Senior Hospital Doctors' Intentions to Retire in NHS Scotland

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Executive Summary

1. Representatives of the NHS employers in Scotland, the BMA (Scotland) Consultants Committee, the Academy of Medical Royal Colleges and Faculties in Scotland, and academics from the University of Dundee combined to produce the largest and most comprehensive survey of senior hospital doctors'[1] intentions to retire (ITR) and intentions to scale down of work commitments in NHS Scotland.

2. Their joint efforts produced a very good response rate for such surveys, with just under 1700 doctors completing a lengthy questionnaire. The response rate of 40% of senior hospital doctors at least 50 years old showed the strength of interest and feeling on this issue, with more than 700 of these doctors adding, often extensive, free text commentary to two open questions at the end of the survey. The views of doctors under 50 were also sought and used to compare with the 50+ cohort for signs of generational differences.

3. We found nearly half of doctors 50 years old or over intend to retire (ITR) before normal pension age, with less than 30% of this cohort intending to work to or beyond normal pension age.

4. Estimates show doctors in the 55+ cohort group intend to retire at age 58, while the 50-54 cohort and <50 cohort's ITR is 60.

5. Most doctors intend to transition into retirement by scaling down work commitments; only 22% of the total sample did not intend to transition into retirement by scaling down work commitments.

6. These headline statistics suggest that future planning norms, if based on normal pension age, may require to be substantially revised to consider the potential for premature retiral or scaling down work commitment from work by senior hospital doctors in NHS Scotland.

7. Extensive statistical analysis of the c1700 survey responses and qualitative analysis of the 1531 accompanying free text comments to two open-ended questions showed financial concerns, including the pension taxation regime, to be the sole or main reason given by doctors for their intention to retire before normal pension age and/ or scale down work commitments.

8. The statistical analysis and free text commentary combined to show organisational disillusionment and disidentification (OiDD) as the second most important reason for premature ITR, either solely or in combination with other reasons.

9. Pension taxation issues and OiDD often combined with other important factors to provide a multifactorial explanation of premature withdrawal from work. These additional factors included burnout, lack of meaning derived from, and engagement with, their work, health, wellbeing and caring concerns and positive expectations of retirement.

10. There were significant differences among doctors, however, in how they responded to many of the survey questions according to key demographics. Age differences were the most important of these. Age cohort differences (the age at which doctors completed the survey) were significant for many questions and reasons given for ITR. It is not possible to do other than speculate from a cross-sectional survey such as this one on whether age differences are evidence of generational differences in values, especially among the under 50s. However, some of the free text commentary suggest a potential for generational differences in attitudes to work, work-life balance, and early retirement. We regard generational differences as an important issue for further investigation.

11. Gender and ethnic differences were also found to be important in explaining the reasons for ITR and reduction in work commitments.

12. The main reasons given for continuing to work up to or beyond normal pension age were financial reasons and good health. Work centrality (a sense that doctors are contributing to a social and moral of purpose and are engaged in their work) and cognitive and social stimulation from work was only moderately expressed by most doctors, and a moderate source of motivation for many.

1 We did not ask the respondents to identify SAS grade/consultant/other, so it has not been possible to break down differences across different staff groups – we have noted in the report where data is specific to consultants

13. Combining these different factors and findings into a coherent and credible narrative suggests the potential withdrawal from work is a consequence of a breached 'psychological contract'. Doctors feel they have undergone many years of demanding training, relatively low pay compared to other professions, and long, often unsociable, hours. In return, they came to expect clinical autonomy, high status and meaningful work when fully trained as consultants, accompanied by good pay, conditions and pensions. Most senior hospital doctors, however, have come to feel these reasonable expectations have been severely breached. Changes to the pension and taxation regime are interpreted as 'the straw that broke the camel's back', which has already been strained by progressive disillusionment with the system's failure to provide sufficient resources to meet ever-escalating demands. Thus, senior hospital doctors are responding by expressing a reduced sense of meaningfulness of their work, reduced levels of work engagement, and significan levels of burnout in some cases. The outcomes are that doctors are increasingly seeking to withdraw from or exit from full-time work as the pull of more leisure time becomes ever more attractive.

14. Such breaches of the psychological contract with senior doctors are likely to present the NHS, the employers, and the medical professions with significant problems in recruiting, engaging, and retaining newer generations of doctors, whose expectations may well be different and whose opportunities for alternative employment may be greater. Consequently, it is vital that these expectations among the 50+ and under 50 cohorts are addressed.

15. Our research has also surfaced what help doctors value in coming to decisions over premature withdrawal from work in the NHS. Change to the pension taxation regime was the most important remedy, but such changes were outside the scope of health board control. Important remedies that do fall within the control of health boards included: work restructuring, flexible working and better designed and consistently implemented retire and return programmes. They also included addressing workload issues, succession planning and staffing issues, along with honest messaging from the NHS as a system and its leaders. Importantly, doctors also expressed a need to feel more valued and seek a greater voice in how they are managed. Finally, career planning in the NHS in Scotland for doctors in the later stages of their career needs to be given much more attention, especially in helping them navigate the increasingly complex pension tax regulations, and in finding innovative ways of supporting doctors to remain at work by playing to their strengths and capabilities.

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1.1 Background to the Problem and Key Research Aims

Against a wider backdrop of people exiting early from the UK labour force (the so-called 'great resignation', (CIPD 2022; Carrillo-Tudela, et al., April 26th. 2022), evidence suggests doctors' and other health professionals are also retiring before normal pension age across the UK or scaling down their work commitments (BMA 2020, Buchanan, Charlesworth, Gershlick & Seccombe, 2019; Cleland et al., 2020, Improving Medical Retention Advisory Group, 29th Sept, 2022;). Withdrawal from the UK medical workforce, either through early retirement or a reduction in work programmed commitments, became more prominent following the Global Financial Crisis in 2007 and is thought to have been, further amplified by the stresses and strains associated with COVID-19 (BMA 2020).

This trend among doctors in the UK to retire before normal pension age, is unusual in some respects (or at least was). Firstly, professionals in other sectors show signs of retiring later (Carrillo-Tudela, et al. ibid). Secondly, international comparisons show doctors in some other countries increasing their work commitments and retiring later (Wijeratne, Earl, Peisah, et al., 2017). Thus, doctors' intentions to retire early in the UK suggests that unique, context-specific explanations underlie the early retiral of doctors in the UK. Previous qualitative research in NHS Scotland shows the phenomenon can be partly explained by the current UK tax regime on pensions and work-related pressures in the NHS (Cleland et al., 2020). However, it is also clear that other factors contribute, including organisational cultural problems and a lack of career planning for doctors in the later stages of their careers (Improving Medical Retention Advisory Group, ibid.)

Against this backdrop, representatives of the NHS Scotland employers, the BMA Scotland Consultants Committee, and the Academy of Medical Royal Colleges and Faculties in Scotland (hereafter referred to as the Project Group) commissioned research to:

(1) Gain a more in-depth understanding of the intentions of doctors in secondary care to retire (ITR) before their normal pension age or reduce their work commitments by scaling down the sessions they normally work,
(2) Fully understand the reasons underlying doctors' ITR and/or intentions to reduce work commitments to assist with medical workforce planning in NHS Scotland (NHSS), and
(3) assist doctors to make decisions regarding their careers that can reduce the negative effects associated with premature withdrawal from work.

1.2 What Do We Already Know? Summary of Findings from the Existing Literature on Doctors' Intentions to Retire

There have been several attempts to provide coherent explanations of intentions to retire (ITR) among doctors, to identify the factors that might lead to ITR (and scaling down work commitments) to vary across age, gender, location, and speciality, and to pose possible solutions tailored to the underlying causes (BMA, 2020; 2021; Cleland et al., 2020; Improving Medical Retention Advisory Group, 2022; Lemaire, 2017; Martin et al., 2020; Smith et al., 2017; Wijeratne et al., 2017).

A headline summary of what these studies tell us is that doctors' ITR in the UK can be explained by a combination of factors, including:

- The complex pension taxation regime in the UK,
- The degree to which doctors are embedded in their work (including their job engagement and the extent to which they see their career as a 'calling' imbued with moral and social purposes), their levels of integration into/identification with their teams and/or organization, and the resources they require to cope with the increased burden as they age,
- The sacrifices they make to either leave or stay in the job. Usually this involves a cost-benefit calculation of loss of income, personal and professional identity ("who am I"? "who do I want to be" and "who am I not"), the support they get versus the costs of staying, e.g. tax penalties they face, the opportunity cost of doing something different (e.g. a new career, family/caring/travel etc.),
- The degree of 'fit' between their values, personal identity, and professional identity (what does it mean to be a medical professional) with the changing job demands, new concepts of medical professionalism (e.g., ability to embrace multiple logics of decision making and hybridity), managerial challenges, the changing organisational and NHS identities,

- Doctors' actual and perceived wellness, which includes their physical and cognitive (present and anticipated) wellness, experience of burn-out, and family/ partners' wishes regarding retiring,
- How doctors cope with, and adapt to, ageing, both personally and during their professional practice,
- Generational differences among doctors and the cohort age at which doctors are asked to forecast their intentions to retire (how near they are to retiral when asked about retiring),
- Key demographic factors such as gender, speciality, and 'place' differences.

While the pension tax regime is often given as the main reason why doctors in the UK differ from those in other countries regarding their early ITR, there is little doubt that reasons connected with the changing idea of what it means to be/ takes to be a medical professional (i.e. their professional identity) in the NHS, and burnout resulting from the increased job demands placed on doctors in secondary care without concomitant resources are also important explanations (BMA, 2021; Cleland et al., 2020).

With these findings in mind, the following solutions to the problem are thought to be effective in mitigating the negative effects of premature ITR/scaling down of programmed work commitments:

- Addressing well-being, work-life balance, and burnout challenges,
- More effective workforce planning, job planning, appraisal, recognition of senior hospital doctors' contribution and voice,
- Use of part time and flexible working,
- Managing careers at all stages in the life cycle, and to have specific programmes aimed at later career doctors,
- Seeing work as an emotional challenge that might be helped by learning about other doctors' experiences and how they deal with emotions and identity issues often helps
- Making use of 'identity workspaces' for such mutual learning, since work/ professional identity is a key element in 'who am I' and "who do I want to be' and 'who am I (definitely) not',
- Creating careers that retain skills and experiences by offering opportunities to focus on mentoring, providing learning support, conducting research etc.,
- Scaling down/ retire and return programmes,
- Other forms of flexible and hybrid working,
- Better provision of financial planning

A Scottish-based inquiry, led by the Improving Medical Retention Advisory Group (2022, Sept 29th), has been particularly keen to see measures such as the ones listed above to be introduced, as well as short term changes to the pension and taxation regime.

1.3 Conclusion

This brief review of existing literature provides the backdrop in NHS Scotland to our research questions and design. Drawing on this existing research summarised above, we aimed to provide a more complete and systematic analysis of the intentions to retire and/ or reduce work commitments among career grade doctors employed in NHS Scotland. We also sought to provide further insights into the types of assistance that might help all stakeholders make more informed decisions on this issue.

2. Method

2.1 Survey Design, Research Objectives and Survey Administration

The specific objectives of the research were to conduct a large-scale survey that:

1. Identifies the scale of the problem in the NHS in Scotland in terms of number of doctors' intending to retire (ITR) before their normal pension age in the short-to- medium-term;
2. Provides coherent explanations of premature ITR among doctors in NHSS;
3. Identify significant differences in ITR (and scaling down work commitments) according to key demographic factors, including age, gender, location and speciality, ethnicity, and;
4. Pose possible solutions tailored to the underlying causes of premature ITR.

At every stage of the proposed research, we worked with the Project Group to ensure the design and running of the study met their needs. Bearing in mind what we already knew from the existing literature, and the requirements of the Project Group, we conducted an online survey of the population of career grade doctors in NHSS with their full support. The survey focused on sampling doctors 50 years old or over (50+) to improve response rates and therefore the statistical generalisability of the findings to this target group. However, we also invited doctors under 50 to take part, with a view to providing a comparison between different age cohorts or generations of medical staff.

As previously noted, the survey questions were guided by our review of the relevant literature from the UK, other countries where similar studies have taken place, and our previous research into consultants' experience of work in NHS Scotland (Martin, Siebert, Bushfield & Howieson, 2015; 2020). Where appropriate, we used validated questions and scales to improve the overall validity of the questionnaire and to make comparisons with previous studies in the UK and elsewhere.

Ethics approval was granted under the University of Dundee Ethics Approval Procedures by the School of Business Ethics Committee. Respondents were guaranteed complete confidentiality concerning data collection, storage and reporting; no individual can be or was identified in the research process.

A draft version of the survey was piloted among 15 doctors who were representative of the focal population of career grade doctors 50-years-old and over (50+). They were asked to comment on the content and survey design. Following detailed feedback and appropriate amendments, the final version of the survey was agreed by the Project Group.

The survey link was promoted by all three bodies in the commissioning group by email and follow up emails/ text during a three-week period ending on December 20th, 2022.

3. Findings 1 – Characteristics of the Respondents

3.1 Age Characteristics

In total, we received 1698 usable replies. 1045 of these were from doctors in the target 50+ cohort, while 653 were aged <50. Calculating response rates from both cohorts is surprisingly difficult because of the problems in obtaining accurate estimates of the total number of career grade doctors in the secondary sector of NHSS. NHS Education for Scotland (NES) was helpful in providing data for Table 1 in this regard. Thus, our best estimates are based on data they provided for the headcount of consultants (including clinical, medical and dental directors) in NHS Scotland by age in June 2022.

Table 1 shows our target population of consultants employed in NHSS in the 50+ age cohort is 2704.

Table 1: Headcount numbers of consultants (including clinical, medical and dental directors) in NHS Scotland by age in June 2022

Age Group	Headcount	Percentage
25-34	172	2.7
35-39	903	13.9
40-44	1357	21.00
45-49	1338	20.7
50-54	1197	18.5
55-59	934	14.4
60-64	393	6.1
65+	180	2.8
Total	6474	

Source: NES, Freedom of Information Request.

Table 2 gives an indication of the response rates by age group to our survey. Thus, we estimate that the 1045 consultants in our target 50+cohort who completed the questionnaire represents an overall response rate of 38.6% of the target population. Sub-group response rates were 39.4% for the 50-54 age category, 45.9% for the 55-59 age category, and 24.3% for the 60+ age category. We believe this overall response rate and the sub-group response rates provides a very good basis to generalise from our findings to the population of consultants in the sub-cohorts of the 50-54 and 55-59 age groups. The lower response rate in the 60+ cohort is more of a problem for the purposes of statistical generalisation, so we have to be more circumspect in any conclusions involving comparisons with this cohort.

Table 2: Numbers responding by age group

Age group	No. of respondents	% of total responses	Mean age	Standard deviation	Quartile 1	Median age	Quartile 3
Less than 50	653	38.46	43.66	4.19	41	45	47
At least 50	1045	61.54	55.51	4.06	52	55	58
Of which there were in 50-54 age range	472	27.80	N/A	N/A	N/A	N/A	N/A
55-59	429	25.27	N/A	N/A	N/A	N/A	N/A
60 and over	144	8.48	N/A	N/A	N/A	N/A	N/A

We were also fortunate in capturing the views of more than 650 senior doctors below 50 years old. While this number represents only 17.3% of consultants in that age group in NHS Scotland, it nevertheless provides a useful point of comparison to speculate on the possibility of generational differences in ITR. By generational differences we refer to differences in how people in different age groups think, feel and act because of the diverse historical circumstances connected with their personal and professional socialisation (Lyons & Curon, 2013). In this regard, doctors have been found to differ in values and attitudes because of differences in UK postgraduate medical education models and the broader changes in the social, economic, and political circumstances of their training (Splig, Siebert & Martin, 2012). We realise such comparisons are difficult because ITR has been found to be related to the age at which you ask the question of doctors – so-called cohort age. However, while acknowledging this qualification and accepting the constraints of a cross sectional survey in identifying trends, our findings at least raise the possibility of generational differences in how doctors make sense of ITR. As we shall see, there were significant differences within the 50+ cohorts and between the 50+ and <50 cohorts in how they responded to key questions related to our study. The potential for generational differences was also given further support by some of the free text comments, during which doctors made sense of their careers by looking back or, in the case of younger doctors, looking forward.

Table 3 below shows the proportion of respondents identifying their normal pension retirement age, with almost two-thirds of the 50+ cohort identifying 60 as their retirement age. However, it should be noted that because some staff were members of more than one scheme, this should be treated with some caution when used for analysis of data by normal pension age.

Table 3: Numbers identifying their normal pension scheme retirement age

	All respondents		<50 cohort		50+ cohort	
	Number of respondents	% of total respondents	Number	%	Number	%
60 (as per 1995 scheme)	778	45.63	105	16.1	669	64.01
65 (as per 2008 scheme)	355	20.82	150	23.0	201	19.23
68 (as per 2015 scheme	534	31.32	397	62.8	135	12.91
55 (Mental Health Officer status	38	2.23	0	0	38	3.6

3.2 Work Patterns, Sex, Ethnic and Place Characteristics

More than 50% of respondents in the 50+ and the total sample could be classified as working more than the full-time norm of 10 sessions per week, which provides some insight into the intensity of senior hospital doctors' workload. A further 35% plus worked at least 8 session per week (see Table 4).

Table 4: Sessions worked per week

	All respondents		<50 cohort	50+ cohort
Number of sessions typically worked	Number of respondents	% of total responses	Number of respondents	Number of respondents
11 or more	867	50.79	339	523
8-10	646	37.84	262	381
5-7	154	9.02	48	105
Fewer than 5	40	2.34	3	36

Our sample is also representative of the proportions of male and female consultants employed in NHSS (Table 5) and the ethnic background of consultants in Scotland (Table 6). As discussed in the following pages, the male/ female split produced some important and statistically significant differences related to ITR in the 50+ cohort. Respondents' ethnic backgrounds also revealed differences across a wide range of variables.

Table 5: Sex of respondents

Sex	All respondents		<50 cohort		50 + cohort	
	Number	%	Number	%	Number	%
Female	775	46.7	310	48.6	462	44.3
Male	833	53.3	328	51.4	548	56.7

Table 6: Ethnicity of Respondents

Ethnic Group	All		<50 cohort		50+ cohort	
	Number	%	Number	%	Number	%
White	1427	84.0	546	83.7	872	83.6
Non-white	105	11.1	83	12.7	108	10.4
Prefer not to say	83	4.9	23	3.5	60	5.8

Finally, we were keen to identify if there were any significant regional differences, since the sociological notion of place (which gives the geographical notion of space its identity) is a potentially important explanation of factors associated with ITR (Siebert, Bushfield, Martin, and Howieson, 2018). For example, doctors in regions outside of the Central Belt sometimes point to greater difficulties in recruitment and retention because of their peripheral geographical and cultural position. We settled on the Deanery association of respondents as a rough approximation of place (Table 7) because it was felt it might breach confidentiality commitments if we used regional boards, etc. As we shall see, however, Deaneries rarely featured as significant sources of difference on most issues.

Table 7: Location of Respondents by Deanery

Deanery	All		<50 cohort		50+cohort	
	Number	%	Number	%	Number	%
North	313	18.5	120	18.4	192	18.4
East	150	8.8	46	7.1	103	9.9
South-East	494	29.1	198	30.4	295	28.3
West	739	43.6	287	44.0	446	42.8

4. Findings 2: Analysis of the Survey Data

4.1 Methods

We undertook a range of statistical and qualitative analyses to address our research questions. These included: (a) cohort analysis of means of subgroups, using ANOVA (b) exploratory factor analysis (EFA), and (c) univariate analysis of selected demographic variables and emerging factors to estimate the probability of retiring before normal pension age. The data and findings from these forms of analysis provide the groundwork for most of our findings and potential explanations.

We also undertook thematic analysis of the extensive qualitative data from the two free text questions asking doctors: (a) to elaborate on the problems, and (b) suggest potential solutions to retaining doctors. These questions generated 771 and 764, often-lengthy, responses respectively, which translated into approximately 300 pages of text. These responses were particularly useful in providing insights into the emotional, formative, and changing perspectives of senior hospital doctors, since many of them took time to tell us how they felt, and reflect on their sensemaking concerning if, why and when they intended to retire or reduce their work commitment. In the following paragraphs in this section, we set out our main findings.

4.2 Age of Senior Hospital Doctors, ITR and Scaling Down of Work Commitments

Table 8 below shows that just under half of respondents in the 50+ cohort intend to retire before their normal pension age, with just under 40% of the cohort either intending to continue working to or beyond their normal pension age, or currently working (either full time or part time) beyond their normal pension age. Table 8 also shows there were significant differences within the 50+ cohort. The 50-54 group report they are much more likely than the 55-59 group retire early and less likely to retire at or beyond normal pension age. These data also show an even larger percentage of under-50 doctors report intentions to retire before normal pension age.

Table 8: Intentions to Retire

	All		50+ cohort		% of respondents with known age in sub-cohorts			
	No.	%	No.	%	50-54	55-59	60+	P-value
Intend to retire before normal pension age	965	56.66	497	47.65	62.71	44.37	8.33	0.00
Intend to retire when I reach my normal pension age	290	17.03	218	20.90	18.64	27.93	7.64	0.00
Intend to continue working beyond by normal pension age	97	5.7	89	8.53	3.81	10.80	17.36	0.00
I do not know if I intend to retire when I reach my normal pension age	221	12.98	118	11.31	13.77	11.27	3.47	0.00
I have already reached my normal pension age but remain in full time employment as a doctor	43	2.52	42	4.02	0	0.23	28.47	0.00
I have already reached my normal pension age but have scaled down my work commitments	43	2.52	42	4.02	0	1.17	25.69	0.00
Other			36	3.45	1.06	4.23	9.03	

In Table 9, we have used the data for doctors in the different pension schemes and data on their mean and median intended age of retirement to provide an estimate of the potential reduction in years worked caused by early retiral in Table 9. Thus, those eligible to retire at 60 give a mean/ median anticipated age of retiring of 58 approximately. Those eligible to retire at 65 anticipate retiring around 60 (a 5-year gap), while those eligible to retire at 68 under the most recent scheme also as 60 (an 8-year gap). ***In short, regardless of which pension scheme senior hospital doctors over 50 years old belong to, their estimated age of retiral remains around 60 or less.*** This finding suggests planning norms for the recruitment and retention of doctors in the acute sector over the next 10 years or more that are based on assumptions of normal pension age for a scheme may need to be revisited.

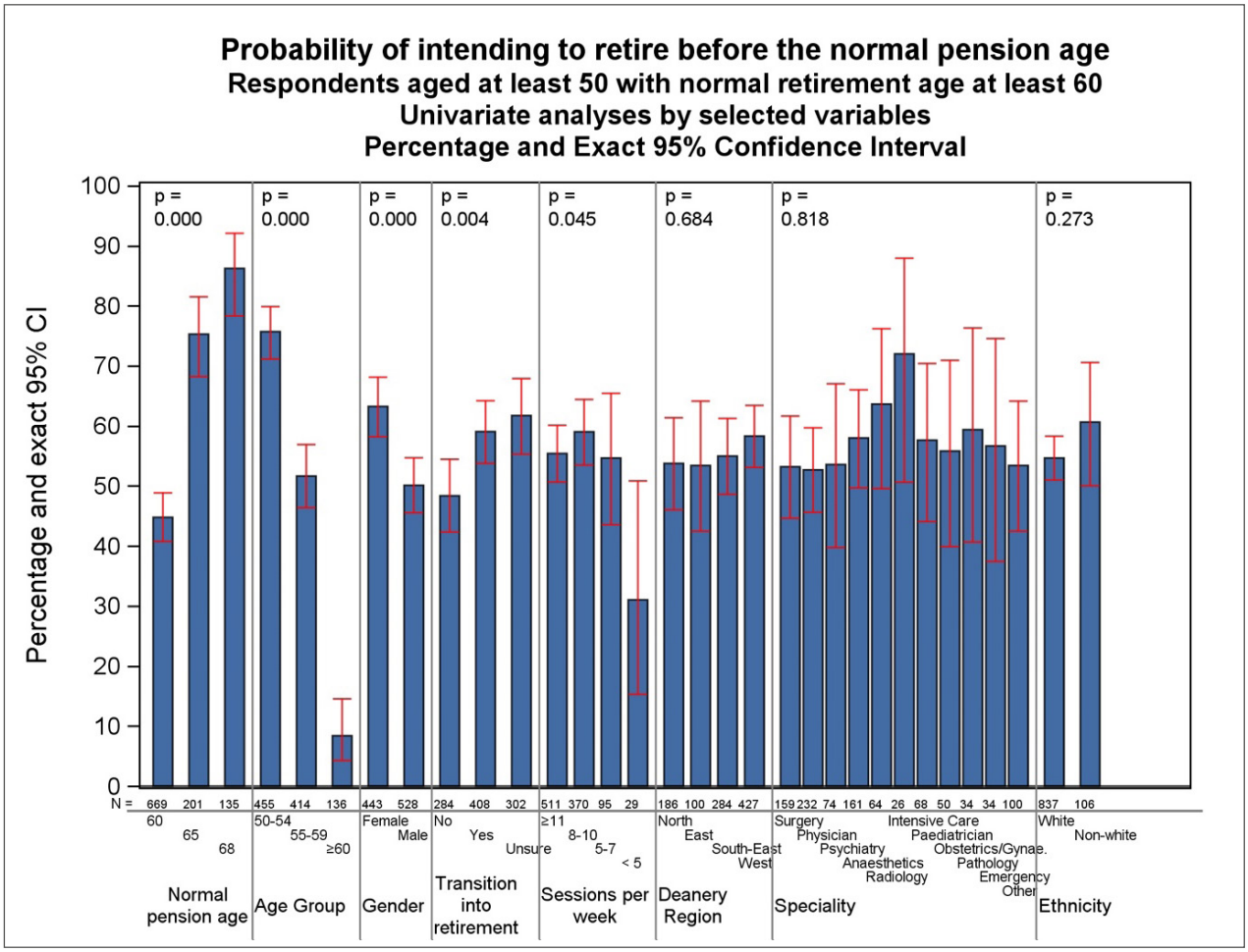
Table 9: Mean anticipated age for retiring for those intending to retire (ITR age) before normal pension age, analysed by membership of different pension schemes

Question	Pension scheme	No. of valid. responses	Mean age of intended retiral	SD	Quartile 1	Median age of intended retiral	Quartile 3
ITR age	1995 (60)	464	58.29	2.70	57	58	60
ITR age	2008 (65)	282	59.72	3.11	59	60	60
ITR age	2015 (68)	431	60.31	3.83	60	60	62
ITR age	Mental Health (55)	10	59.40	8.19	55	55	60
Normal pension age - ITR age	1995 (60)	464	-1.71	2.70	-3	-2	0
Normal pension age - ITR age	2008 (65)	282	-5.28	3.11	-6	-5	-5
Normal pension age - ITR age	2015 (68)	431	-7.69	3.83	-8	-8	-6
Normal pension age - ITR age	Mental Health (55)	10	4.40	8.19	0	0	5

Moreover, within the constraints of cross-sectional surveys, ***such a pattern of responses of senior doctors intending to retire progressively short of their eligibility age suggests a possibility of generational differences as an explanation of ITR***. So, for example, our data also show doctors in the <50 or 50-54 age ranges are significantly more likely ($p<0.001$) to intend to retire before normal pension age. However, further research would be needed to explore whether these differences are associated with generational differences in values and lifestyle preferences, or due to having built up significant pension pots, or both. As we have already noted, such a pattern of responses could also be explained by findings from previous research showing ITR estimates may depend on the age doctors are asked the question, i.e., how close they are in having to make life-changing decisions.

To shed further light on the age-related dependence of ITR, we have provided probability estimates of intentions to retire before normal pension age among the 50+ cohort according to a range of demographic characteristics in Figure 1 below. These data show the importance of age-related factors in comparison with other variables in explaining the probability of early retiral. As can be seen, the normal pension age of respondents and the age group they belong to are the variables that are most associated with, and so may predict, the probability of retiring before normal pension age. The 50-54 age group show a significantly higher probability (circa 75%) of doctors intending to retire early than the 55-59 age group (53%), with the 60+ group showing a very small probability of intending to retire early (either because they are already working beyond their normal pension age or do not wish to do so)

Figure 1: Probability of ITR before normal pension age (50+ cohort) by selected demographic characteristics



We were also interested in senior doctors' intentions to transition into retirement by scaling down work commitments. Scaling down before retiral can be interpreted in several ways, but one is to see it as a more 'silent' exit or incremental withdrawal from work than full retirement. In doing so, it contributes to a reduction in the medical workforce in NHS Scotland, probably beyond what has been planned for. On the more positive side, it may help prevent doctors from leaving the medical workforce altogether and retain at least some of their skills and knowledge. Table 10 shows that approximately 40% of doctors over 50 intend to reduce their present work commitments, with a further 30% unsure. The pattern of responses by sub-cohort shows a consistent intention to reduce work commitments across all age groups.

Table 10: Intentions to transition into retirement by scaling down work commitments

	All		% of respondents with known age in sub-cohorts				
	Number	%	<50	50-54	55-59	60+	P value
Intend to maintain current work commitments	375	22.15	19.20	22.46	33.10	39.26	0.00
I intend to reduce my present work commitments	742	43.83	42.32	40.47	42.25	38.52	0.00
Not sure about my intentions	576	34.02	45.83	37.08	24.65	22.22	0.00

4.3 Reasons for Early ITR Given by Respondents Who Propose to Retire Early

Reasons Given for ITR. Table 11 below sets out the means of the most to least influential reasons for influencing the timing of retirement among those respondents intending to retire early (mean of a 5-point scale with 1 = not at all important and 5 = very important). We have also provided the significance level for age range differences.

Table 11: Relative importance of reasons influencing timing of retirement of those intending to retire before normal pension age by age group (1=not at all likely, 5=highly likely)

Reasons most likely to influence timing of retirement for all those intending to retire before normal pension age	All	<50	50-54	55-59	60+	Significance
Achieving a level of financial security	4.53	4.62	4.53	4.41	4.28	0.00
Concern that working longer will increase my tax liabilities	4.47	4.59	4.41	4.44	3.91	0.00
Ability to access pension funds without incurring charges	4.32	4.31	4.29	4.36	4.35	0.43
A desire for more leisure time	4.14	4.29	4.07	4.04	3.81	0.00
Work-related stress	4.05	4.24	4.02	3.89	3.48	0.00
The burden of increased regulation and revalidation	3.49	3.57	3.37	3.42	3.78	0.50
Cognitive, sensory, or motor skills impairment that affects my ability to do job	3.11	3.44	3.05	2.66	2.81	0.00
A physical illness or disability	3.09	3.44	2.95	2.68	2.80	0.00
Partner or spouse retiring	2.90	3.12	2.81	2.72	2.57	0.00
Need to act as a carer for family member	2.84	3.08	2.78	2.54	2.68	0.00
Being able to pursue another career outside of the NHS	2.56	2.65	2.63	2.34	2.53	0.00

As can be seen from the above pattern of responses, the only variables recording means within the likely/ highly likely category (mean at least 4) for all cohorts are the three financial and pension-related variables, a desire for more leisure time and work-related stress. Further statistical analysis of means of 5-point Likert-type scales reported in Box 1 below showed there were statistically significant within-cohort differences. These mainly related to age, work pattern, sex, and ethnicity.

Box 1: Differences in Reasons Given for the Timing of Retiral by Key Demographic Groups

Age related differences. Further inspection of the data showed observable and statistically significant differences between 50+ and under 50s for nearly all reasons, apart from burden of increased regulation and revalidation. A pattern is evident from Table 11 in which the mean agreement with nearly all reasons also declines with age, suggesting age is a key influence on ITR and the reasons underlying it.

Those in later pension schemes were more likely to be influenced by physical illness or disability, or work-related stress.

Senior hospital doctors in the 60+ sub-cohort were significantly less likely to be influenced by financial security or tax liabilities, work-related and non-work-related stress, more leisure time, or pursuing another career outside of NHS.

Those already reached normal pension age but remain in full time employment as a doctor, tend to be significantly more relaxed about all potential influences.

Work pattern difference Work pattern differences were also evident, with significant differences found in the financial and pension reasons by sessions worked. Those working fewer than 5 sessions were less likely to propose financial and pension reasons as a reason for influencing the timing of retirement and more likely to report needing to act as a carer for family.

Gender Differences. Males were significantly more likely to report that working longer will increase tax liabilities and to feel the burden of increased regulation. Females were significantly more likely to report work-related stress, need to act in a caring capacity, or partner/ spouse retiring.

Specialty Differences. Paediatricians and physicians in all specialities were significantly less likely to report tax liabilities as a key influence, although it is still a significant issue for them.

Ethnic Differences. Non-whites were significantly more likely to be concerned by financial reasons, though these reasons were important for all groups. Also, non-whites significantly more likely to report stress, and all other reasons.

4.4 Reasons Given for Continuing to Work to Normal Pension Age

Table 12 below sets out the most influential reasons for influencing the timing of retirement given by respondents who ***do not*** intend to retire before normal pension age. These are rank ordered by mean on a 5- point scale with 1 = not at all likely and 5 = very likely. We have also provided the significance level for age range differences in these reasons.

Table 12: Relative importance of demographics influencing timing of retirement of those not intending to retire before normal pension age (1=not at all likely, 5=highly likely)

Reasons most likely to influence timing of retirement for those not intending to retire before normal pension age	All	<50	50-54	55-59	60+	Significance
Financial reasons	4.29	4.45	4.38	4.24	3.96	0.00
Health-related	4.09	4.19	4.06	4.10	3.98	0.00
Sense of purpose	3.77	3.71	3.59	3.81	4.11	0.00
Cognitive stimulation	3.77	3.73	3.63	3.77	4.10	0.00
To do best for patients	3.59	3.38	3.49	3.67	3.97	0.00
Social stimulation arising from work	3.52	3.52	3.41	3.56	3.62	0.00
To do the best for my work colleagues	3.49	3.30	3.37	3.59	3.87	0.00
Fulfilling professional relationships	3.46	3.42	3.27	3.48	3.79	0.00
Family or partner's wishes	3.43	3.62	3.42	3.41	3.11	0.00
Sense of duty to my employer	2.31	2.35	2.22	2.25	2.56	0.37

As can be seen from the above table of means, only two reasons appear to influence the timing of retiral of those who do not intend to retire before normal pension age in the 50+ cohort. These are financial reasons and health (n + to or greater than 4).

Further statistical analysis pointed to the following demographic differences in Box 2.

Box 2: Differences in Reasons for Not Retiring Early by Key Demographic Groups

Age related differences. Those in later pension schemes in the whole sample report more likely to be influenced by financial reasons as a reason for working until pension age.

Respondents in the 60+ group were significantly more likely to report cognitive stimulation, doing the best for patients, social stimulation, colleagues, and fulfilling professional relationships as reasons for remaining. However, we should acknowledge the lower response rate (24.3%) among this cohort, so question whether this finding can be generalised to all 60+ doctors remaining at work.

Work pattern difference. There were significant differences in both the whole sample and the 50+ cohort expressing financial reasons for not retiring according to sessions worked, with those working more sessions significantly more likely to be concerned with financial reasons.

Those working fewer than 5 sessions in over 50s cohort significantly more likely to report cognitive stimulation arising from work as a reason for continuing.

Gender Differences. No significant differences between males and females. Neither gender reported relations with work colleagues as an important reason for remaining at work.

Specialty Differences. No specialty differences among 50+.

Ethnic Differences. Non-whites in both cohorts were significantly more likely to report a sense of purpose and good health for staying on.

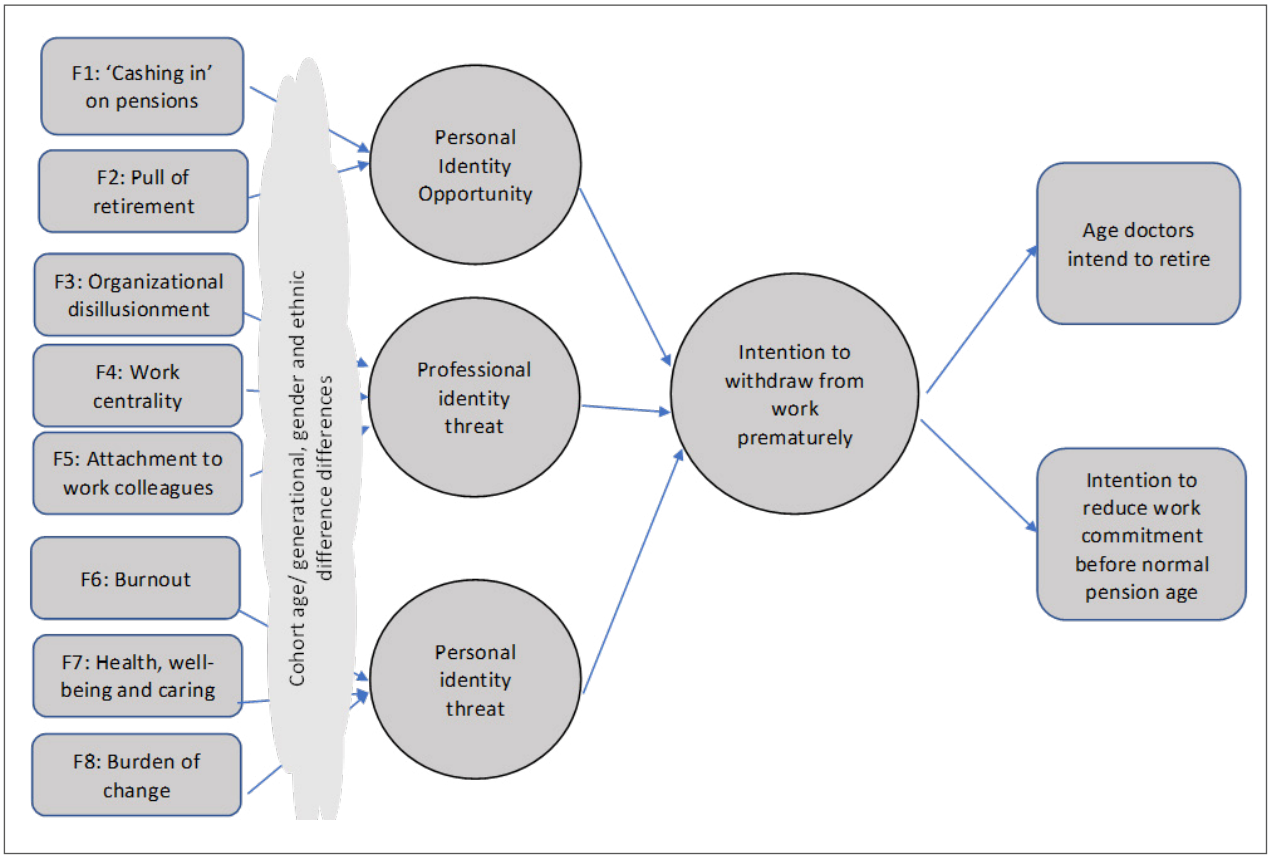
5. Discussion: Towards a Triangulated Explanation of the Data Structure

5.1 Introduction

The volume and quality of free text data allowed us to use a mixed methods approach to explain ITR. Mixed methods are sometimes seen as the gold standard in social science in having advantages over quantitative and qualitative data analysis alone in providing more comprehensive, credible, and valid explanations of phenomenon such as ITR. However, they also present problems of triangulation in bringing together quite different types of data that have different uses. Quantitative data are widely used to develop and test explanations of relationships between/ among variables. Qualitative data are less concerned with 'counting' and cause and effect, and more concerned with discerning patterns, processes, or peculiarities that might not be evident from quantitative analysis. They do require, however, equally rigorous analysis in showing how you get from text to explanation, which we have attempted to do.

So, to provide a more complete or rounded explanation of these different types of data, we began with quantitative approaches using exploratory factor analysis (EFA) and univariate analyses of selected variable and factors to estimate the probability of ITR. Next, we undertook empirical coding to produce thematic analysis of the free text commentary to shed light on the potential explanations generated by the statistical findings. By triangulating these quantitative and qualitative methods, we offer a more grounded 'theory' of senior doctors ITR and intentions to reduce work commitments by drawing on doctors' textual interpretations and enactment of their world as well as their responses to pre-determined survey questions (see Figure 2 below for our overall model).

Figure 2: Modelling the relationship between key factors, identity and intentions to withdraw from work



5.2 Exploratory Factor Analysis

As noted above, our starting point was exploratory factor analysis (EFA) using Principal Components Analysis (with reported factors satisfying Kaiser's criterion). EFA helped us to:

(a) reduce the large number of variables in this study to a smaller set of latent factors,
(b) understand the relationships among the variables, and
(c) develop an analysis and interpretation of ITR among the 50+ cohort.

We also undertook EFA for the whole sample as a check. This analysis showed no differences in the factors extracted for the 50+ cohort.

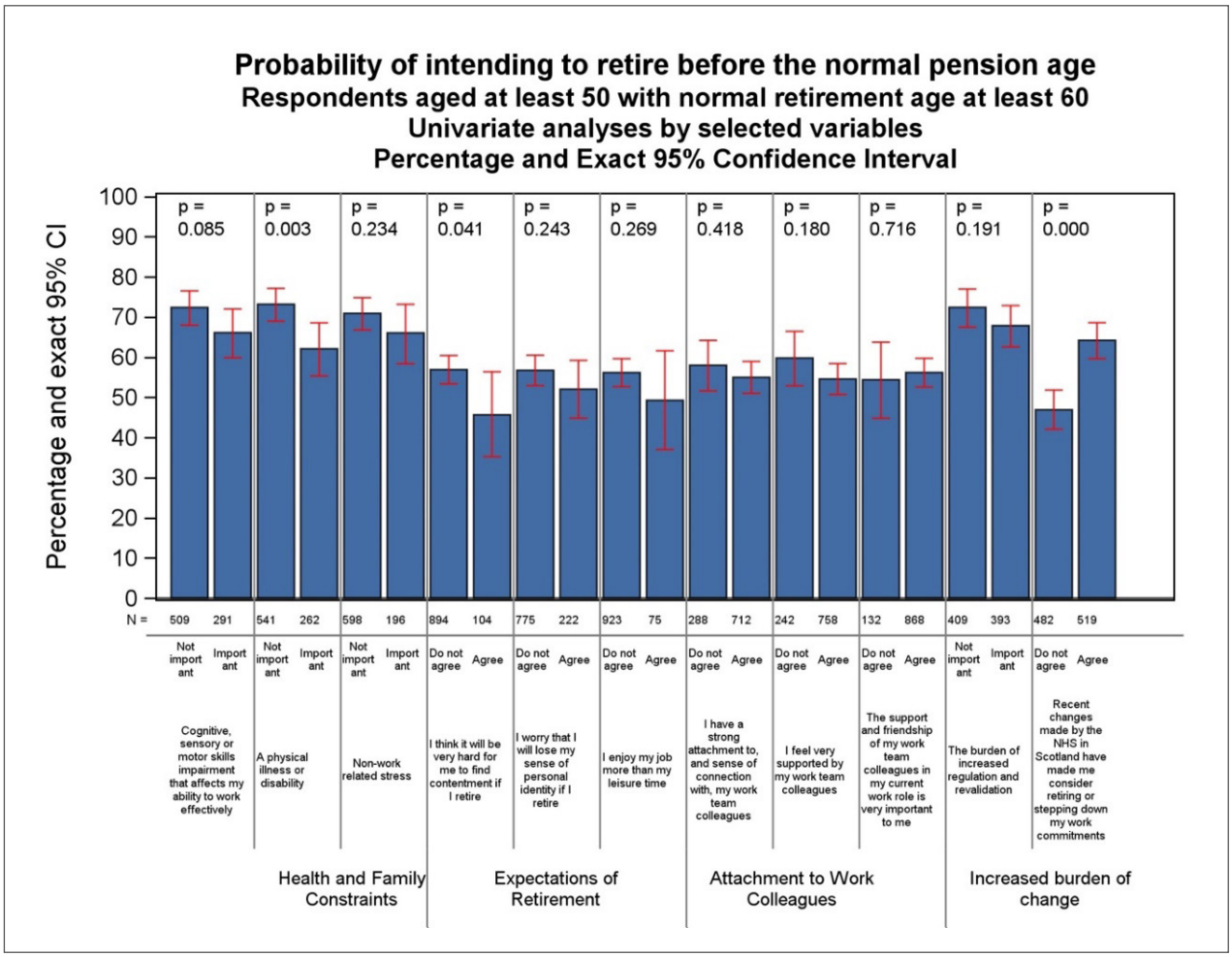
Nine factors were produced by EFA from the 60 plus variables in the questionnaire survey (see Appendix 1). Eight of these were found to be relevant as potential explanations of the variation in premature ITR across the group with relatively significant coefficients (Appendix 1 for factor loadings and means). Most of these factors mapped onto well-known theoretical explanations of how professionals make sense of retirement though career ending narratives and the reasons why they retire (e.g., Vough, Bataille, Noh & Lee, 2015) and to previous explanations from research into doctors' early retirement studies. These included burnout, organisational disillusionment and disidentification (OiDD), work centrality, health, well-being and caring issues, attachment to work colleagues and positive expectations of retirement (see Figure 2 above).

One factor, however, stood out from all others in showing very little variance across the whole sample and in recording the highest mean scores overall for reasons given for ITR (see earlier Table 11). This factor was the current pension and taxation regime.

5.3 Univariate Analysis of Individual Factors to Estimate the Probability of Retiring Before Normal Pension Age

Secondly, to estimate the probability of ITR related to individual factors, we used univariate analyses. This process involved taking the three most highly loaded variables in each of the eight factors and dividing all responses to each of these three variables into Agree (=agree and strongly agree) and Do Not Agree (= neither, disagree, strongly disagree). Figure 3 shows the estimated probabilities in two 'dynamite plots' of all eight factors and the extent to which those agreeing and not agreeing differed significantly in their factor scores. Comparing these estimated probabilities across the eight relevant factors provides a further indication of the individual factors' explanatory value of ITR.

Figure 3: Probability of intending to retire before normal pension age by selected factors



5.4 Thematic Analysis of the Qualitative Data

Thirdly, we undertook thematic analysis of the extensive qualitative data from the two free text questions. These questions produced 771 and 764 short-to-lengthy responses respectively to questions asking doctors:

(a) to elaborate on the problems identified as key causes of ITR, and
(b) to suggest potential solutions to help retaining doctors.

Many responses were a paragraph long or multiple paragraphs of their interpretations and enactment of doctors' intentions to retire. These extended reflections were especially useful in providing insights into, and illustrations of, the complex emotional, formative, changing and sometimes unique perspectives of senior hospital doctors.

The textual data were analysed into themes to identify the underlying, or 'grounded', factors emerging from doctors' comments. The process of identifying themes was undertaken manually in accordance with appropriate empirical coding methods. With the help of a spreadsheet, manual coding allowed us to get close to the data by reading and re-reading and analysing comments in relation to existing theory. We also used NVIVO, a qualitative analysis software package, to provide a check on the themes emerging from our manual analysis and to provide counts of these themes. Although counting is not the main aim of qualitative analysis, we followed the maxim of counting what is sensible to count. These theme counts in Table 13 give us a better understanding of the relative and combined importance of our EFA factors and the sentiments underlying them.

Of the 771 responses to question 23, more than half accounted for their intentions to retire as the pension and taxation regime as the single most important cause or as the key one from a range of factors. Of the non-pension and taxation factors raised by respondents, organisational disidentification and disillusionment, stress and burnout, work centrality, and optimism about retirement were the most frequently cited (Table 13).

Table 13: Core Themes from Qualitative Analysis

Core themes	Count	% of responses to Q23
Pension/Tax Issues	419	55
Organisational disidentification and disillusionment	201	26
Stress and burnout	157	21
Work centrality – reduced engagement	88	12
Work centrality – positive engagement (calling)	42	5
Optimism about retirement	97	13
Wider factors (e.g., politics, discrimination, pandemic, personal financial situation)	68	9
Health, well-being and family circumstances	63	8
Attachment to colleagues	22	2
Survey feedback	81	11

5.5 Triangulating the Data to Model Senior Doctors' Premature Withdrawal from Work

Combining these three forms of analysis allowed us to propose a model of the intentions of doctors in our sample to withdraw from work prematurely. Our model, which we set out earlier in Figure 2, requires further elaboration at this stage.

To begin with, we propose senior hospital doctors' premature withdrawal from work is strongly influenced by personal and professional identity issues (Martin et al., 2020). These identity issues can be thought of as doctors' answers to questions such as: 'who am I as a person', 'who do I want to be', 'who am I when I'm at work', 'who am I not when at work'? In turn, they present doctors with opportunities and challenges, depending how they make sense of them. Personal and professional identities also influence doctors' valued expectations, forming the basis of a 'psychological contract' with the employers and the NHS. From the perspective of doctors, an expectations gap in breaching valued expectations are good explanations of doctors' attitudes, values, and behaviour – most importantly, in doctors deciding whether to remain or go.

Thus, we see the eight factors on the left-hand side of Figure 2, initially identified by EFA but confirmed and enhanced through further quantitative and qualitative analyses, as personal and professional identity opportunities, and challenges. These opportunities, and challenges influence their sensemaking, both interpretations and enactment, of the psychological contract with their employers and the NHS. How doctors' respond to these opportunities and challenges we regard as fundamental explanations of premature withdrawal from work (Martin et al., 2020; Vough et al., 2015).

Drawing on this line of explanation, we can interpret the pension taxation problems, perhaps counterintuitively, as a personal identity opportunity to 'cash in' their chips in a game in which they see the rules have been 'stacked' against them, so leading them to re-assess their answers to the 'who I am as a person' question. The pull of retirement is a more obvious example of an opportunity, which is an attractive alternative to continuing to work for many doctors. A loss of work centrality, anxiety over a loss of attachment to work colleagues, and increasing organisational disillusionment and disidentification among doctors can be interpreted as professional identity challenges or answers to the question, 'who am I and who am I not at work'. Finally, concerns over health, well-being and caring, perceptions of burnout and an increased burden of change are all connected with personal identity threats. We should also note that key demographic variables moderate the impact of factors on identity threats and opportunities, and ultimately on premature withdrawal from work. It is clear from our analysis in the previous pages that there were significant differences in factor importance according to sex and ethnic backgrounds, and, to a lesser extent, specialty in ITR.

However, the most impactful variable that moderated the effects of most factors on ITR was cohort age. We have discussed this notion of cohort age as the age at which doctors completed the survey and their proximity to retiring. Whether these age effects can be attributed to generational differences (in formative experiences and their impact on values such as preferences for work-life balance) is a question that cannot be answered with any confidence in a cross-sectional study such as this one. We believe, however, there is enough in our quantitative and qualitative data to pose the existence of true generational differences between younger and older hospital doctors.

In the following paragraphs, we describe our model in Figure 2 by triangulating the different sources of data and analysis to discuss the eight factors and their impact on doctors' intentions to withdraw from work before normal pension age. We use extensive quotes from the free text commentary to both illustrate and develop the factors and their potential relationships with one another.

5.6.1 Identity opportunities

Factor 1: Pension and Taxation Concerns

As noted above, pension and taxation concerns were the most important variables in explaining ITR and/or scale down work commitments. Two questionnaire items loaded onto this factor, and while it explained only 3.6% of the total variance in the EFA, the mean score of these two variables was 4.34, which was higher than any of the other factors associated with ITR. Using univariate analysis of the two items loaded onto this factor also showed that high levels of pension and taxation concerns predicted 60—70% of premature ITR.

One way of interpreting these data is to see pension and taxation concerns as offering a personal identity opportunity, in which doctors engage in a form of identity work to re-assess their answers to the 'who I am as a person' question and to retain a sense of 'self-worth', rather than seeing themselves as losing out. This identity work is a likely response to what most older doctors interpret as an unfair violation of their traditional psychological contract with the NHS. The expectations of older doctors were for a psychological contract based on reasonably high rewards, including a good pension package, high status, and meaningful/ autonomous work in return for the many years of education, 'apprenticeship', low-to-moderate rewards, and long hours they undertook as doctors in training. Thus, senior doctors are increasingly likely to engage in a form of 'cashing in' their stake in the existing 'game' to minimise financial losses, or in some cases, optimise financial gain.

The textual data were especially useful in showing how pensions and taxation issues have become the objective materialisation of violated expectations and seen as an attack on their personal and professional identities. The metaphorical 'straw that broke the camel's back' was often invoked. Thus, more than half of the 771 free text comments focused, in whole or in part, on the pension taxation concerns. A pithy but emotional comment summarised the feelings of many doctors:

> *"Pension annual allowance and lifetime allowance, disproportionate tax bills associated with pay increment, back pay or DP awards. It is crushing the spirit of myself and other doctors I speak to on a regular basis".*

Pension and taxation concerns, sometimes in combination with other reasons, often set up a tension between wanting to continue at work but being unable or unwilling to remain because of losing out:

> *"I love my job, but the stress caused by an ever-increasing workload in a department with consultant vacancies in combination with pension taxation means I do intend to retire before my normal pension age".*

Such views, most evident in older doctors, were also communicated to younger colleagues, potentially influencing how younger doctors see their work, their attitudes to the system and their employers:

> *"The pension tax issue a real killer and profoundly demotivating, not only to those currently affected. It is a significant disincentive for younger colleagues to contribute additional capacity and seek additional leadership roles Many senior colleagues advising junior consultants to limit their activity and "look after number 1".*

Thus, even senior hospital doctors in their 40s were affected by what they regarded as a punitive and unfair system that appears to have breached or violated the long-established psychological contract One talked of 'quiet quitting' at a relatively young age, describing how he planned to re-establish the wage-work bargain by reducing his work commitments:

> *"At 43 years old at the peak of my career I have already reduced my work from 12 PA to 9 PA and will probably have to drop further sessions. I am unable to do internal locum on-calls or apply for discretionary points, despite meeting the criteria as this would be another financial penalty. I am also planning to retire at 60 or even before. Previously it would be unthinkable for me to retire before my "normal" age!"*

A further potential consequence of pension and taxation issues was raised by some respondents, who were seriously considering 'cashing in their chips' in the NHS, either to work as a better paid locum or to gain employment overseas:

> *"My personal situation is that I cannot retire until my children have completed their education. This will take me past the retiral age for my final salary pension, but I will go before the CARE version age. I am considering leaving the NHS to work abroad for the last few years of my career to earn enough to bridge the gap between pensions so that I am not penalised for retiring early. Taxation penalties for saving 'too much' into my pension will also lower my pension somewhat and I can mitigate against this by working overseas".*

> *"...Pension taxation alone is enough to push me into leaving the NHS and probably working abroad for my last years. I intend to leave the UK and work overseas rather than spend my last 5 years being taxed to work with reducing levels of help...".*

Factor 2: Positive Expectations of Retirement

Doctors' expectations of a positive adjustment into retirement (Rosenthal & Moore, 2018) were particularly high. Four variables loaded onto this factor – concern about finding contentment and feeling good following retiral, not worried about a loss of identity, and finding enjoyment in life without work. The EFA showed that positive expectations of retirement explained a relatively small but significant amount in the data variance. These figures were supported by just over 12% of free text comments invoking the attraction of retirement.

The 'pull' of early retirement was often explained in relation to a breach of valued expectations and as a personal and professional identity threat. One doctor's answer to his own question resonated with the interpretations of many respondents:

> *"Why work longer, to be made poorer by an unfair tax?...I will be retiring early, or if I have to see out my time then cut to...part time at 60 and try and recover some of my life and family time and curtail the tax money haemorrhage....".*

Another expressed his assessment of professional identity loss with personal identity gains in the following way:

> *"I'm looking forward to a change in life- I've really enjoyed my job as (names specialty) and feel what I've contributed to the NHS and my patients is completely worthwhile. I spent 7 years in management, so haven't cruised along. I'm looking forward to experiencing new challenges and hopefully have a good 15 years of active good health to enjoy it!"*

The pull of retirement is a factor that may pose the existence of generational differences in the value placed on work-life balance. The following comment by a 44-year-old consultant suggested such a possibility:

> *"Life is too short to work till 68 (and that retirement age can be moved later by the government in future). One has to enjoy themselves more and spend more time with their friends/family sooner e.g., in your 50s if one can afford it".*

Interestingly, our univariate analyses of positive expectations of adjusting to retirement predicted 45-55% probability of a premature retiral, which was relatively low. This finding suggests that the pull of retirement is outweighed by push factors.

5.6.2 Professional identity challenges

Factor 3: Organisational Disillusionment and Disidentification (OiDD)

Organisational disillusionment and disidentification were seen as key professional identity challenges, evident from both the quantitative and qualitative analyses. Organisational disillusionment refers to feelings of being let down by the organization and/ or the system and is an important explanation of premature retirement in the literature (Vough et al., 2015). Organisational disillusionment can be seen as the opposite of organisational identification and virtually all variables we have previously used to ascertain respondent's organisational identification with their employers and leadership loaded negatively onto our emerging OiDD factor.

Univariate analysis of the three highest loaded factors related to OiDD predicted a 48-58% percent probability of premature ITR, which, when compared with other factors, was not especially high. However, the number of comments related to OiDD accounted for more than a quarter of the total and were often characterised by intense emotions. This finding suggests OiDD was the second most important explanation of ITR after pension taxation. Indeed, more than a quarter of the total comments related to question 23, raised OiDD as the most important cause of ITR, either on its own or combined with other factors. One doctor articulated the combined effects when describing his disillusionment with the system and his employers' actions/ inactions:

> *"Everything just feels broken at the moment and as a consultant that leaves you very vulnerable because of the responsibility we carry. I spend most of my life worrying that the poor resourcing and organisation of the NHS, and the staffing issues, will mean me taking the blame at some point in the last notional 7 years of my career.*

Disillusionment is often accompanied by organisational disidentification, which refers to attempts by individuals to affirm their personal and professional identities ('who they are') by avoiding negative associations with the values and stereotypes of the organisations that employ them ('who they are definitely not') (Elsbach & Bhattachyra, 2001). Organisational disidentification involves active separation of an individual's identity from the negative attribution and enactment of their employing organization as the 'other', 'the opposition' or even 'the enemy'. Thus, many disillusioned doctors come to define themselves by who they are not – what they see as the negative attributes of their employers (Martin et al., 2020). OiDD is associated with intentions to quit, negative employee performance, negative advocacy of the organization as a place to work, and increased voluntary absence (Chang, Kuo, Su & Taylor, 2013). One doctor pointed to the absence of values, such as a lack of care, and to disassociation from managers, when explaining the pull of overseas work:

> *"De-skilling and devaluation of the medical profession. The organisation does not care about individuals. Managers are terrible much of the time. Moving abroad is very appealing at my stage of career as a very experienced consultant."*

As the above quote also shows, organisational disillusionment is often linked to the notion of 'deprofessionalisation', evidenced by feelings of loss of status and autonomy due to system changes (Martin et al., 2015; 2020). One doctor spoke for several colleagues about deprofessionalisation when explaining his attitudes towards, and trust in, his employer:

> *"After two decades or more of systematic deprofessionalisation of doctors, being treated as a commodity by managers chasing often clinically meaningless SGHD targets, and a decade of lack of adequate NHS funding, a pay-freeze, a hiking of pension contributions, freezing of higher awards, punitive pension tax penalties and an exhausting pandemic, I do not feel benevolent towards my employers, the NHS or Government".*

Factor 4: Work centrality

Work centrality was a further important factor emerging from both the quantitative and qualitative data. Work centrality brought together variables from a work engagement scale with variables related to respondents' orientations to work. In designing the study, we used the shortened version of the Utrecht work engagement scale, which assesses the vigour and dedication a person brings to a job, and their levels of absorption (getting lost in) the job. High levels of work engagement in healthcare have been previously found to predict a series of positive outcomes and the avoidance of negative ones, such as early exit from the job.

Work orientation is a related concept in which the meaning of work for individuals ranges along a continuum from work being seen as just a job to provide for material purposes (e.g., financial rewards) to work being seen as a 'calling' (Dobrow, Weisman, Heller & Tosti-Khara, 2023). By a calling, we mean work invested with moral and social purpose by job holders. Called work is an important source of personal and professional identity, which is often (but not always) seen as more important than financial rewards. The notion of a calling is widely used to describe doctors' professional orientation (Yoon et al. 2017) and the logics they use to make sense of the system. Thus, it is often externalised by doctors through expressions of dedication to the values of the NHS and prioritising a high-quality service to patients and service users. One anaesthetist invoked the notion of called work and its contribution to patient care as follows:

> *"Medicine has been a large part of my life and I have enjoyed helping others. I have never regretted becoming a consultant and I still think and know that Medicine and (names specialty) is hugely valuable for individual patients. I can try and make one of the most stressful times in a person's life a bit less stressful by being nice to them and getting them through the experience in a positive way. At present I do not want to give that up…."*

Our expectation from previous research on consultants in NHS Scotland was that a sense of calling would have remained relatively high despite the widespread pension and taxation concerns. However, this expectation was not supported by the survey data. The mean score for work centrality variables among the 50+ cohort fell within the 'neither agree nor disagree' range (n=3.7, with 1=strongly disagree and 5= strongly agree), suggesting a high degree of ambivalence or identity liminality ('betwixt and between') among the cohort. Furthermore, the weight of negative commentary on reduced engagement outweighed the positive commentary on engagement by a factor of 2:1.

One possible explanation relates to our previous analysis of violated expectations among doctors of the traditional psychological contract. One likely response to such perceptions of violation is the exercise negative or 'avoidance' 'job crafting' (Harju, Kaltiainen & Hakenen, 2021), whereby employees negatively adjust their effort in, and commitment to, their work. Social exchange theorists would point to this process also being accompanied to a shift in values concerning the centrality and value of medical work to align with the new, more transactional, psychological contract between doctors and their employers. Thus, one doctor expressed their ambivalence due to changes in the system:

> *"I still enjoy my profession, which is why I continue working beyond my pension age. However, the job is no longer enjoyable as I feel I can no longer look after my patients the way I would like to, and that there is no sign that this will change in the near future…."*

This ambivalence was further amplified by a consultant, who expressed mixed feelings about what their working life had become:

> *"I still enjoy my job, but medicine has become much more of a grind. There is a trend to over investigation leading to many unnecessary tests. The era of Realistic medicine has never evolved. The more enjoyable parts of the job – teaching and discussing cases with clinical colleagues – often has to take a hit".*

Such a negative picture was characteristic of the expanded commentary, some of which had negative influences on those senior doctors under 50 who reported the effects of seeing and listening to older colleagues talk in demoralised terms about their work.

> *"As a consultant relatively early in my career, sustainability is important and seeing role models ahead of you in mapping out potential pathways through my career. Seeing senior and experienced consultants demoralised and frustrated with their working environment and particularly their pension scheme impacting on their ability to continue working in a profession which they enjoy is extremely distressing. They have immense experience to impart to me and my contemporaries and I have grave concerns around the loss of their knowledge and support of my generation of consultants and leaders. It gives me a truly sad and pessimistic perspective of the future".*

Consequently, as one doctor stated succinctly, the likely outcome was a loss of professional identity and experience of work as a calling:

> *"Now I see my job as a job. It is not an important part of my identity as a human being".*

Another doctor referred to his/her epiphany associated with Covid, which triggered a sense that their work was less valued than before:

> *"The pandemic has provided the headspace and realisation that senior clinicians are no longer respected....Had not had thoughts of retirement before Covid and punitive stealth taxation was sneaked in".*

Work centrality, as we have noted was ambivalently expressed by the 50+ cohort. When combined with the weight of negative commentary about lack of engagement, such ambivalence raises a cause for concern. Using univariate analysis of the three highest loaded factors related to our work centrality factor, those not agreeing that they were motivated to perform their job had a 60% probability of a premature ITR, while even those agreeing had a 50% probability of premature ITR.

Factor 5: Attachment to Work Colleagues

Relationships with work colleagues and attachment to them (Yip et al., 2018) can be an important factor in doctors choosing to remain or leave work. Attachment to work colleagues emerged as a partial pull factor with three variables in the EFA combining to give a mean of 4.03 (1=strongly disagree and 5= strongly agree). This mean score represents a reasonably strong attachment to work colleagues. When talking about the pull of his relationships with professional colleagues, one doctor spoke directly of his/her colleagues:

> *"I am entitled to retire on my 60th birthday . However, I still like my job very much and, although I do not entirely define myself through my professional activities, I still very much enjoy the professional social contacts to all Team members. This is very important to me and something I would surely miss".*

Interestingly, our univariate analyses of negative attachment to work colleagues predicted 50-55% probability of a premature ITR, while a positive attachment to work colleagues predicted a lesser premature ITR. The weight of negative commentary in the free text responses suggests that the push of having to working with some 'problem' colleagues was more important in ITR than the pull of positive relationship.

5.6.3 Personal identity threats

Factor 6: Burnout

Burnout has been defined as a state of overwhelming mental exhaustion resulting from chronic stress in a work situation. Burnout is often associated with emotional exhaustion, symptomised by mental draining, feeling worn out or empty, depersonalisation, cynicism regarding work, and reduced personal accomplishment. It is typically high among doctors, though some specialities are thought be more prone to burnout, e.g., emergency medicine (Lemaire, 2017).

We used a previously validated burnout scale. So, as expected, all items in our survey loaded highly onto our EFA burnout factor. However, despite explaining the most variance in the 50+ cohort, doctors did not report high levels of burnout overall. The mean score for all variables associated with burnout was 3.5, in the 'neither important nor unimportant' category. The exploratory factor analysis and the neutral mean suggest that it might be an important factor for some doctors but was not widely experienced in the 50+ cohort. Interestingly, doctors in the <50 cohort were significantly more likely than the 50+ cohort to report burnout, a finding possibly worth further investigation. The univariate analysis of the three highest loaded factors related to our burnout factor, confirms this picture. We calculate those doctors agreeing or strongly agreeing with these key items on experience of burnout were significantly more likely to intend to retire early than those not agreeing, with an estimated probability of between 63-68% as opposed to 40-48% (see Figure 3 earlier). One 44-year-old doctor spoke of his/her changing experience:

> *"Clinical work & unrealistic demands over the past decade have gone from stressful to unbearably stressful to health-damaging during the pandemic. Work has become hazardous to health!"*

The free text data helped explain how burnout developed in some doctors. This next account by a consultant illustrates a typical attribution of a cause-and-effect chain, in which increased demand and pressures failed to be met by adequate resources. In the illustration below, the consultant managed his burnout by withdrawing from work, and example of so called 'quiet quitting':

> *"I'm a single-handed consultant doing the job of 2 consultants. We're unable to recruit second consultant.... working many more hours to cope with workload..... Burn out earlier this year.... Had to put own measures in place, e.g. (lists measures to reduce workload)"*

As previously noted, doctors who experienced burnout reported it as important factor in their ITR. One specialist explained how policy and its implementation had led to his burnout:

> *"Government policy and NHS management have combined to make my job impossible. The daily physical and mental exhaustion combined with constant, deliberate moral injury inflicted upon emergency department staff would not be tolerated in any other specialty or indeed profession.*

Factor 7: Health, Well-Being and Family Concerns

Health, well-being, and family concerns often outweigh the benefits and attractions of continuing to work. These calculations are sometimes triggered by major events, with Covid-19 being one such example. Surprisingly, the pandemic did not feature highly in the free-text commentary. More often, the process was more of a gradual realisation, which one doctor reflected on when continuing to work in a reduced capacity:

> *"I retired at age 58 and continue to do work in another specialty from my main one. I would have considered retire and return at an earlier age if this had been possible and think this would have benefitted my health. However, this was not an option so I worked on which was very stressful and detrimental to my health even though I did reduce my hours to as little as I could afford to".*

Doctors would often attribute their own health problems to the nature of the work they did or to work patterns:

> *"My early retirement was planned due to health issues that were a consequence of the consultant work pattern (i.e., working >15h days and insufficient rest after periods on call). A lack of rest periods in work further compounding my health-related issues".*

On-call or out-of-hours working was often seen as a major issue for doctors even in their early 50s, as these next to reflections by a 51 and 52-year-old respectively illustrate:

> *"OOHs working is a significant factor in my decision making about retirement. I would love to keep working longer but onerous overnight on call and 12.5-hour weekend resident day shifts (sometimes without a break) will become untenable I suspect".*

> *"On call is getting harder. Recovering from a busy night takes much longer now. Would happily work for longer if I didn't have to do on call".*

In addition to burnout, the mental health concerns of colleagues were also a feature of some accounts and, in this case, complaints about the lack of managerial concern:

> *"Despite managerial policy on preserving mental health, and encouraging people to speak up, it is a universal opinion amongst consultants that our voices aren't heard....A female colleague was desperate to reduce her workload due to fear for her mental health....We raised concerns and nothing happened as far as we could see. That doctor, who was an immense asset to the team, has now left medicine....".*

The mean of the four variables loading onto this factor was 2.8 (1=strongly disagree and 5= strongly agree), suggesting it was not a widespread concern among for staff in general in the 50+ cohort. However, for a significant group of staff it was a major issue. Thus, female doctors were significantly more likely to report work-related stress, need to act in a caring capacity, or partner/ spouse retiring as reasons for ITR. Some female doctors also raised the impact of the menopause on their working lives, implying it was rarely considered by managers and colleagues.

Female doctors were also more likely to report a need to act in a caring capacity for a family member as a reason most likely to influence timing of retirement for those intending to retire before normal pension age. This next quote shows something of the guilt experienced by one female doctor because she was unable to fulfil her caring role:

> *"Plus, I have an elderly Mum so feel guilty that because I'm working so much I can't spend time with her. I saw her at the weekend. On arrival, she asked, "How are you?" and I burst into tears because purely and simply, I was so tired".*

Some doctors under 50 also raised health as a key consideration for early retiral in certain specialities. These considerations raise the possibility of generational differences emerging in relation to the dangers of prioritising work centrality over health concerns. This next reflection by a younger consultant suggests no epiphany would be needed to recognise the negative consequences of established patterns of work of their older colleagues. Instead, it suggests a change in values are required to avoid mistakes of the past made by older consultants:

> *"The current normal retiral age for me at 43 is supposed to be 68. The nature of the work I do with demanding on-call is not effectively possible at that age without significant health-risks and this has been evidenced in the past. I do think that working beyond 60 is possible and I see colleagues of mine doing this, but they all admit that they are affected by their age....".*

As noted above, health, well-being and family constraints were of only moderate importance to the 50+ cohort. Nevertheless, our univariate analysis showed health and wellbeing variables predicting the probability of premature retiral being more than 70%. This suggests they would be a defining concern among those who experienced these issues, and they were taken very seriously in ITR calculations. Interestingly, these concerns were significantly more important among non-white doctors who were more likely to see them as a cause to retire before normal pension age.

Factor 8: Increased burden of change

Two items loaded onto this factor – the perceived increased burden of regulation and, revalidation, and other changes recently introduced in the system – although the mean of the two variables (n= 3.49, 1=strongly disagree and 5= strongly agree) suggest the burden of change was not widespread in influencing premature ITR. However, our univariate analyses showed significant differences between those agreeing that recent changes had made them think of considering retiring or stepping down work commitments and those not agreeing, predicting a premature ITR of more than 60%.

A non-UK domiciled doctor highlighted the effects of changes on his ability to work effectively, and hence his professional identity, because of increased bureaucracy and the lack of experienced staff:

> *"When at work I find myself guiding more and more inexperienced staff (as retention is bad for the nursing and midwifery workforce also), so inevitably the science in care declines more and more, taking quality with it. This is extremely frustrating. At the same time the amount of guidelines, paperwork and documentation required for the same work just increases – combine this with highly ineffective and slow IT systems, means that the time needed for the same task multiplies exponentially. I am frustrated, disappointed, and demoralised to the extent that on occasion it feels that my professional integrity would be best expressed by walking away from the NHS".*

Examples of the burden of changes were often a local feature of different regional Boards. Thus, in the following illustration, the impact Modernising Medical Careers on health boards outside of the Central Belt, became of source of significant frustration:

> *The things I see as key to decimating morale in our department and causing a mass exodus are: 1. Modernising medical careers: This has resulted in disastrous recruitment for non-central belt trusts. Previously students from (city outside of Central Belt) would mostly wish to work in (region outside of Central Belt). Since central belt trainees have more on their CVs (there are more of them and better research/training opportunities and facilities), they displace local candidates. Since MMC, we have had doctors who don't want to be here, who put posts on hold and don't arrive, are separated from families, or leave at the first opportunity. I can't stress enough that we need to go back to local recruitment so that you place doctors where they want to work and where they are invested in working and likely to settle…."*

6. So, What Can Help? The View From the 'Shop Floor'

6.1 The Statistical Evidence on Valuing Different Forms of Help

We were interested in evaluating the different kinds of help that doctors might be given to plan for retirement. Table 14 below shows the rank ordering and strength of belief in the different kinds of belief by age cohort. From the table, it is evident that pension taxation changes rank well above all other forms of help, which requires changes in government policy. However, there is a bundle of three other forms of help that appear to appeal to senior hospital doctors across all age ranges, all of which are in the gift of NHS Scotland and its Boards. These are flexible and hybrid working, retire and return programmes and workshops to learn more about financial planning. Less valued, but still relevant forms of help for some senior doctors are possible workshops on dealing emotions, learning from other doctors' experiences, and mentoring.

Box 3 provides an analysis of the relative importance of different kind of help by key demographic variables.

Table 14: Relative Importance of different types of valued help (1=strongly disagree, 5=strongly agree)

Types of Help	All	<50	50-54	55-59	60+	Significance (0.05 cut-off)
I would value changes to the pension and taxation that do not penalise doctors	4.71	4.77	4.74	4.67	4.40	0.00
I would value greater flexibility and hybrid working	4.20	4.25	4.15	4.21	4.10	0.10
I would value form scaling down / retire and return programmes	4.15	4.10	4.15	4.23	4.13	0.10
I would value career planning workshops to learn more about financial planning	4.05	4.15	4.10	3.95	3.77	0.00
I would value changes to the regulatory system and revalidation	3.96	3.99	3.81	3.98	4.04	0.69
I would value career planning workshops to facilitate discussion about personal and professional experiences, emotions and attitudes towards potential retiral or scaling down	3.92	3.98	3.94	3.86	3.78	0.01
I would value career planning workshops to learn more about developing careers that would allow doctors to mentor others, provide learning support or conduct research	3.73	3.76	3.74	3.70	3.71	0.39
I would value career planning workshops to learn more about the experiences of other retirees	3.54	3.51	3.56	3.58	3.57	0.32

Box 3 Differences in Reasons for Valuing Different Kinds of Help by Key Demographics

Age differences. There were few significant differences related to age. Younger doctors in the 50+ and <50 valued more help with financial planning than older age groups, while older doctors were more likely to value changes to the regulatory and revalidation systems.

Work Pattern differences. Those working fewer sessions were more likely to place less value on formal retire and return programmes. Those working fewest sessions would value changes to the pension/ taxation system. Those working most sessions were more likely to value financial planning help.

Those seeking to continue working and maintaining current activity until pension age more likely to value formal scaling down/ retire and return programmes, greater flexibility and hybrid working, facilitated discussion or personal and professional help.

Deanery. Few significant differences, apart from doctors in the West Deanery who were more likely to values changes to the regulatory system than other regions.

Speciality. No specialty differences.

Ethnicity. Non-whites significantly more like to value facilitated discussion of personal and professional experiences, developing careers, learning more about experiences of other retirees and financial planning.

6.2 A Qualitative Perspective on Valued Help

The commentary from the 762 free text responses on Question 24 extended our understanding of the kinds of help doctors valued. Table 15 shows the frequency count of themes induced from these responses.

Table 15: Valuing different forms of help.

Core themes	Count	% of total
Reforms related to pay, tax and pensions	417	55
Reforms to work restructuring, flexible working and retire and return programmes	110	14
Address workload, succession planning and recruitment and staffing issues connected with doctors, nurses etc.	72	10
Reforms of NHS and approaches to leadership	65	9
Felling valued and listened to	51	7
Other (e.g., reducing bureaucracy and revalidation requirements, admin support etc.)	33	5

6.2.1 Reforms to pay, tax and pensions.

As might be expected, solutions to problems of premature withdrawal from work were often inextricably linked to their causes. Of these causes, the pension taxation issue was interpreted as the main trigger for their expressions of a violated psychological contract between the NHS and doctors. Two consultants illustrated different aspects of their sensemaking on this issue, and what was needed to resolve it in general terms:

> *"Fixing the pension issue would be the biggest single change. There is enough stress in the job without having to worry about finances too".*

> *"Getting rid of the pension trap (as has already been done for judges and civil servants) would retain senior staff for longer, and allow senior staff to work extra, if they chose, to deal with waiting lists and rota gaps...."*

Much of this commentary attributed blame and the solution to Government, either explicitly or implicitly. However, this next quote typifies the views of some doctors who linked the pension taxation issue to their sense that it was health service managers as well as politicians who questioned the value of doctors and their professionalism:

> *"Pay needs sorted but not before tax and pensions, and Scottish Government have their head in the sand (...) about that. I honestly think this government think they can do without "expensive" doctors".*

Other respondents went into considerable detail about what a specific 'fix' would look like for them. These next quotes by three senior doctors at different stages in their careers illustrate different types of fix:

> *"The biggest thing making me consider reducing hours soon and/or retiring early is tax. I am about to hit the withdrawal of the personal allowance (which creates a 61%) tax band if I continue working full-time. I have also used more than 75% of my pension lifetime allowance, so will breach this long before retirement if I continue full-time. It seems daft to work longer hours and/or years to lose much of the money I would have earned. This tempts me to take those hours for myself. If these tax barriers were not there, it is unlikely I would be considering reducing hours and/or retiring early at this point in life".*

> *"PENSIONS! I'm sure that by increasing the annual allowance by £10k per year would reduce the taxation on senior medical professionals (as it is now not just the Consultants who are affected by this issue) significantly. I think this issue has a significant adverse effect on medical professionals whilst only bringing in a very modest sum of money to the Government in taxation revenue. I also think that we should be allowed to choose the percentage of pension contribution we place into the pension each year in increments of 10% (i.e., 0%, 10%, 20%, 30% etc). This may reduce our overall pension pot but would allow a balance between pension contributions and end-of-year taxation"*

> *"Perhaps if you were allowed to stay in the NHS pension scheme i.e., to ensure that individuals retain their death in service provision but stop paying into it to avoid tax liabilities, then that might encourage more doctors to carry on working beyond age 60. After 35 years of contributions, I do not see why you cannot stop making contributions but retain the death in service provision. That may allow more to remain in the profession and contribute to healthcare*

Reducing the complexity of the pension taxation issues, and providing support to doctors to navigate the complex system, were also a feature of the commentary on the types of help needed – thus supporting the data in Table 14:

"We need good access to information about pensions that makes sense and isn't too full of jargon. It's extremely confusing and anxiety provoking..."

"Some clarity with the pension situation; replies from SPPA within weeks rather than months (predates Covid/ McCloud). Robust, individualised advice/support/mentoring about pensions/retirement/continuing to work".

6.2.2 Reforms to work design, support for flexible working and retire and return.

Doctors were vocal in expressing the types of changes needed to address systemic problems. This next quote proposes that many more doctors would remain if such problems were addressed by supporting its staff with work design, flexible working and job crafting at later stages in their careers:

> *"I think there is huge potential for the NHS to be more effective in retaining doctors in the medical workforce. A good start would be to treat them as autonomous professionals often also with the with the financial capacity (particularly towards the later part of their careers) to save themselves from the drudgery of a soulless, faceless, NHS bureaucracy. The NHS pays lip service enabling staff to flexible retirement options (step down, step back, etc, phased retirement etc). However, these are not easily available in practice.... In truth I think almost all NHS doctors would choose to stay on in some capacity for as long as possible if the NHS was sufficiently flexible in trying to support this. and genuine in negotiating reduced hours or possible roles. The NHS is almost entirely ineffective in trying to support or develop the staff it employs....People work not only for pay, but for professional satisfaction, out of intellectual curiosity, for moral and ethical reasons, and because they like to be genuinely appreciated, valued and supported by other members of a team. All of this is lacking in the modern NHS".*

Dealing with the problems of ageing featured in many of the responses in this category of comments. Sometimes this related to on-call/out-of-hours demands in specialties such as radiology and emergency medicine, as these next quotes illustrate:

> *"A better recognition of the impact of experience and ageing on the skills and capabilities of a consultant. One size fits all between the ages of 32 and 62 – this doesn't make sense".*

> *"I gave up on call.... Prior to this, I was considering early retirement, as on call (routinely being woken from sleep) was affecting my physical and mental health. Now I intend to work beyond my intended retirement age. In my view, allowing senior clinicians to cease on call in their pre-retirement years, along with sensitive and flexible late career job planning could significantly reduce early retirement and increase the number of clinicians who remained in employment post-retirement".*

> *"I would say that recognising the need to change as you get older and contribute in different ways would retain the medical workforce. After a lifetime of out of hours work it is not unreasonable to be able to step away from that when you get older so that daytime work is more productive".*

> *"For those of us in high intensity specialties the workload overnight is unsustainable (for all ages) but particularly hard as one gets older. Working overnight is not adequately remunerated or valued. Intensity of work during out of hours is the main reason I want to retire. I worry for my peers and my junior colleagues as well as myself".*

Job planning, which allowed for flexible job crafting and a change in attitudes to the value of non-patient facing work, was also proposed as a solution:

> *"National planning for evolving job plans across career, allowing more flexibility for hybrid job plans such as those incorporating a teaching, management, research, or alternative role – at present the prevailing attitude is that you are "taking away" clinical capacity rather than delivering equally valuable but non patient facing service. This makes it difficult to negotiate additional roles, and there seems to be a belief from management that the non-clinical aspects are less valuable".*

> *"Scaling down acute work in years before retirement – genuine planned offers of alternative ways to use experience rather than last ditch response by board to sickness or burn out – real appreciation of areas other than acute work".*

6.2.3 Addressing workload, succession planning and recruitment and staffing issues.

Linking workload and staffing issues to doctors' retention was a key explanation of, and solution to, the problems of premature withdrawal from work, as bluntly stated by two 50 plus doctors:

> *"To deliver any service, you need manpower which is lacking in NHS. Failure to employ the required number staff to deliver the service, makes doctors exhausted and to leave".*

> *"More staff, so that the pressure of work was spread. We need more of everything, from cleaners to consultants".*

The links between workload, recruitment and problems related to retaining and funding junior doctors and doctors in training were also voiced:

> *"Lack of staffing and increasing demands are the main factors impacting on our workloads and stress levels. The other key factor is under-funding and now the Scottish government wants us to make millions of pounds in savings – it is unrealistic and adds to the stress levels of senior management and frontline staff who are still trying to deal with the aftermath of covid. Junior doctors have been emigrating in larger numbers since the overhaul of the system many years ago which affected how they applied for jobs – this also needs to be addressed".*

> *"Don't expect older doctors to be able to do their role and that of junior doctors. My bad days are because of frequently covering gaps and the risks of delivering poorer care stay with me. Talk about RECALIBRATING and not RETIRING"*

A specific focus on doctors' retention and workload was sometimes linked to feelings of deprofessionalisation within the health service. This next quote links career planning to sensemaking over deprofessionalisation, evidenced by status decline and lack of voice, which were two common complaints:

> *"Given the problems with vacancies in almost all fields in medicine, and in (names discipline) in particular, I think all doctors should be approached at age 53-55 and offered a review and a meaningful plan for how to keep them in the workforce for longer. .... Over my professional lifetime, we have become devalued, not even referred to as "doctor" by our mangers, we have very little voice in how services are run, our concerns about safety are not acted upon, we are just expected to absorb more and more workload and are not supported when patients are unhappy with the care they receive".*

6.2.4 Retire and return.

Making retire and return more widely available and useable was also widely believed as a way of encouraging doctors to stay in the system. However, one later career doctor pointed to current practices in some boards to limit the availability of retire and return, when implying only a short-term contract was available:

> *"Longer contract when considering current "retire & return" option (currently only one year".*

Others wanted to see it as a statutory right, or made more widely available, as these next three quotes illustrate. All three quotes point to a reluctance among some Boards to engage with such programmes without attaching 'strings':

> *"Introduce retire and return as an option available to all doctors over the age of 55 as a statutory right".*

> *"It should not be difficult for doctors to return to their area to teach others to take over their roles. I have found it quite difficult in some ways to do this which will merely push me into retiring completely, as in I feel a bit fed up with the management in my health board, that they seem to value my experience pretty lowly. Retire and Return should be actively encouraged, and I do not think that it is....*

> *"(Mentions name of Board) do not value those who retire and return – Scottish Government must act now to ensure proper retire and return contracts, continuation of discretionary points and allow retire and return doctors to have senior management roles".*

6.2.5 Reforms of NHS and approaches to leadership.

System-wide reform and 'honest signalling' by government and healthcare leaders were voiced by a significant minority of consultants, who engaged in often lengthy responses on this issue. Honest signalling, which refers to the credibility and trustworthiness of messages, usually took the form of communicating to the public a realistic expectation of what could be delivered by a system in which the ever-increasing demand for care would always outstrip the system's ability to resource such demand. These next quotes illustrate different aspects of this analysis:

> *"Ration healthcare or finance the NHS properly. We can't be everything for everyone. Strategies for care of the elderly need to be sustainable. Reduce bureaucracy and ask political parties to agree a cross party heath plan. In essence you get what you pay for – do we need a sacrosanct health tax that can fund what the country needs or are we inadvertently heading to scrapping the very principles of the NHS".*

> *"I would value (politicians) that can recognise the public's unrealistic expectations of Primary Care. Recruitment and retention of GPs will not get any easier until this is recognised. GPs mustn't be blamed by politicians and the media for failings of a healthcare service which is straining under the weight of an obesity epidemic, an ageing population, a shortage of carers and a viral pandemic".*

> *"Doctors went into medicine to help patients by delivering a good quality of care. The NHS needs to rationalise what it can deliver with the current pot of money offered and not delude itself that doctors and nurses can deliver more with less money and resource".*

At times this kind of analysis was linked to small or incremental changes that could be made, while acknowledging the difficulties in achieving system reform:

> *"We need to have honest discussions about what we can achieve. Patients are dissatisfied and we feel the brunt of their frustrations. Change in the NHS is impossible. Most folk in the 50s that I know are burnt out – not by the hours but by the lack of value in what they do and how they are treated. No parking spaces, no food out of hours (or even in hours), no lockers etc.,...if you get the little things right then the big things work. I have an enormous amount of admin work that could be done by admin staff to free me up to provide more clinical work".*

System reform was sometimes linked to changes that reflected the specific interests of women in medicine, which was a feature of the statistical evidence. This next quote from an older, female physician refers to the challenges faced by female doctors who having a caring role:

> *"We need to know more about the level of peril facing the NHS – and so be able to judge what we can and feel able to do to help. I would like to see more support for women in medicine at retirement – As the population ages more will face this challenge – as we have moved towards gender equity within medicine we have not factored in this additional demand for women. If the NHS is indeed in peril we need to strip out superfluous tasks many driven by collecting data electronically which add little to care and training. Encouraging doctors to be able to do something rather than nothing may help...."*

6.2.6 Feeling valued and being listened to.

Not feeling valued, which was a common complaint among doctors in our sample, is inextricably linked to a sense of deprofessionalisation among doctors (Martin, Beech, MacIntosh and Bushfield, 2015). Thus, a need for politicians, managers and other stakeholders to demonstrate a greater sense of the value of doctors was seen as critical in dealing with the ITR problem. Two female doctors put the case forcefully, with the second elaborating on a general response by a substantial number of doctors.

> *"Doctors and all other experienced staff need to feel valued and listened to. Some flexibility in job plans and the time to give good care will encourage us to stay".*

This second quote highlights the symbolic effect of small changes in the second half of this quote, which is worth recounting at length:

> *"Value doctors a bit more – value my time, my experience, and my professional integrity. This comes with more money and less tax punishment....Academising medical (and all healthcare) education and removing the apprenticeship model has completely broken medicine and the joy from learning at one's own pace. It would help to be less controlled by non-clinical managers. ...I also understand the need for healthcare to be financially effective. However, healthcare is not a business, like others, even when it is private. I come from a country with private healthcare and have experience of it. Politicians and managers need to understand it. As long as the NHS policies fail to convince me of the government's commitment to social policy over money, I will fail to commit myself to remain in the workforce. Being seen to really care about me as a physical being would also help to retain me in the workforce. I'm not referring to getting policies drawn up to describe how to support me, I'm referring to real care: having access to hot food (not a heated-up cuppa soup, or a 57p-priced at 250p meal) during my working time, day and night; not having to pay £7 daily to park at work, etc. Working during the pandemic has also detached me from the emotional commitment to the NHS. Whilst the country was getting home quality time on furlough pay, NHS workers (like the food and energy industry) have been hammered – and we are continued to be hammered as the UK comes out of the pandemic".*

Encouraging doctors to 'speak up to the power of the other' was also a common proposal, as the next two quotes illustrate. It is important to note, however, that our past research has pointed to a widespread belief among doctors and managers that the 'other' has much greater power, which often leads to communications that more resembles 'competing monologues' rather than genuine dialogues (Beech, MacIntosh & Martin, 2012):

> *"Have our opinions listened to and be able to make changes to our service. We are not listened to by managers or politicians. The lack of ability to change anything leads to disillusionment and disengagement and is a shocking waste of clinical experience".*

> *"We need an actual safety culture that listens to the workforce on the ground. (Name of Board) consistently ignores concerns raised by clinicians, leaving us exposed to completely unreasonable working conditions on a daily basis.".*

Inevitably, competing monologues lead to feelings and expressions of disconnections and distance between leaders, including clinical leaders, and their colleagues. The increasing clinical and non-clinical leader lack of 'visibility' was seen as a problem:

> *"Having more direct contact with (senior clinical leaders) to feel our concerns are heard but more importantly, that our solutions to problems and how we want our service to develop is heard and facilitated. Give consultants back the power to be in charge of their own service and give us back the respect".*

6.2.7 Reducing revalidation and appraisal.

A final set of comments focused on the burden of revalidation and appraisal. Two of these set out the problem, the former highlighting the appraisers' view, the latter proposing an overhaul of the existing system.

> *"I genuinely love my job and find extraordinary value in it. However, the revalidation/appraisal process (I am an appraiser myself) is a significant stress...It needs to be changed – respecting that there needs to be some sort of process".*

> *"Overhaul of the current revalidation/appraisal process. It is not fit for purpose and costs a fortune to run....".*

7. Conclusions

We believe this research has thrown light on significant problems facing the NHS in its ambition retain older doctors in the system for longer. Our data point to significant numbers of doctors aged 50+ intending to withdraw from work prematurely. They also point to potential explanations for such withdrawal, with the pension taxation issues being a key factor and 'gamechanger'. We have posed a storyline that resonates with consultants we have spoken to during research for this project. To repeat one of our core messages, we see the potential withdrawal from work by senior hospital doctors as a direct response to a severely breached 'psychological contract' – as seen from their perspective. They underwent many years of 'apprenticeship' with demanding training, relatively low pay compared to other traditional professions, and long, often unsociable, hours of work. In return, they expected the 'promise' to be high levels of autonomy, high-status and the opportunity to engage in meaningful work with the opportunity to fulfil a strong social purpose as consultants. These expectations were to be accompanied by good pay and good pensions when they chose to retire. Many doctors, however, have come to feel these expectations have been breached. Changes to the pension taxation regime are interpreted as an unfair change of the rules governing their psychological contract, and thus 'the straw that broke the camel's back', when considered against the backdrop of increasing disillusionment with the system and the employers' inability to provide sufficient resources to meet ever-escalating demands. So, doctors are increasingly responding by expressing burnout, the meaning they attach to their work and their engagement with it. The outcome is that more senior doctors are seeking to withdraw from/exit from full-time work, especially when compared to the attractions of leisure time.

If this explanation of breach of the traditional psychological contract is plausible, the NHS, the employers and the medical professions are faced with significant problem not only in retaining older doctors but also in recruiting, engaging and retaining newer generations of doctors. The latter's expectations may well be different, opportunities for alternative employment are likely to be greater outside of the NHS and will probably seek to avoid the travails of the generations before them. Consequently, it is vital that these expectations among the 50+ and under 50 cohorts are addressed.

This research has made a start on surfacing the expectations gap and the type of help older and younger career grade doctors might value. This help is required at three levels – national government, NHS Scotland, and individual employing boards. Changes to the pension taxation regime, on the surface at least, are by far the most important to pursue. However, these can only be implemented at governmental level through fiscal policy. As such, these are outwith of the control of the employers, who can only make a case to government using evidence of the kind provided in this report.

What is in the gift of NHS Scotland to deliver, especially with its 'Once for Scotland' ambitions, include: more honest messaging of what the system can provide given scarce resources; work redesign and restructuring policies; flexible working; and better designed and consistently implemented retire and return programmes. NHS Scotland might also consider more effective medical workforce planning to address workload pressures; more rounded succession planning to consider doctors as among the most highly valuable and scarce resources in the NHS; and addressing the burden created by staffing shortages.

To help deal with organizational disillusionment and disidentification at Board level, doctors need to feel valued and supported. They also seek a greater voice in how they are managed. Arguably, these reasonable expectations require an approach and culture that focuses on the processes of leadership rather than leaders per se by improving leader-doctor relations involving both clinical and non-clinical leaders (Howieson, Bushfield & Martin, forthcoming). Finally, career planning at Board (and perhaps at NHS Scotland) level for doctors in the later stages of the career needs to be taken much more seriously and systematically, especially in helping them navigate the increasingly complex pension tax regulations, and in developing innovative ways of enabling them to remain at work by playing to their strengths, identity motives and capabilities.

Few, if any, of these findings will come as much of a surprise to those responsible for leading and managing the NHS in Scotland. However, familiarity with the problems should not diminish the importance of searching for the concerted actions required to address the serious problems raised in this report. Discussions with medical colleagues during the writing of this report point to a need for all Boards to implement actions along the lines we propose, and for Boards to follow up on these actions by evaluating their outcomes and learning from them. Longer term, we believe that further research is needed to address the implications of potential generational differences with junior doctors/ doctors in training, if we are not to repeat the problems of the present.

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Appendix 1: Exploratory Factor Analysis

Questionnaire Item	Factor Score	Mean response
I often feel exhausted mentally because of my job	0.83	3.76
I often feel emotionally drained because of my job	0.81	3.65
I increasingly feel the need to mentally withdraw from my job to cope with the pressures of working	0.68	3.10
In general, how would you rate your current mental health and well-being?	0.66	2.53
I often feel exhausted physically because of my job	0.62	3.44
Work related stress	0.57	3.92
I often feel so frustrated in my job that it makes it very difficult for me to control my emotions	0.57	2.93
The following questions apply to everyone to answer. As I get older, I find I am less able to cope with the demands of my job	-0.53	2.41
At work, I usually feel full of energy	-0.56	3.03
I rate the top leadership team of my current employer highly	0.81	2.29
My employer has done a good job in creating a culture that values doctors' voice	0.81	2.23
My employer has done a good job in creating a culture that values doctors' autonomy	0.81	2.32
It is very important to me to work for my current employer	0.71	2.37
I am very happy working for my current employer	0.70	2.91
Working for my employer is an important feature in defining who I am	0.67	2.42
I identify strongly with the goals and values of my employer	0.61	3.01
I am highly motivated to perform my job	0.65	3.89
I am fully devoted to my job	0.61	3.43
I often find myself immersed in my work	0.59	3.76
Continuing to develop my expertise as a doctor is the best way for me to contribute to the aims and values of the NHS	0.57	3.63
I am usually enthusiastic about my job	0.56	3.55
It is very important to me to have a successful working life	0.53	4.05
I experience a good deal of meaning in my current job because I'm contributing to the aims and values of the NHS	0.51	3.72
Cognitive, sensory or motor skills impairment that affects my ability to work effectively	0.81	2.87
A physical illness or disability	0.81	2.82
Non-work related stress	0.68	2.72
A need to act as a carer for a family member	0.65	2.67
I would value career planning workshops to facilitate discussion of personal and professional experiences, emotions and attitudes towards potential retiral or scaling-down of work commitments	0.83	3.89
I would value career planning workshops to learn more about developing careers that would allow doctors to mentor others, provide learning support, or conduct research	0.79	3.72

Questionnaire Item	Factor Score	Mean response
I would value career planning workshops to learn more the experiences of retirees	0.77	3.57
I would value career planning workshops to learn more about financial planning	0.59	3.99
I think it will be very hard for me to find contentment if I retire	0.71	2.00
I worry that I will lose my sense of personal identity if I retire	0.71	2.40
I enjoy my job more than my leisure time	0.56	2.18
I expect to feel good about life when I retire	-0.52	4.15
I have a strong attachment to, and sense of connection with, my work team colleagues	0.83	3.88
I feel very supported by my work team colleagues	0.82	3.95
The support and friendship of my work team colleagues in my current work role is very important to me	0.75	4.28
The burden of increased regulation and revalidation	0.54	3.43
Recent changes made by the NHS in Scotland have made me consider retiring or stepping down my work commitments	0.53	3.55
Concern that working longer will increase my tax liabilities beyond a level that makes it worthwhile continuing with my current work commitments	0.73	4.37
Recent changes in the NHS pension and taxation system have made me consider retiring or stepping down my work commitments	0.68	4.31