Summary
An excessive workload and work-related stress have contributed to an increasing sense of job dissatisfaction amongst many GPs. This coupled with the reducing cap under pension changes introduced 2010-2014 (effectively a pension of around £50K p.a. above which there are significant prohibitive tax penalties) has led to many physicians retiring from the profession in their mid-50s. Although there is strong evidence that GPs see workload and pension related issues as drivers to early retirement, there is currently no clear evidence that particular changes would revert early retirement. Over the last decade, it is increasingly recognised that addressing GP shortages will require a system-wide approach covering individual, practice and organisational levels [1].

GP shortages are exacerbated in non-urban metropolitan areas, where the majority of reported interventions have focused on exclusively financial incentives. However, where we choose to make our home and work are complex issues and there is evidence that multi-dimensional approaches that account for the wider implications for the GPs and their dependents may be more successful.

There is currently no clear evidence to suggest that behavioural insights, or nudge-style, interventions would be effective in delaying the age of GP retirement. While they may be supportive of reducing work-related stress (a symptom of job dissatisfaction), due to the considered nature of the decision one takes to retire, it is yet unclear to what extent such approaches would have a significant impact on GP retention.

Introduction
General practices across England are experiencing high demand, placing a huge pressure on primary care. Key drivers include an ageing population with multiple conditions and increasing patient expectations. A 2017 King’s Fund report [2] asked if general practice was in crisis, with GP numbers falling and fewer newly qualified doctors choosing work in primary care and many retiring early.

The following policy brief provides a review of incentives which could support retention and reduce early retirement of GPs, with a focus on rural areas. We also identify and summarise what motivates early retirement and reduced participation in GPs and what further research is needed in this area.

About the research study
Our research explored recent published literature and findings from a select number of active GPs as to the factors behind falling retention and reasons for early retirement in GPs and what might support improved job satisfaction and greater retention into later age.

Design and methods
Method
An initial scoping of the literature was carried out with a focus on systematic reviews and recent (< 5 years) primary studies. We identified an NIHR funded report by Mitchell et al. (2018) [3] ’Recruitment, retention and returning to General Practice: A rapid scoping review to inform the Greater Manchester Workforce Strategy’ and applicable studies published subsequently to build upon the evidence summarised in the report. As this was not a systematic review, but a rapid scoping review of the current evidence, we included both published and grey literature.

This project is funded by the National Institute for Health Research (NIHR) [Policy Research Unit in Behavioural Science (project reference PR-PRU-1217-20501)].
Rapid review search strategy
We conducted a search of the following databases: PubMed, Web of Science & Google Scholar using the following search criteria: (GP* OR physician OR doctor) AND (retirement OR retention) AND (UK OR ‘United Kingdom’). Additionally, we extended this search to add the criteria (recruitment) AND (rural areas) in relation to GP recruitment in remote areas in the UK to address this question.

Study selection
The PubMed search yield 353 articles. These were first screened by title to gauge appropriateness of search criteria and to remove those deemed irrelevant, and then by reading the abstract in order to identify relevant papers. This search was complemented by a search of Web of science and Google Scholar which yield over 1,000 papers which were again checked for appropriateness first by title and then the abstract. Duplicate papers were removed. Although we did not specify strict eligibility criteria, we screened for relevance by including mainly papers from England and the UK (including qualitative and quantitative studies) and only included papers from Europe, USA and Australia which were directly relevant to the UK context (mainly in relation to GP recruitment in rural areas). This resulted in 15 studies in addition to the NIHR funded report by Mitchell et al. (2018) [3].

Data extraction
From the 16 studies we completed the data extraction based on the two key themes/research questions:

- What is the motivation to leave general practice (reasons for early retirement)?
- What strategies or interventions may reduce early retirement of GPs?

Quality assessment
We identified numerous strategies and suggestions that may support a delay in retirement. However, there is no rigorous evidence of effectiveness, an issue highlighted in the NIHR funded report by Mitchell et al. (2018) [3].

Factors influencing early retirement of GPs

Key findings:
- Increasingly stressful job
- Financial ability to retire early

A recent survey of senior doctors in the UK highlighted that more GPs (54%) than surgeons (26%) or hospital medical specialists (34%) had fully retired at the age of 59.5 years; and significantly more female GPs than male GPs had retired (63% and 50%, respectively) [4]. The issue is multifaceted, influenced primarily by financial incentives and increasing demands, both patient and administrative.

An NIHR-funded scoping review conducted in 2018 revealed that GPs were being penalised financially through high taxes if they continued to contribute to the NHS pension system [3]. Other factors, either directly affecting early retirement or associate with dissatisfaction with General Practice in the UK, identified from the scoping review and research published since 2018, included:

- Excessive workloads [3, 5-7]
- Work-related stress or poor health [3, 5, 6, 8]
- Concerns regarding fear and litigation risk [9]
- Concerns about the administrative and emotional burden of medical revalidation [10]
- Job dissatisfaction [5-7]
- Poor work-life balance [5]
- Feeling pessimistic about the future for GPs [3, 8, 9]
• Being in a financial position that could support early retirement [3]

Of note, interviews with GPs revealed three key sources of stress and distress [11].

• The emotional work associated with managing patients’ psychosocial needs, as well as abusive or confrontational patients
• A practice culture characterised by collegial conflict, bullying, and isolation and a lack of support
• Work role and demands, specifically noting sources of stress associated with a fear of making mistakes, managing complaints, appraisal & revalidation, Care Quality Commission inspections, and financial risks for partners.

Additional feedback from active physicians affirmed our principal findings that the work of a GP has become increasingly stressful and that for many their financial situation means that it is not necessary for them to keep on working. They detailed “work being dumped from hospitals onto general practice”, the frequency of the appraisal and revalidation process, the unsustainable workload, and for many GPs in their mid-50s they have already reached their maximum pension. Furthermore, while related financial issues include tax changes introduced by HM Treasury has meant that many medical consultants reaching or surpassing the £110,000 a year threshold have received large tax bills, resulting in being paid less for doing more work.

Strategies with the potential for improving GP retention nearing retirement age

Mitchell et al.’s [3] and subsequent studies have identified strategies that may have the potential to improve retention of GPs nearing retirement. However, we found no substantive evidence of evaluation regarding an assessment of whether strategies resulted in a significant reduction in the rate of GPs leaving practice.

Based on the findings above regarding the factors related to early retirement, strategies that may have the potential to increase GP retention, particularly those nearing retirement should focus on the following:

Key Recommendations

• Reform of the NHS pension scheme
• Reduction in workload demands – both patient and administrative
• Mental health support for GPs

GPs wanted protected pension rights [3] with active physicians detailing to us that they want reform and removal of tax penalties that incentivise early retirement and a reduction in workload.

GPs would like greater control over their workload, with the ability to reduce their hours worked [3]. They would like to reduce the administrative burden which would protect face-to-face patient contact. Such changes could include using administrative staff for tasks such as correspondences and prescriptions [3]. Other policies that would be welcomed included the enabling of flexible working (e.g. portfolio careers, or support for ‘programmed health care activities’ to allow GPs to work across several GP practices) [12] and improved change management skills [3]. Practices that are supportive of an improved work-life balance would be agreeable, such as interventions aimed at tackling high GP workloads (e.g. recommending a maximum number of consultations per GP per day, and/or offering longer consultation times per patient [12]. Such schemes could also be supplemented through national or regional campaigns to manage patient expectations of GP care capacity [12].

Mitchell et al. identified the need for greater consideration of the health and well-being of GPs, and the wider practice [3]. Consultations with physicians suggested that stress may well be reduced through either
a reform or scrapping of appraisal and revalidation, which was viewed as a tiresome and ineffective process. Locke & Lees (2020) conducted a literature review of interventions to reduce stress in physicians more broadly. They found evidence of: (1) mindfulness-type, (2) coping and solutions-focused, and (3) reflective groups style interventions in helping physicians deal with stress [13]. Underdahl et al. (2018) advocated for an improvement in resilience to reduce physician burnout. The authors cited a novel study that delivered six workshops with interactive presentations and role-playing activities designed to strengthen coping mechanisms such as setting goals in frustrating situations, solving problems, managing stress, regulating negative emotions, and communicating effectively in suboptimal scenarios [14].

Other strategies that might have a positive impact more broadly on GP retention are the ability for GPs to maintain their job interest through: (1) developing a portfolio career or a sub-specialisation, (2) support for programmed healthcare activities, and (3) the ability to work across several practices [3, 12]; as well as, (4) access to a dedicated occupational healthcare services, and/or peer support schemes [12]. Practice-level intervention that have been deemed appropriate included support for GPs returning to work following a career break, the development of mechanisms for strategically planned exits for retiring GPs [12]. Improved signposting of treatment to patients may have promise in reducing GP burden, through practice reception staff, websites and other professionals [3]. Other ideas with promise, though currently lacking in evidence, welcomed by GPs included: developing the practice team, increasing patient self-care (e.g. patient managing a cold), and social prescribing [3]. The ‘GP Career Plus’ pilot was cited in Mitchell et al’s review, which has a stated aim of improving GP retention, however, we were unable to find any reporting or evaluation of this scheme [3].

Additionally, Mitchell et al. identified interventions that do not work, which should be avoided. These included: new consultation types, reducing ‘did not attends’ and personal productivity [3].

**GP recruitment in rural areas**

A shortage of GPs is often geographically patterned and frequently most pronounced in rural areas. This creates unequal access to health services and is associated with health inequalities. As the Department of Health and Social Care is committed to reducing health inequalities, it is important to review the initiatives undertaken and their effectiveness in order to inform policy.

Understanding the factors influencing a physician’s choice to practice in a rural location is critical for informing strategies to increase their numbers in such settings. A systematic review on the reasons for recruitment in rural or remote areas in the US found that the strongest predictor was growing up in a rural area. This was due to the fact that physicians require a particular skill set to treat a diverse range of conditions within their communities and perform a wide variety of procedures, often without specialised training [15]. GPs in Australia are offered a range of non-financial (such as training schemes) and financial incentives to practise in rural and remote areas. This additional funding is made available to most non-metropolitan practices, with the amount of funding increasing with the remoteness of the location of the practice [16].

To assess the impact of a financial incentive, a recent evaluation of the Scottish Targeted Enhanced Recruitment Scheme (TERS), offering a £20,000 payment to GPST trainees to accept a specific post, found that only 21% of the respondents were willing to train in an alternative location that was geographically close to their first preference [17]. In comparison, the level of financial compensation for Australian GPs depends on the remoteness of the area, ranging from 37% to 130% of the annual earnings [16]. However, Lee and Cunningham (2019) indicated that there are ethical considerations about using the TERS payment for medical staff who are relatively well paid compared to other health-care professions. The amount spent would have provided resources for the training of advanced nurse practitioners and other clinical staff.
The issue of recruitment and retention of GPs in rural areas is complex. Multi-dimensional approaches to recruitment may be more successful than those relying on financial incentives alone, as other lifestyle or personal values are highly influential [15]. Locations of family, partner and spouse were commonly reported factors that were prioritised over substantial financial incentives to accept a post in a rural location [17]. Similarly for physicians in Norway, important recruitment factors for attracting health staff to remote areas included the opportunity to control their working hours, professional development and a preference for larger practices, and other non-financial incentives such as paid vacations, assistance with finding their spouse employment and child care [18].

**Behavioural Insights**

Behavioural insights often refer to the nudge (decision architecture) perspective. Such approaches focus on our automatic, unconscious processes, as opposed to conscious decisions. This is distinct from the wider subject of behaviour science which is concerned with human actions. Rather than aiming to help individuals to become more rational in their decision-making, the nudge perspective focuses on ways of configuring options to take account of human irrationality, i.e. essentially, it advocates policy intervention that makes changes to the context in which individuals make decisions (so that they make better decisions), rather than attempting to change how individuals feel about/react to contexts. To this extent from a theoretical perspective there is limited impact regarding reducing the rate of early retirement in GPs, as the choice to retire is a conscious and not automatic process.

The number of studies is minimal, and the evidence of their effect is modest. We did not identify any specific studies relating to the application of nudge-style interventions. However, given that job stress is a significant factor found to influence early retirement among GPs, Locke & Lees (2020) detailed a number of interventions that may be successful to help doctors deal with stress [13]. These included:

**Mindfulness-type interventions**

Calming physiological effects achieved through mindful awareness, meditation, relaxation and yoga exercise. Such interventions require high levels of organisational resources.

**Coping and solution focused**

Adoption of positive coping strategies such as problem solving or seeking social support, and behaviour change, requiring lower levels of organisational resource.

**Reflective groups**

Support of colleagues, sharing concerns and learning new techniques [13].

Whilst not specific to the health sector Weyman et al. (2012) produced a report for the Department of Work and Pensions on behaviour change interventions that targeted extending working life [19]. They reported that there are strong social norms amongst both employers and employees surrounding retirement at and before State Pension age. There is some evidence that a significant proportion of individuals would be positively disposed to extend their working lives, typically by a year or two, if work was configured in an attractive fashion, principally part-time and/or flexible [19].

Additionally, Weyman et al. detailed that people are more disposed to reacting to options they are presented with, e.g. by employers or by Government, in terms of pensions choices over their date/manner of retirement, i.e. most are passive rather than active decision-makers [19]. This suggests that situational influences may play a role in decision-making. People are susceptible to an array of contextual influences (nudges), some of which may motivate early withdrawal from work, while others may encourage working longer. In their review, Weyman et al. noted that one way to nudge individuals is to reduce ‘choice
When focusing on the decision to extend working life the value of channelling choice is relevant. There is evidence that policy nudges may advantage different groups in different ways (some groups may benefit more than others due to their level of socio-economic or educational status). For example, nudge will not influence the choices of these two groups equally: a group of workers who may feel that they do not have the commitment to manage their own portfolio and another group of workers who may feel that they have the commitment to manage their own fund portfolio but have insufficient knowledge. It is also important to recognise that nudge may have very little impact on those who have little autonomy and choice over their access to work and working arrangements [19].

Further research
The evidence gathered for this Policy Brief was rapid in nature and not systematic in terms of having strict inclusion and exclusion criteria for study selection, therefore, it should not be considered exhaustive. To our knowledge, while there are numerous studies that seek to understand the current professional climate in which GPs work, there is no evaluation of subsequent intervention that may increase the average age of retirement. However, the decision to retire is complex and not taken lightly. While a GP’s financial position is supportive of making the choice to retire, it is unlikely the factor that triggers such thoughts.

An increasing sense of job dissatisfaction is clearly playing a role. Both from the literature and having spoken with physicians further work to understand how reform or removal of the appraisal and revalidation process would be welcomed. There is need to have studies that evaluate interventions that aim to reduce GP workload, particularly those that could reduce their time spent on administrative tasks, such as skills training to the wider GP surgery workforce. But we need to better understand how improved methods to signpost patients to the appropriate service or supportive of patient self-care, as well as social prescribing could reduce the current pressures on primary care. However, suggestions about how to help retain GPs within the active clinical workforce need to address issues covering individual, practice and organisational levels. It is important to tailor incentive packages to the characteristics of the job and also consider the broader organisational, financial and political context in which these incentives will be implemented.

The mental health of GPs should also be considered. Further research to better understand how stress felt by GPs can be alleviated. While this is important, if efforts are not made to concurrently to reduce workload, i.e. the underlying mechanisms that manifest in poor GP mental health, then such problems will only persist.

Acknowledgements
We would like to thank the expert contributions of Professor Martin Roland and Dr Samuel Parker, as well as Irene Soulsby a PPI independent representative to the PRU in Behavioural Science.

Research Team
This report was authored by: Professor Falko Sniehotta (unit Director), Professor Mike Kelly, Professor Ivo Vlaev, Dr Vivi Antonopoulou, Dr Louis Goffe, Dr Aikaterini Grimani and Dr Carly Meyer.

Disclaimer
The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care. This report is independent research commissioned and funded by the National Institute for Health Research Policy Research Programme. The views expressed in this publication are those of the author(s) and not necessarily those of the NHS, the National Institute for Health Research, the Department of Health and Social Care or its arm’s length bodies, and other Government Departments.
This project is funded by the National Institute for Health Research (NIHR) [Policy Research Unit in Behavioural Science (project reference PR-PRU-1217-20501)].

References
