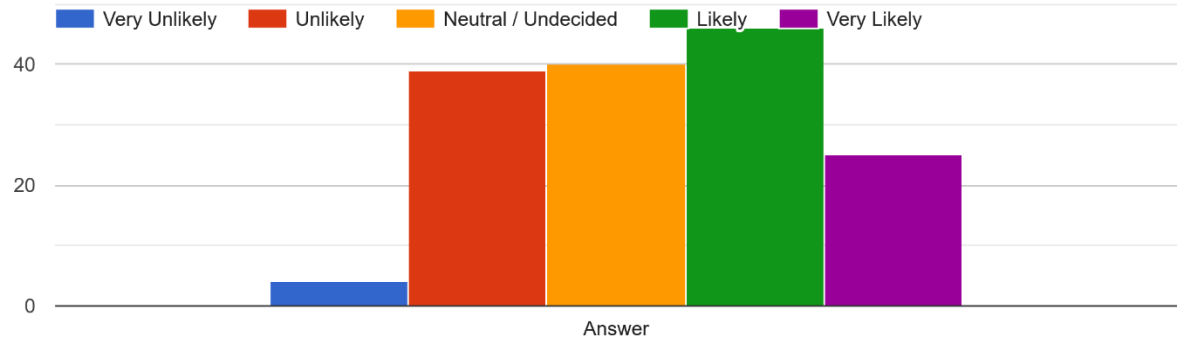
152 responses



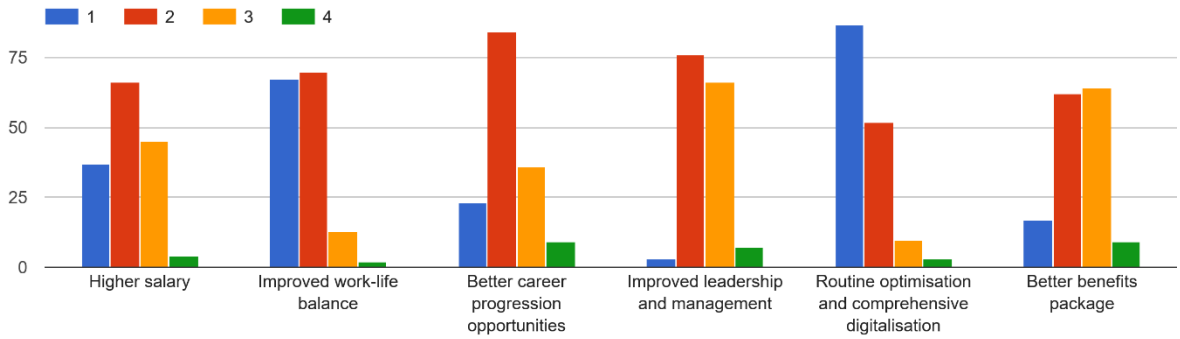
5. What impact do workforce shortages in NHS Wales have on your job satisfaction?



6. How likely are you to leave NHS Wales for another healthcare provider or a role outside of medicine after completing Foundation Training?

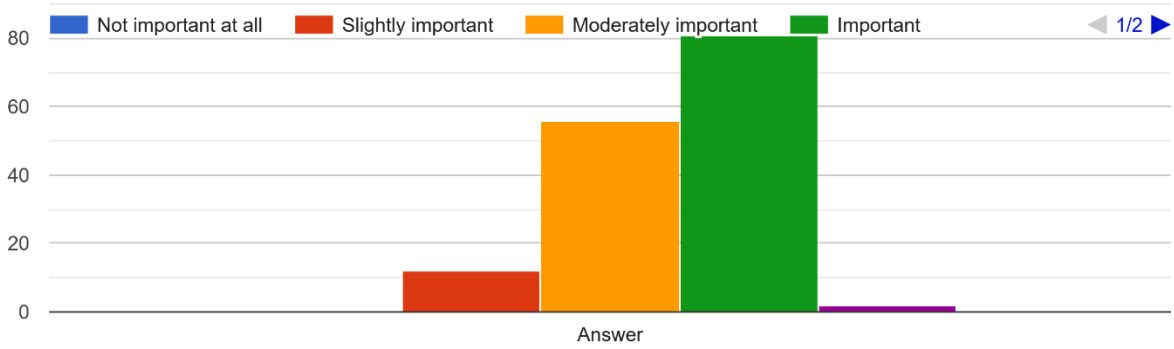


7. What would make you more likely to stay in NHS Wales after Foundation Training? Please rank 4 important factors (1 = The most important factor; 4 = The least important factor):

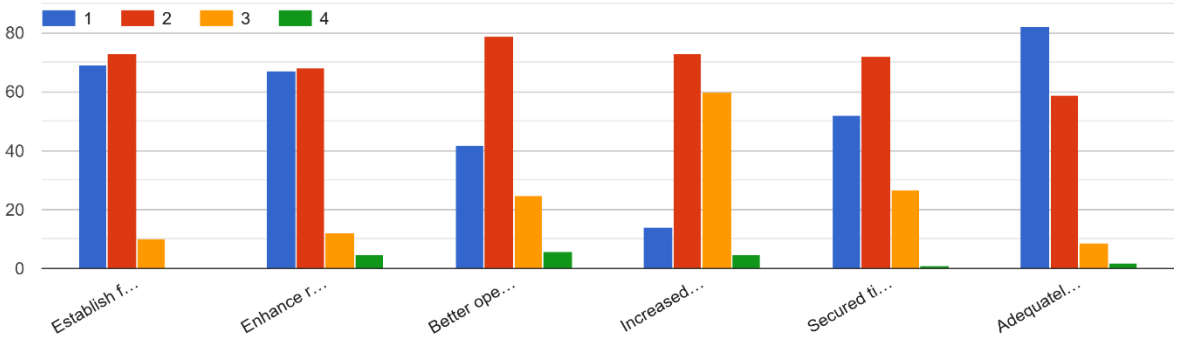


Part 4 – Career Progression and Retention Strategies (6 questions)

1. What role should mentorship, coaching and career guidance play in retaining junior/resident doctors in NHS Wales?

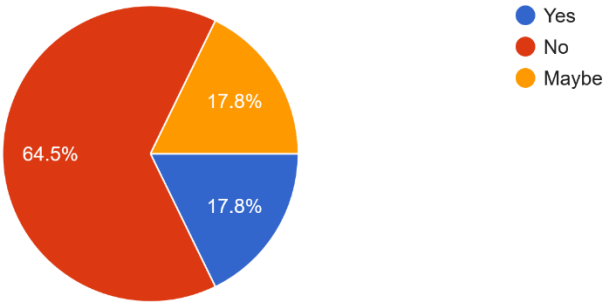


2. How could the leadership in NHS Wales improve in supporting junior/resident doctors' professional development? Please rank 4 important improvements (1 = ...tant improvement; 4 = The least important improvement):

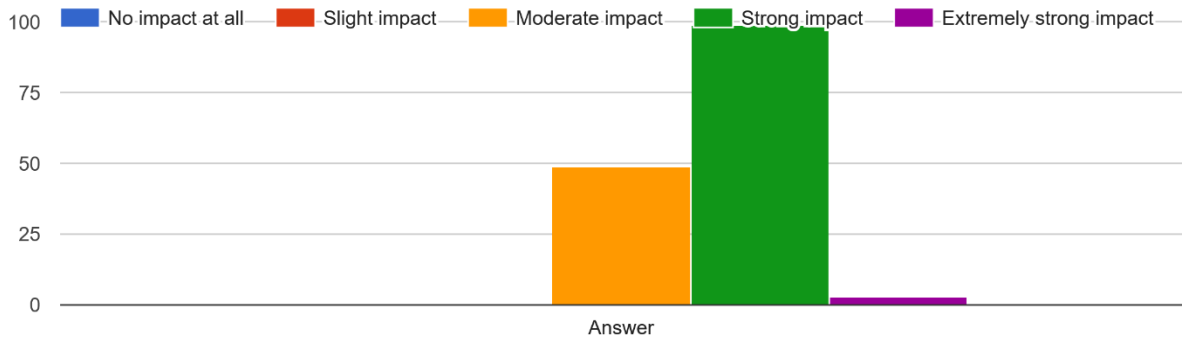


3. Do you think salary improvements alone will be sufficient to retain junior/resident doctors in NHS Wales?

152 responses

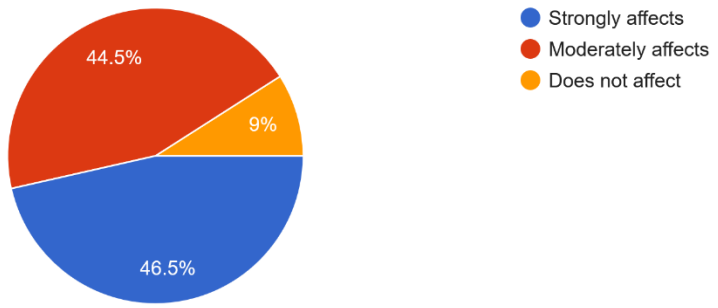


4. How much does the administrative burden and bureaucracy (e.g., paperwork, ad hoc meetings, etc.) affect your job satisfaction?

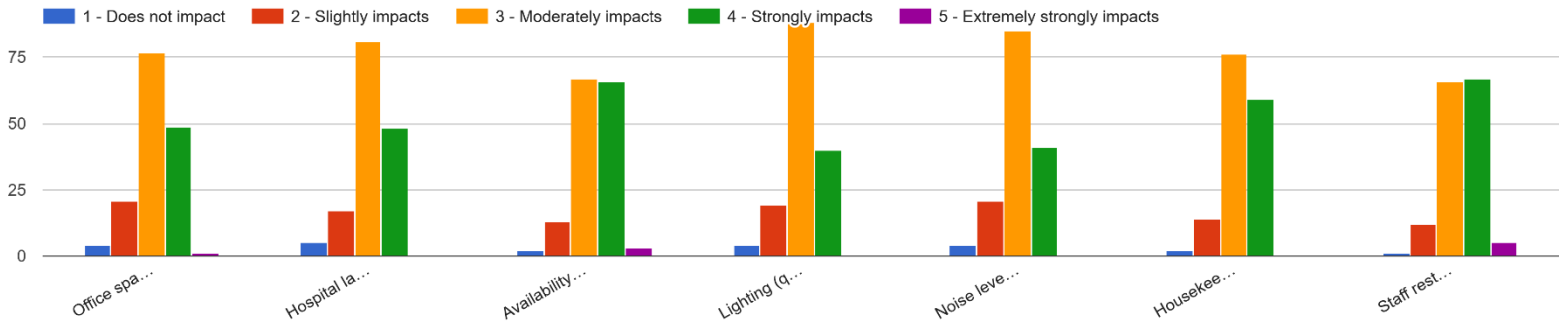


5. How much does your current workload affect your decision to stay in NHS Wales?

155 responses



6. To what extent does the physical work environment influence your overall job satisfaction? Please rate the level of impact using the scale below (1 = Does not impact at all, 5 = Extremely strongly impacts):



Thank you for your time and valuable input. Your responses and participation are greatly appreciated. If you have any questions or are interested in following up on this study's findings, please feel free to email gm.limited@aol.com.

Source:(Foundation Training Doctors Survey, 2025)

Appendix I – Interview Transcript

R1. Interview with BMA Representative 1 (Anonymised)

Role: *BMA Representative*

Q1: To begin, could you please describe your current role within NHS Wales?

R1: *"I currently serve as a BMA representative supporting doctors across Wales. Prior to this, I worked as a clinical supervisor and speciality registrar in internal medicine."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R1: *"After completing my foundation years, I became increasingly concerned about the systemic barriers that junior doctors face, especially in terms of fairness, support, and respect. My professional interest in governance and patient safety aligned naturally with the work done by the BMA. It was both a personal mission and a professional progression."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R1: *"Personally, I feel very confident in the path I have taken. Some excellent mentors encouraged reflective practice and advocacy early on, and those experiences built my confidence to act on systemic issues and challenge the status quo. However, I also witnessed many instances of junior doctors being left unsupported, which, combined with my own experiences and observations, led me to become a BMA representative."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R1: *"Significantly. I realised early in my clinical career that poor work-life balance leads to burnout and disengagement. My current role allows me to contribute meaningfully while maintaining a healthier equilibrium – something I aim to advocate for others, too."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R1: *"Honestly, mixed at best. I had some amazing, knowledgeable and experienced supervisors, but the broader system often undermined the learning environment. The rota gaps, under-resourcing, and pressure to prioritise service over training diminished job satisfaction and learning quality for most."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R1: *"Yes, but more by what was lacking than what was available. A lack of exposure to certain specialities and a heavy emphasis on service delivery made it hard to make informed career decisions. The variability between sites also meant some colleagues had far better opportunities than others. This problem is now new. It was during my foundational training, and this is today's reality, too."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R1: *"In my opinion, yes; however, it is not clear enough. Many juniors feel lost between FY2 and speciality training. I would recommend structured mentorship schemes, more transparent application processes, and stronger pastoral support during career transitions."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R1: *"Yes, frequently. The top reasons are pay stagnation, burnout, poor supervision, and family pressures. Some leave medicine entirely. It doesn't surprise me anymore; it makes my advocacy role feel even more necessary. I do not plan to leave, as all my personal and professional life is here in South Wales. However, I do understand the motives of the younger generations with fewer strings attached."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R1: *"Absolutely yes. These early-stage losses create recruitment gaps, financial burdens from locum reliance, and long-term planning issues. If we don't support all junior doctors early, the whole system suffers."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors to remain within NHS Wales long-term?

R1: *"The answer is simple despite the complexity: increase transparency in career progression, address pay erosion, mandate protected learning time, and provide dedicated mentorship for each FY1 and FY2 doctor. I believe that these changes could drastically improve both retention and morale. However, I also believe that to achieve it, the whole system must be meaningfully revamped, not on paper and annual reports, but in everyday practice. A cultural shift, if I can say so. "*

R2. Interview with BMA Representative 2 (Anonymised)

Role: *BMA Representative*

Q1: To begin, could you please describe your current role within NHS Wales?

R2: *"I'm currently engaged in full-time union work with the BMA. I was previously a consultant in general surgery and held educational roles."*

Q2: 1. Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R2: *"I've always believed that patient safety is rooted in staff wellbeing. Years of seeing junior doctors exhausted, underpaid, and unsupported led me to switch from clinical work to focus on structural reform."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R2: *"I feel highly confident now, but that came from hard-earned lessons. I had a few role model trainers and several toxic teams. Those contrasting experiences taught me that supportive environments are the exception, not the rule, and that needs to change."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R2: *"Honestly, they played a huge part. Long hours, shift fatigue, and the emotional toll of medicine started affecting my family life. My move into the BMA representative role allowed me to work on the root causes of burnout while also restoring my personal well-being and spending more time with my family."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R2: *"Low. Most of the training was unstructured and reactive. Even today, juniors tell me they are overwhelmed and unsupported. Good intentions exist, but the system is under constant pressure. Supervisors are overstretched, and junior doctors are treated as service providers."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R2: *"Yes, but it often narrowed my choices. Some rotations were so poorly supported that they discouraged further interest. Others gave glimpses of good practice. I believe the inconsistency was a key issue."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R2: *"Progression is too often 'figure-it-out-yourself' – I'd like to see structured career pathways introduced earlier in FY1, including rotations that align with long-term goals and personalised development plans."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R2: *"Yes. The reasons are repetitive: pay, burnout, lack of flexibility, relocation pressures. It influenced my own decision to exit clinical care. It's hard to stay motivated when you see peers walking away disheartened, changing to non-full-time or simply on long sick leave."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R2: *"Yes, critically. Every doctor lost at this early stage means lost training investment, staffing gaps, and poorer continuity of care. The system cannot sustain this level of attrition long-term, even with the attraction and deployment of medical professionals from foreign countries – an utterly unsustainable solution as a long-term strategy. As I said, we can see some taken by NHS remedial actions, but in my opinion, they are insufficient and can impact the quality of the Welsh healthcare service."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R2: *"Emphasis on long-term contracts, fair pay reviews, consistent supervision, and stronger psychological support systems. Also, empower junior doctors to have a voice in decision-making processes affecting their training."*

R3. Interview with NHS Wales Foundation Trainer 1 (Anonymised)

Role: *Clinical Trainer, Emergency Medicine*

Q1: To begin, could you please describe your current role within NHS Wales?

R3: *"I work as a Clinical Trainer in the Emergency Department at Morriston Hospital, providing supervision and teaching for FY1 and FY2 doctors during their rotations. My role involves overseeing their clinical decision-making, ensuring they meet training competencies, and giving regular feedback to support their development. I also coordinate simulation-based training sessions and debriefs after complex cases. Because the ED environment is fast-paced and unpredictable, I spend a lot of time helping trainees develop resilience and prioritisation skills. It's a role that requires both clinical expertise and a strong commitment to mentorship."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R3: *"For me, the variety and immediacy of emergency medicine were the biggest draws after my own Foundation Training. I enjoy the challenge of never quite knowing what will come through the door and the satisfaction of making rapid, life-saving interventions. On a personal level, I valued the camaraderie of the ED team, where consultants, nurses, and junior doctors work closely together. The decision was also influenced by the opportunity to remain in Wales, close to family, while still pursuing a speciality that offered good professional development. Ultimately, it was a combination of clinical passion and personal stability."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R3: *"I felt very confident in pursuing emergency medicine largely because my Foundation supervisors were excellent role models. I had a rotation in a busy A&E where I was given responsibility appropriate to my level, but always with backup when needed. That balance helped me grow in confidence without feeling unsafe. The encouragement I received to take on audit and quality improvement projects also broadened my understanding of the speciality beyond direct patient care. Those experiences confirmed for me that I was on the right path."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R3: *"Work-life balance is critical, particularly in emergency medicine, where shifts can be exhausting. I had to be realistic about the impact of irregular hours on family and social life. Personally, I've learned to protect my downtime and ensure I maintain hobbies outside of work. Well-being isn't just about avoiding burnout; it's also about finding purpose in what you do. When I mentor trainees, I emphasise that personal fulfilment and career success are closely linked."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R3: *"I'd rate my own Foundation Training experience as generally positive, though not without its pressures. Supervision was consistent, and I knew who to approach for clinical or pastoral support. That said, workload pressures sometimes meant supervisors had limited time for teaching, and rota gaps could be challenging. Support systems like the hospital library and online learning modules were useful, but access to mentorship could have been more structured. It's an area that's improving, but still variable across sites."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R3: *"Yes. My A&E rotation was the single biggest factor in my choice to enter emergency medicine. I also had a medical rotation that exposed me to acutely unwell patients, which built my confidence in handling complex cases. The variety helped me understand my strengths and what kind of work environment I thrived in. Rotations outside my comfort zone were just as valuable, as they confirmed which paths I didn't want to pursue."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R3: *"Career progression pathways are there, but they're not always well signposted, especially for those considering less traditional routes like academic or portfolio careers. More structured career guidance during the Foundation years would help, ideally from trainers who have diverse career experiences themselves. I also think NHS Wales could do more to advertise opportunities within rural and smaller hospitals, which can offer fantastic hands-on experience. Improving transparency about how to move between specialities or combine roles would also be beneficial."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R3: *"Yes, I've seen colleagues leave, often commenting on work-life balance issues, dissatisfaction with pay progression, and frustrations over rota gaps. The ongoing junior doctor strikes have brought many of these concerns into sharper focus, and some are now seriously considering careers abroad. It hasn't made me question my own commitment, but it has reinforced my belief that systemic change is urgently needed. The departures put more strain on those who remain, creating a cycle that's hard to break."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R3: *"Definitely. If a significant proportion of Foundation doctors decide not to continue in NHS Wales, we risk long-term gaps in the workforce that can't be quickly filled. That affects patient flow, waiting times, and ultimately health outcomes. Retention isn't just a workforce issue; it's a public health priority. The more we invest in supporting early-career doctors, the more resilient the system will be."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R3: *"Competitive pay that reflects the demands of the role is a starting point, but it's not the whole picture. Better rota management, guaranteed access to leave, and protected teaching time would make a big difference. Expanding mentorship schemes so that every junior doctor has regular one-to-one career discussions would also help. Finally, a visible commitment from leadership to address concerns raised during the strikes would go a long way toward rebuilding trust."*

R4. Interview with NHS Wales Foundation Trainer 2 (Anonymised)

Q1: To begin, could you please describe your current role within NHS Wales?

R4: *"I am a GP Educational Supervisor based in a rural practice in Powys, responsible for mentoring FY1 and FY2 doctors during their community placements. My role involves both clinical oversight and providing structured feedback on their consultation skills, patient management plans, and professional development. In a rural setting, the cases are incredibly varied, and juniors often need to adapt quickly to managing a broad spectrum of conditions with limited immediate specialist input. I also coordinate teaching sessions on topics such as chronic disease management, safeguarding, and palliative care."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R4: *"After my own Foundation years, I wanted a speciality that would allow me to build long-term relationships with patients and be involved in their care holistically. Professionally, the variety in general practice was appealing, as was the opportunity to work autonomously while still being part of a wider healthcare network. Personally, the flexibility to live and work in a rural area suited my lifestyle and family priorities. It allowed me to balance meaningful work with a strong community connection."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R4: *"I felt quite confident by the end of my Foundation Training because I had a very supportive GP rotation with a mentor who encouraged independence while providing safety nets. I was trusted to manage my own patient lists under supervision, which built both competence and confidence. That experience made me realise the importance of nurturing self-belief in trainees. The reassurance from my trainer that I had the right temperament for general practice was pivotal in confirming my decision."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R4: *"They influence them a great deal. General practice can be busy and emotionally demanding, but it offers more control over working hours compared to some hospital specialities. For me, being able to attend important family events and maintain hobbies was essential. Protecting my own mental health meant setting boundaries early and learning to manage workload effectively. This is something I actively encourage my trainees to think about from the start."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R4: *"I would rate it as good overall, though there were times when workload pressures made teaching feel rushed. My GP trainer was approachable, and I had regular tutorials that really enriched my learning. The main challenge was accessing specialist advice quickly in a rural setting, which could sometimes delay decision-making. However, this taught me resourcefulness and the value of building strong local networks."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R4: *"Absolutely. My rural GP rotation was a turning point, showing me that primary care can be intellectually stimulating and deeply rewarding. Before that, I had assumed general practice would be repetitive, but the reality was quite the opposite. I saw complex cases, multi-morbidity, and a wide range of patient demographics, all of which kept the work engaging. That variety cemented my decision to pursue this path."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R4: *"Progression pathways exist, but they are not always transparent, especially for roles outside hospital settings. More structured information sessions during the Foundation years would help clarify training routes, especially for those considering rural practice. I would also like to see more funded opportunities for junior doctors to experience primary care early in their training. Making career pathways visible and accessible is essential for retention."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R4: *"Yes, I've known several colleagues who moved to England or abroad, often citing better pay and more predictable hours. The recent junior doctor strikes have brought these frustrations into sharper focus, especially regarding pay erosion and workload intensity. It makes me more aware of how fragile retention can be, even in specialities like general practice. These departures increase pressure on those who remain, which in turn risks more people leaving."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R4: *"Without a doubt. If more juniors leave after the Foundation years, rural areas will be hit particularly hard because recruitment is already challenging. This could lead to longer wait times and reduced continuity of care, both of which impact patient outcomes. The system needs a stable pipeline of doctors willing to commit to the long term."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R4: *"Fair pay is essential, but so is investing in better working conditions, especially for those in rural or underserved areas. Providing financial incentives for rural placements, improving locum cover to allow guaranteed leave, and ensuring robust supervision would all help. Equally important is fostering a sense of belonging and professional respect, so that doctors feel valued beyond their clinical output."*

R5. Interview with NHS Wales Foundation Trainer 3 (Anonymised)

Q1: To begin, could you please describe your current role within NHS Wales?

R5: *"I work as a Consultant Paediatrician in Cardiff, and I'm also actively involved in the Foundation Programme as a clinical tutor for FY1 and FY2 trainees rotating through paediatrics. My clinical work focuses on acute admissions, outpatient follow-up, and safeguarding cases. In my educational role, I deliver bedside teaching, run simulation sessions, and supervise audit projects. I'm passionate about preparing junior doctors for the challenges of working with children and young people, both clinically and emotionally."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R5: *"I was drawn to paediatrics because I enjoy working with families and making a difference early in a patient's life. Professionally, I valued the structured training pathway and the sense of belonging within paediatric teams. Personally, I wanted a career that felt meaningful beyond the day-to-day tasks, something that could sustain my motivation through difficult shifts. The mentorship I received during my own paediatric rotation was a huge influence."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R5: *"I felt reasonably confident after Foundation Training, largely because my paediatric supervisors encouraged my curiosity and allowed me to take on responsibility at a pace I could manage. Simulation training for emergencies, such as neonatal resuscitation, gave me the skills and confidence to cope under pressure. Having a mentor who openly discussed both the joys and the demands of paediatrics made the career feel attainable rather than idealised."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R5: *"These factors weigh heavily in paediatrics because the workload can be unpredictable and emotionally taxing. I've had to be deliberate in setting boundaries and using annual leave to recharge. I also try to prioritise activities outside work that keep me grounded. Without that balance, the emotional intensity of the job can be overwhelming."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R5: *"I would say my satisfaction was generally high, especially with supervision. Paediatric teams tend to be collaborative, and I felt my input was valued even as a junior. Workload could be intense during viral peaks, but support from senior colleagues meant I never felt isolated in decision-making."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R5: *"Yes – the quality of my paediatric rotation was exceptional, with a mix of inpatient, outpatient, and community experience. Seeing the range of paediatric care in different*

settings broadened my understanding of the speciality. It confirmed that I wanted a career that combined acute care with long-term follow-up."

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R5: *"Progression is clear if you know exactly which speciality you want from the start. However, for those who are undecided, the options can seem opaque. More career exploration opportunities within Foundation Training would help, particularly taster weeks in less-exposed specialities like community paediatrics."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R5: *"I've seen several colleagues move abroad, mentioning better pay and work-life balance, especially in Australia and New Zealand. The ongoing strikes have brought pay disparity into sharper focus, and that frustration resonates even among those of us committed to staying. It reinforces the need for systemic changes to keep talent here."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R5: *"Absolutely. If paediatrics loses too many early-career doctors, it will lead to rota gaps and delays in patient care. This is especially dangerous for children with urgent health needs, where timing can be critical. The knock-on effects ripple through the whole system."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R5: *"Addressing pay erosion is vital, but so is investing in staffing levels so that workloads are sustainable. Expanding mentorship programmes and offering funded development opportunities would help juniors feel valued. We also need more flexibility in training, especially for those with families."*

R6. Interview with NHS Wales Foundation Trainer 4 (Anonymised)

Q1: To begin, could you please describe your current role within NHS Wales?

R6: *"I am a Consultant General Surgeon specialising in colorectal procedures at Swansea Bay. Alongside my surgical duties, I supervise FY1 and FY2 doctors during their rotations in the surgical wards and theatres. My teaching role focuses on developing practical skills, clinical decision-making, and time management in high-pressure settings. I also sit on the hospital's training committee to ensure our surgical placements meet educational standards."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R6: *"Surgery appealed to me because I enjoy tangible problem-solving and the immediate impact of interventions. The influence of senior mentors during my Foundation rotations was decisive; they modelled precision, discipline, and resilience. Personally, I thrive in structured, high-intensity environments where teamwork is essential. The combination of technical skill and patient advocacy was too compelling to ignore."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R6: *"By the end of my Foundation years, I felt confident in my choice, largely because I'd been given real responsibility under close supervision. Scrubbing in early and assisting in operations taught me that I could work effectively under pressure. The encouragement from my consultants was instrumental in building that self-assurance."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R6: *"Surgery is demanding, and work-life balance can be elusive. I've learned to accept that this is a lifestyle as much as a profession. However, I do make a conscious effort to carve out time for family and exercise. Without that, burnout is a real risk, especially in the surgical field."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R6: *"I had a mixed experience. Supervision was generally strong, but the workload was punishing during winter pressures. The support systems were there, but accessing them could be challenging during intense periods on call."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R6: *"Without a doubt. My general surgery rotation was dynamic, with exposure to both elective and emergency cases. That variety confirmed my desire to specialise in a field where no two days are the same. The hands-on opportunities made the choice straightforward for me."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R6: *"For surgery, the pathway is well defined, but it's unforgiving if you take a non-linear route. NHS Wales could improve by offering more flexible entry points into speciality training for those who take career breaks or explore other specialities first."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R6: *"Yes, several junior colleagues have moved abroad or left medicine entirely, pointing out unsustainable hours, pay issues, and inadequate staffing. The strikes have amplified these grievances. While I remain committed, I can see why others are disillusioned."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R6: *"I think yes. Surgery depends on a steady pipeline of well-trained juniors. Losing them means longer waiting lists, cancelled operations, and poorer outcomes for patients. The system is already stretched; attrition makes it worse."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R6: *"Competitive pay, better rota management, and a genuine commitment to improving working conditions. Offering structured mentorship and protected training time would go a long way in retention."*

R7. Interview with NHS Wales Foundation Trainer 5 (Anonymised)

Q1: To begin, could you please describe your current role within NHS Wales?

R7: *"I serve as the Clinical Lecturer in North Wales, and my clinical speciality is internal medicine. My role bridges administrative oversight of training programmes with direct teaching and supervision of Foundation doctors. I ensure that our education delivery meets GMC standards and supports the professional growth of our trainees. This involves working closely with consultants across multiple disciplines."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R7: *"I chose internal medicine because I enjoy diagnostic challenges. During my Foundation years, I valued rotations that tested my adaptability. The guidance of supervisors who encouraged critical thinking and a holistic approach to patient care solidified my decision."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R7: *"I was very confident because I'd been fortunate to work in supportive, academically inclined teams. Participating in ward rounds where juniors were actively involved in diagnostic reasoning was formative. These experiences built both my competence and my professional identity."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R7: *"As an educator and clinician, I'm acutely aware that well-being is central to sustained performance. I try to model healthy boundaries for my trainees, although the demands of the role can be consuming. Maintaining that balance is a constant work in progress."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R7: *"I had high satisfaction because I was in departments that valued teaching. The workload was manageable, and support systems were visible and accessible. That early positive experience heavily influenced my commitment to medical education."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R7: *"I would say so. Experiencing a range of internal medicine subspecialties allowed me to appreciate the intellectual breadth of the field. Exposure to both acute and chronic care contexts helped me see how medicine could evolve with a patient over time."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R7: *"Progression is relatively clear, but we could do better in guided, non-linear career pathways. NHS Wales should invest more in career counselling for undecided trainees and in highlighting opportunities in rural and underserved areas."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R7: *"Yes, and the reasons are usually multifactorial: pay, workload, and a desire for more predictable hours. The ongoing industrial action has made these issues impossible to ignore. Personally, it reinforces my resolve to improve training environments."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R7: *"No doubt. Losing motivated juniors to other regions or countries weakens our capacity for service delivery and innovation. Recruitment is only half the battle; retention is where the challenge lies."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R7: *"Implementing structured mentorship, providing flexible training options, and ensuring that feedback from trainees leads to visible change. And, of course, addressing the ongoing concerns over pay and staffing."*

R8. Interview with NHS Wales Foundation Trainer 6 (Anonymised)

Q1: To begin, could you please describe your current role within NHS Wales?

R8: *"I'm a Consultant Anaesthetist working in Cardiff, and I also lead our simulation-based training for Foundation doctors. My work spans theatre anaesthesia, critical care, and perioperative medicine. I'm responsible for teaching technical skills such as airway management, as well as crisis resource management in simulated emergencies. It's a role that combines clinical precision with educational innovation."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R8: *"I was drawn to anaesthetics because of its blend of physiology, pharmacology, and acute problem-solving. My Foundation ICU rotation was pivotal — seeing how anaesthetists manage both life-threatening emergencies and routine cases with the same calm efficiency inspired me. On a personal level, I value the team-based nature of the speciality."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R8: *"I felt highly confident because I had excellent supervision and was trusted to take part in real procedures early on. The supportive learning environment in the ICU built both my competence and my trust in the speciality."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R8: *"Anaesthetics can have unpredictable hours, especially with on-calls, but the work itself is energising. I prioritise my mental health by scheduling recovery days after heavy lists and maintaining interests outside of medicine. A healthy life outside the hospital keeps me effective inside it."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R8: *"It was very positive. My anaesthetics supervisors were approachable, and the workload was intense but manageable. The support systems in critical care settings were robust and set a good example for interdepartmental cooperation."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R8: *"Yes, particularly the rotations in ICU and A&E. The diversity of acute presentations reinforced my interest in a speciality that deals with emergencies across all fields."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R8: *"It's clear for those who know early on what they want, but for those exploring options, the path can seem opaque. More structured tasters in niche specialities would help."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R8: *"Yes, quite a few have gone to Australia for better pay and lifestyle. I think the strikes have amplified those frustrations. It makes me conscious of the need for systemic change here, for sure."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R8: *"Definitely. In acute care settings, losing skilled juniors means heavier reliance on locums and more pressure on consultants – not the best situation to be in."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R8: *"I think improved staffing ratios, guaranteed training opportunities, and genuine work-life balance measures would make a real difference."*

R9. Interview with NHS Wales Foundation Trainer 7 (Anonymised)

Q1: To begin, could you please describe your current role within NHS Wales?

R9: *"I am a Consultant Orthopaedic Surgeon in Carmarthenshire, specialising in trauma and lower limb reconstruction. I'm also an educational supervisor for Foundation doctors*

rotating through orthopaedics. My role is split between clinical work in theatres and fracture clinics, and providing mentorship to junior doctors."

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R9: *"Orthopaedics appealed to me because of the immediate and tangible improvements we can make to a patient's mobility and quality of life. My early exposure to trauma cases and the satisfaction of 'fixing' problems surgically steered me towards the field."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R9: *"I was certain by my second Foundation year after an intense trauma rotation. The hands-on teaching from approachable consultants made a big difference."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R9: *"Orthopaedics is physically demanding, and the hours can be long. I've learned to balance high-volume surgical lists with rest days and time outdoors. Without that balance, the job could become overwhelming."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R9: *"Moderate. While my trainers were supportive, the workload was heavy, and winter pressures sometimes meant teaching took a back seat."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R9: *"Yes, especially my exposure to orthopaedic trauma. The hands-on skills I learned confirmed my choice."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R9: *"Orthopaedics has a clear path, but the bottleneck in speciality training numbers is frustrating. More funded training posts are needed."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R9: *"Yes, many complained about pay erosion and lack of resources. The strikes have brought these issues to the forefront. While I'm committed to staying, I empathise with those who are uncertain about their future in the NHS or leave."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R9: *"Certainly. Trauma services rely on motivated juniors, and without them, the workload becomes unsustainable."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R9: *"Better pay, modernised facilities, and ensuring juniors have protected time in theatre to develop their skills."*

R10. Interview with NHS Wales Foundation Trainer 8 (Anonymised)

Q1: To begin, could you please describe your current role within NHS Wales?

R10: *"I am a Consultant in Public Health with a joint academic appointment and policy advisory role at the NHS Wales. My remit covers medical workforce planning, postgraduate education policy, and public health training design. I frequently work with HEIW to ensure workforce strategies are informed by research and data."*

Q2: Could you describe the key personal and professional factors that have influenced your career choice decisions following the completion of your Foundation Training?

R10: *"I moved into public health because I wanted to impact healthcare at a systemic level rather than one patient at a time. My Foundation rotations in general medicine and community placements revealed how policy shapes outcomes."*

Q3: How confident do you feel in pursuing your chosen career path, and what support or experiences during Foundation Training have shaped that confidence? Why?

R10: *"I was confident because I'd identified a niche where my analytical and organisational skills were an asset. Mentorship from public health consultants during my Academic Foundation Programme was key."*

Q4: How do work-life balance, personal priorities, and well-being influence your career decisions?

R10: *"Public health offers a more predictable schedule than many clinical specialities, which supports my work-life balance. That's a big factor in my job satisfaction."*

Q5: How would you rate your satisfaction with the working environment, including supervision, workload, and support systems during Foundation Training?

R10: *"I would rate it high. I had supervisors who valued my interest in research and policy. They allowed me to tailor parts of my rotations towards those interests."*

Q6: Did the variety and quality of clinical rotations during Foundation Training influence your speciality preference? If so, how?

R10: *"Yes – my exposure to both hospital medicine and community projects showed me the bigger picture of healthcare delivery."*

Q7: Do you feel NHS Wales offers clear and accessible career progression opportunities after Foundation Training? If not, what improvements would you suggest?

R10: *"In public health, yes, but for most other specialities, there's still a lack of transparency. We need clearer, more accessible information about less common career paths."*

Q8: Have you noticed colleagues leaving NHS Wales or switching specialities? What reasons do they usually give, and how do such decisions affect your own career thinking?

R10: *"Yes, I have noticed. The reasons are mostly due to pay disputes, rota gaps, and a lack of career progression. I think the recent strikes have validated those frustrations. For me, it reinforces the importance of policy reform and not only."*

Q9: Do you think foundational training doctors' career decisions will impact the overall healthcare system performance of NHS Wales?

R10: *"Yes. Retention of skilled juniors is a cornerstone of healthcare sustainability. Losing them destabilises services and increases recruitment costs."*

Q10: What specific changes or support mechanisms do you believe would encourage more junior doctors like yourself to remain within NHS Wales long-term?

R10: *"Transparent pay reform, structured mentorship, and flexible training options to accommodate varied career interests."*

Appendix J – Self-Reflection

The six-month dissertation research journey was both exciting and daunting. Balancing academic study, personal commitments, and full-time work proved particularly challenging, especially when dealing with unforeseen contingencies beyond my control. The ongoing war in Ukraine – where my mother and sister live – is one of them, constantly in the background of my mind. Despite these circumstances, the dynamic nature of dissertation research, my genuine interest in the research topic and the practice of mindfulness were my psychological anchor, helping me stay mentally resilient while managing the challenges I could control.

One of the challenges I encountered during my research odyssey was communicating with Health Education and Improvement Wales when I sought their support through official channels. I found myself stuck in a communication loop, repeatedly contacting the same individuals, who continually redirected me from one to another without helping me distribute my survey among Welsh foundation trainees. The ongoing junior doctors' strikes at the time further complicated our communication. As a result, I had to rely on my backup plan – targeting relevant online platforms, junior doctor social groups, and asking friends within the industry to share my survey link so that I could reach an adequate level of data saturation.

Additionally, while working 40 hours per week, I struggled significantly with planning and prioritisation. Balancing work, personal responsibilities, and academic obligations made time management a critical skill to master. Navigating the available literature on motivational theories and insights from NHS UK annual reports was manageable; however, the overwhelming volume of information presented a different kind of difficulty. It became increasingly challenging to maintain focus on the original research objectives, avoid research drift, and adhere to the intended structure. Every new piece of information seemed valuable and tempting to include, especially in the Introduction and Literature Review chapters, which risked inflating the word count without adding meaningful value to the research aim. My dissertation supervisor played a key role in helping me stay aligned with the research goals. I believe it is important to have a knowledgeable and supportive academic mentor to guide the research process from start to finish.

The mixed-methods approach proved to be the most suitable strategy for this study. However, the workload and time demands were considerable, requiring significantly more effort than I initially anticipated. Managing both datasets within the tight timeline was one of the most demanding parts of this study.

The process of arranging interviews with NHS trainers and BMA representatives also posed unexpected challenges. Coordinating schedules and securing mutually convenient times required extensive communication and flexibility. Due to the business, two participants cancelled their interviews, forcing me to find replacements quickly to maintain the agreed qualitative sample size. Fortunately, my partner's personal connections helped me overcome this barrier and connect with the right individuals at the right time to complete the task.

Initially, I felt a strong sense of purpose and excitement as I started the research journey, as the topic closely matched my academic and professional interests, especially in understanding what motivates different people today and how organisations can support their professional development. However, this initial enthusiasm was tempered by the realisation of the practical demands involved. Given that I chose a broad topic requiring both quantitative and qualitative data collection and analysis using two motivational theories, I often wondered if I had adequately considered the time and effort needed to complete my research to a sufficient academic standard without overcomplicating the process and adding unnecessary stress.

I believed that my time management skills would be sufficient to handle the workload and stress related to inevitable setbacks caused by communication delays, scheduling issues, and the volume of literature. However, as the research progressed, it became clear that to deal with these unexpected challenges would require more flexibility and perseverance than I had expected. The difficulty in obtaining institutional support from Health Education and Improvement Wales, compounded by the need to find replacements for two withdrawn interview participants, was particularly frustrating as those delays slightly disrupted my initial timeline. This caused a degree of stress and uncertainty, particularly during the data collection phase.

At times, I felt under pressure to meet self-imposed deadlines while also maintaining the quality of work expected at the master's level. The constant reviewing and refining of the chapters' structure and content, coordinating interviews, all while finding a healthy work-life balance, was defying my mental and physical stamina. As they say, "No pain, no gain." Thus, I adapted my strategy to the realities, temporarily reducing my working hours, prioritising dissertation activities and began to feel more in control and confident in my research direction.

Meeting with knowledgeable healthcare professionals and analysing their insights on the research topic provided me with valuable experience – allowing me to hear directly about the problem from their perspectives – and satisfaction, as I finally progressed through the data collection and analysis phase. Seeing meaningful patterns emerge from the data was indeed an exciting moment. While the journey was far from easy, it gradually became more rewarding as I gained a clearer understanding of the motivations of FY1-FY2 doctors and factors that influence their career choices after foundational training.

Despite all the ups and downs, I want to acknowledge that the research process was both challenging and rewarding. One of the most positive aspects was the relevance of the chosen topic. It felt pertinent to current issues affecting NHS Wales and junior doctors. Although adopting a mixed-methods approach was suitable and enhanced the interpretation of research results, managing and tracking all related activities was very demanding for me. I think next time I will choose a less complex topic and fewer cumbersome research tools for my academic study, trying something different in future research projects.

In terms of personal development, I gained a deeper understanding of my working style. As a perfectionist, I tend to be thorough and detail-oriented, which is helpful in areas like analysis and writing, but can also slow down progress when quick adjustments to changing circumstances are needed. This research experience reinforced my belief in the importance of adaptability in research, especially when facing insurmountable barriers. Additionally, I have come to the conclusion that the most effective research is not only technically sound but also responsive, focused, and grounded in a clear understanding of context, time, and human dynamics – something I need to work on in my future dissertations, as there is always room for further improvement.