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UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL, HUMAN AND MATHEMATICAL SCIENCES

Social Sciences

**The older health and social care labour force in England: characteristics, work
patterns and policy implications**

by

Alison Wadey

Thesis for the degree of Doctor of Philosophy in Gerontology

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UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF SOCIAL, HUMAN AND MATHEMATICAL SCIENCES

Doctor of Philosophy in Gerontology

THE OLDER HEALTH AND SOCIAL CARE LABOUR FORCE; CHARACTERISTICS, WORK
PATTERNS AND POLICY IMPLICATIONS

By Alison Wadey

Along with population ageing, the health and social care labour force is also growing older. However, despite evidence of the characteristics and factors that relate to older workers in general, there is a dearth of empirical evidence relating specifically to the older health and social care labour force (aged 50 years and over).

With rising longevity, there is increasing demand for efficient and effective health and social care provision that is delivered by a skilled, experienced and capable labour force. To manage such demand, the Government introduced measures under the extending working lives (EWL) agenda to encourage older workers to remain in work for longer. These measures included the removal of the default retirement age, increases to the State Pension Age (SPA), and the development of anti-discriminatory legislation.

This thesis furthers our understanding of the characteristics of this labour force aged 50 years and over, and establishes factors that are associated with the decision to work part-time at and beyond the SPA. Using merged cross-sectional data (2009-2013) from the Labour Force Survey (N=10,123), descriptive and multivariate (binary logistic regression) analyses were conducted.

The results indicate that the older health and social care labour force comprised individuals aged 50 and 84 years and that the majority (86 per cent) were women. Among this labour force, 48 per cent worked as health and care professionals and 52 per cent were employed as health and care support staff. The findings show that the likelihood of working part-time increased with increasing age. For example, among individuals aged 65 to 69, and those aged 70 years and over, the odds of working part-time at and beyond the SPA were 2.26 and 3.34 times respectively the odds among those aged 60 to 64. Ethnicity, marital status and earnings were also found to be significantly associated with working part-time at the SPA and over. Under the auspices of EWL, these results have important implications for national and organisational policy development, and for the development of effective workforce planning in health and social care.

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DECLARATION OF AUTHORSHIP

I, Alison Wadey

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

The older health and social care labour force: characteristics, work patterns and policy implications

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
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7. [Delete as appropriate] None of this work has been published before submission [or] Parts of this work have been published as: [please list references below]:

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Definitions and Abbreviations

ACAS	Advisory, Conciliation and Arbitration Service
AHP	Allied Health Professional
AIHW	Australian Institute for Health and Welfare
APA	American Psychological Association
APS	Annual Population Survey
BHF	British Heart Foundation
BIS	Department for Business, Innovation and Skills
BMC	Biomedical Central
BME	Black and Minority Ethnic
CfWI	Centre for Workforce Intelligence
CPD	Continuous Professional Development
CROW	Centre for Research into the Older Workforce
DH	Department of Health
DRA	Default Retirement Age
DTI	Department of Trade and Industry
DWP	Department for Work and Pensions
EEA	European Economic Area
EHRC	Equality and Human Rights Commission
ESA	Employment and Support Allowance
ESDS	Economic and Social Data Service
ESRC	Economic and Social Research Council
EU	European Union
EWL	Extending Working Lives

FTE	Full-Time Equivalent
GDP	Gross National product
GSCC	General Social Care Council
HCHC	House of Commons Health Committee
HCPC	Health and Care Professions Council
HEE	Health Education England
HLE	Healthy Life Expectancy
HM Government	Her Majesty's Government
HM Treasury	Her Majesty's Treasury
HSCIC	Health and Social Care Information Centre
HSE	Health and Safety Executive
IFS	Institute for Fiscal Studies
ILC-UK	International Longevity Centre – United Kingdom
ILO	International Labour Office
JRF	Joseph Rowntree Foundation
LA	Local Authority
LE	Life Expectancy
LFS	Labour Force Survey
LLL	Lifelong Learning
MAC	Migration Advisory Committee
NHS	National Health Service
NIACE	National Institute of Adult and Continuing Education
NIDCD	National Institute on Deafness and Other Communication Disorders
OBR	Office for Budget Responsibility

OECD	Organisation for Economic Co-operation and Development
Ofqual	Office of Qualifications and Examinations Regulation
OH	Occupational Health
OHE	Office of Health Economics
ONS	Office for National Statistics
OT	Occupational Therapist
PBS	Points Based System
POST	Parliamentary Office of Science and Technology
PPI	Pensions Policy Institute
RCM	Royal College of Midwives
RCN	Royal College of Nursing
RCP	Royal College of Physicians
SOC	Standard Occupational Classification
SPA	State Pension Age
TAEN	The Age and Employment Network
TSO	The Stationery Office Limited
UK	United Kingdom
UN	United Nations
USA	United States of America
WHO	World Health Organization
WRT	Workforce Review Team
WRVS	Women's Royal Voluntary Service

Chapter 1: Introduction

1.1 Introduction and Rationale

Over the next 50 years, all Organisation for Economic Co-operation and Development (OECD) countries, of which England is one, will experience an increase in the proportion of older people in their populations and a decrease in the proportion of those of working-age (16 to 64 years) (OECD, 2006). While increasing longevity is a cause for celebration and has benefits for individuals and society, there are still challenges to be faced, such as securing adequate health and social care provision, and ensuring that individuals have sufficient finance to fund later life (Mayhew, 2009; Vickerstaff, 2010; ONS, 2012o). A ‘key consequence’ of the ageing population in England has been an increase in research and policy interest related to the older labour force (Loretto, 2010: 279).

In light of increasing longevity, it has been suggested that without the promotion of improved employment prospects for older workers (defined throughout this document as those aged 50 years and over), increases in the numbers of older workers exiting the labour market places ‘enormous pressure’ on public finance, through for example, reduced taxation and increased benefit provision (Loretto et al., 2005b; Pagán, 2011: 96). By improving employment prospects for older workers, the Government benefits from greater taxable capacity, whilst reducing the dependency of older people on the state (Zaidi and Fuchs, 2006). However, from the older workers’ perspective, issues such as health concerns and lack of access to flexible working opportunities (Porcellato et al., 2010), can reduce the incentive to remain in work in later life. Additionally, to consider remaining in the labour market in older age, older workers need to experience a level of job satisfaction, and be certain that they have the ability to complete their job effectively (Bound et al., 1999; Leversidge, 2013; Pagán, 2013).

In an effort to address the economic consequences of the ageing population, in line with European Union (EU) guidance, the Government of the United Kingdom (UK) developed a series of policy measures aimed at encouraging older workers to remain in work for longer; these are collectively known as the Extending Working Life (EWL) agenda (Pensions Commission, 2006a; Hedges and Sykes, 2009). Furthermore, Ilmarinen (2006: 362) posited that population ageing also challenges the ‘sufficiency and quality’ of health and social care services, and questioned the capacity of the health and social care sector in its ability to supply enough staff with relevant experience to cater for the needs of the increasingly ageing populous.

Chapter 1

With the ageing population, policy reform, and concern for health and social care services in mind, this research seeks to explore the characteristics of the older health and social care labour force in England, and to identify factors that are associated with their working pattern in later life. The results invite debate about the efficacy of the EWL agenda and requirements for workforce planning in relation to this specific labour force. To realise this aim, factors that influence older workers' employment decisions were established, and secondary analysis of the Labour Force Survey (LFS) (2009-2013) was completed.

Within this thesis, the older health and social care labour force (N=10,123) comprises occupations from the health care labour force as defined by the Health and Care Information Centre (HSCIC) (2014) and the social care labour force as defined by Skills for Care (2015). More specifically, this research places focus on the non-medical labour force captured by the Labour Force Survey (2009-2013), and includes nurses (n=3,091), the allied health professionals (AHPs) (occupational therapists n=119, physiotherapists n=111, speech and language therapists n=52, radiographers n=151, podiatrists n=111, health professionals n=215, therapy professionals n=312), nursing auxiliaries (1,500), social workers (n=673), care workers (3,355) and senior carers (n=433). Other health and social care occupations, such as doctors, dentists, ambulance and clerical staff, were excluded from the study due to differing pay scales and or comparable job roles in relation to direct patient care (HSCIC, 2014; Skills for Care 2015).

In this introductory chapter, themes that are important to the development of this thesis are explored. First, the notion of the ageing population in England is presented (Section 1.2). This provides the context for the development of Government reform, and establishes the importance of focussing on older workers within the health and social care labour force. Secondly, having considered the context for policy reform, key policies of the EWL agenda are described (Section 1.3). By establishing the background themes to the thesis, key questions that determine the structure and focus of the research are presented (Section 1.4). Finally, to conclude this introductory chapter, Section 1.5 provides a breakdown of the structure of the document.

1.2 The ageing population in England

The ageing of a population refers to the 'increase in the median age of the population and the increase in the number and proportion of older people in the population' (ONS, 2012n: 2). Over the last one hundred years, as in many other European countries, the population in England has grown older as birth rates have declined and life expectancy (LE) has risen. These developments, stimulated by the large number of births in the period following the Second World War and into the 1960s baby boom, have contributed to a changing population structure (Danson, 2007;

Cracknell, 2010; ONS, 2012j; 2012l). Although the fertility rate has been increasing in England since 2001, it is still below the replacement level of 2.1 children per woman, which is 'the total fertility rate required for population to replace itself in size in the long-term' (ONS, 2012n: 2; 2012l).

1.2.1 Life expectancy and healthy life expectancy

LE can be defined as the average number of years an individual can expect to live (ONS, 2014f). In England, for the period 2011-2013, LE at birth for males was 79.2 years and for females it was 83 years, demonstrating an 8 year increase in LE for males and a 6 year increase for females since 1980-1982 (ONS, 2014h). An increase in LE has also been noted within the older population of England over the last 30 years. Among those aged 65 in 2011-2013, LE for a man was 18.5 years (compared to 13.1 years in 1980-1982), and for a women it was 21 years (compared to 17 in 1980-1982) (ibid.). Moreover, LE for those aged 85 has also improved since the early 1980s, with men and women in England living around 1.5 years longer than their counterparts in 1980-1982 (ibid.). A combination of factors has contributed to the improvement in longevity and mortality rates, including progress with health and safety at work, medical and technological advances, such as the treatment of heart disease and stroke, and changes in lifestyle, such as smoking cessation and improved diet (Coggan et al., 2009; Mayhew, 2009; ONS, 2013b). However, while improved diet has decreased mortality compared to a century ago, more recent behaviour (for example, increased sugar intake and decreased physical activity), has resulted in increases in obesity levels which are subsequently contributing to the slowing of healthy life expectancy (HLE) (HSCIC, 2012; Popkin et al., 2012; WHO, 2015b). Nevertheless, in spite of these recent behavioural influences, it is expected that LE for both men and women will continue to increase in the foreseeable future (ONS, 2013b).

Health expectancies add a quality of life element to LE estimates, and HLE describes the number of years expected to be lived in good health throughout the life course (calculated using self-reported health measures) (POST, 2006; ONS, 2014d). As LE is increasing in England, to adequately inform policy for the provision of suitable health and social care, it is important to establish the length of time an individual spends in good health or poor health. In England (2009-2011), at birth, men had a HLE of 64.7 years and women had a HLE of 66.4 years, and at age 65, men could expect to live for a further 10.9 years in good health, and women for another 12.2 years (ONS, 2014d). In England (2009-2011), compared to men aged 65, in absolute terms women of the same age live longer in good health; however, as men have a shorter LE than women, on average they spend a shorter proportion of their life in not good health (ibid.). Nevertheless, despite the concerns raised with regard to increases in obesity, these data indicate an

improvement in HLE for both genders over the last 10 years (HSCIC, 2012; WHO, 2015b).

Furthermore, for babies born between 2009-2011, males are expected to live 4.1 years longer and females 3.9 years longer in good health, than those born during 2000-2002 (ONS, 2014d). Overall, the trend suggests that men and women in England can expect to spend 'longer periods of their longer lives in very good or good health' (ONS, 2012f: 12).

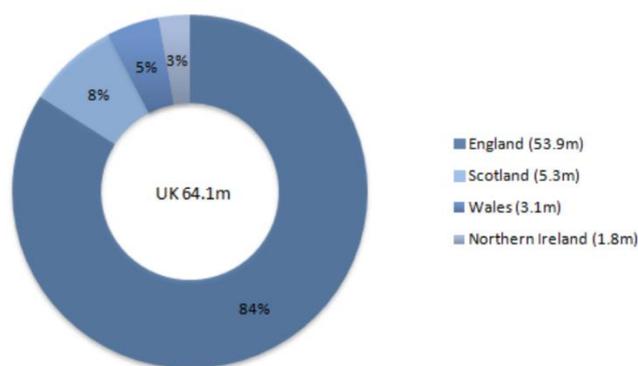
In setting the scene for this research, to continue our understanding of the context of the development of the EWL agenda, and to establish the importance of focussing on older workers in the health and social care labour force, there was a need to ascertain the population structure in England. Thus, having established that average LE and HLE is increasing in England, in the following section, focus is turned to the present population structure and changes expected in the foreseeable future.

1.2.2 The population structure in England

The results from the UK Census of 2011 showed that England had a population of 53,107,000, of which 51 per cent were female and 49 per cent were male (ONS, 2012b; g). Additionally, between 2001 and 2011, the number of births per year increased while the number of deaths decreased (ibid). Furthermore, as well as changes in the overall population size, the age structure of England's population had also shifted since the previous Census of 2001 (ibid.).

The UK comprises four countries, of which England forms the most sizeable geographical area, and with 84 per cent, the largest population (Figure 1.1) (ONS, 2014a).

Figure 1.1 Population estimates for the UK (Mid-2013)

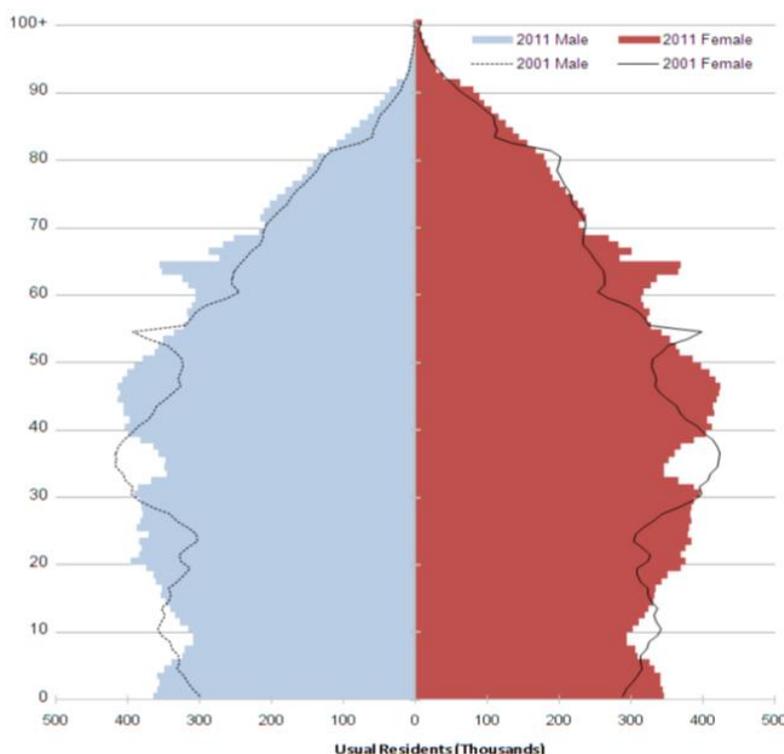


Source: ONS (2014a: 3)

Although the population pyramid shown in Figure 1.2 presents data for England and Wales (as a pyramid solely for England was not available), as Wales comprises just 5 per cent of the overall UK population (Figure 1.1), the pyramid can be used to represent the general population structure of

England. The overall shape reveals an ageing population, and can be seen by comparing the shaded pyramid (2011) with the area within the dark line (2001), where for example the proportion of individuals aged 85 and over is larger in 2011 than in 2001 (ONS, 2012a; b). Patterns of birth, death and migration determine the population size and its age composition (ONS, 2012a), and the high birth rates that occurred following the Second World War and in the subsequent baby boom of the 1960s, are evident in Figure 1.2 where in 2011 larger proportions of men and women in the age groups of 63 to 64 and 40 to 49 are noted. Furthermore, the group of 5 to 15 year olds (2011), demonstrates a reduction in births at the beginning of the twenty-first century, with the 0 to 9 age group reflecting a subsequent increase in birth rates (ONS, 2012a). Additionally, towards the top of the pyramid, where females outnumber males, the higher life expectancy of females is visible (ONS, 2012b; o). According to the ONS (2012a: 15), in England '45 per cent of the growth between 2001 and 2011 was due to there being more births than deaths' (whereas, in Wales it was 8 per cent).

Figure 1.2 Population 2001 and 2011 by age and gender (England and Wales)

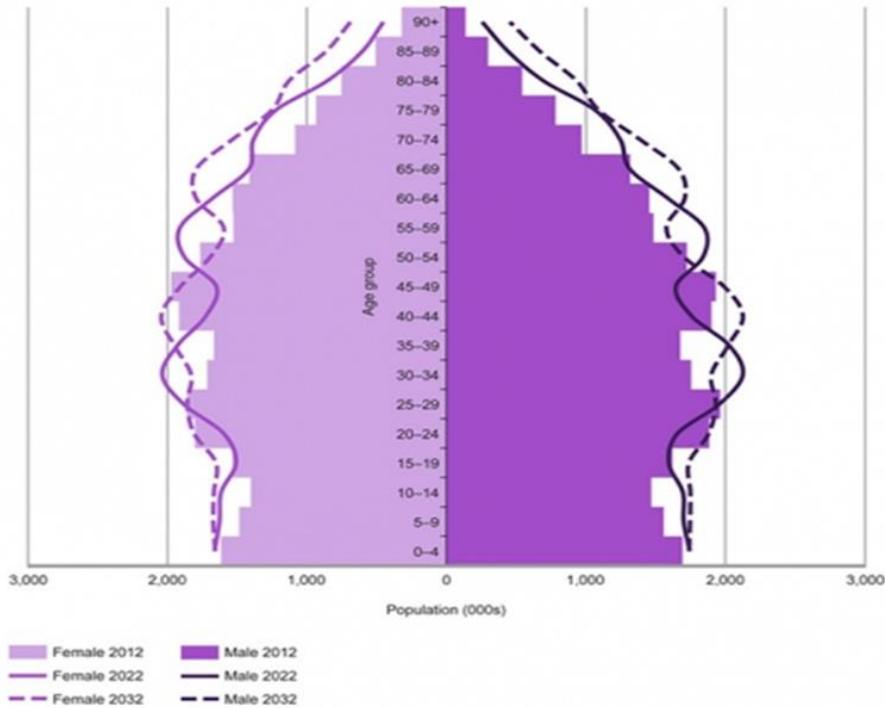


Source: ONS (2012a: 11)

The median age of the population in England had risen to 39.5 years by 2010, demonstrating an increase of 3.9 years since 1985 (ONS, 2012a). Moreover, it has been estimated to increase to 41.9 years by 2035 (ibid.). Projections suggest that the proportion of individuals aged 65 and over will increase from 16 to 23.6 per cent between 2011 and 2021, and continue to rise further to 51 per cent by 2030 (ONS, 2012g). Additionally, in England from 2012 to 2032 (Figure 1.3), 'the

population of 65 to 84 year olds and the over 85s are set to increase by 39 and 106 per cent respectively, whereas 0 to 14 and 15 to 64 year olds are set to increase by 11 and 7 per cent respectively' (The King's Fund, 2015: 1).

Figure 1.3 Projected change in age structure in England (2012-2032)



Source: *The King's Fund (2015)*

1.2.3 The impact of the ageing population

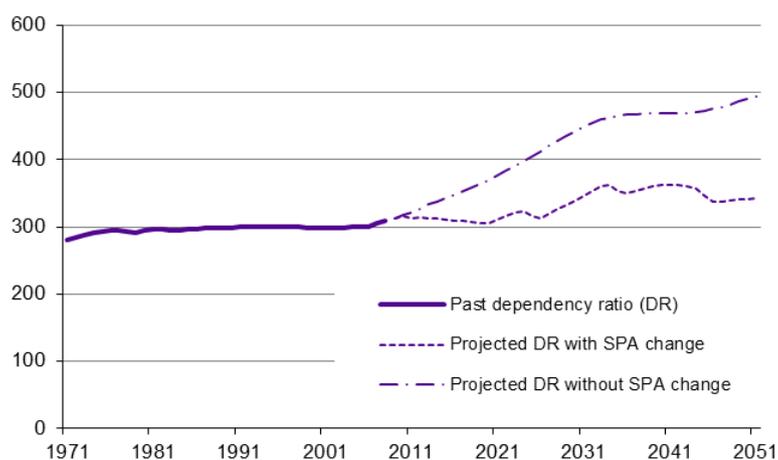
The King's Fund (2012) acknowledge that the impact of population ageing on health and social care services is difficult to predict. They posit that the ageing population 'may lead to increased costs' or 'may create new economic and social opportunities' (ibid.: 1). It has also been suggested that the annual cost of health and care services is greater for older individuals, that larger proportions of older people in the future will be living on their own, and the proportion of older people requiring care will rise by over 60 per cent by 2032 (Pickard, 2015; The King's Fund, 2015).

If existing working patterns continue, the old-age dependency ratio, that is the number of individuals over the State Pension Age (SPA) (currently 60 to 62 for women and 65 for men) for every 1,000 individuals of working age is liable to increase (OECD, 2007; ONS, 2012I; The King's Fund, 2015).

Due to increases in LE and decreases in fertility rates, the proportion of individuals aged 65 years and over is increasing, creating a higher old-age dependency ratio, where a disparity in the

number of working people to non-working people is observed (Ingham et al., 2009; The King's Fund, 2015). Moreover, as Figure 1.4 suggests, although the old-age dependency ratio is projected to fall with increases to the SPA, it is expected to rise again after 2021 (ONS, 2011c). A high dependency ratio is symptomatic of the 'dependency burden' on the working population, as those in work (via taxation and care giving) support health, education, benefits and pension provision of those not in work (Ingham et al., 2009: 223).

Figure 1.4 Old-age dependency ratio per 1,000 individuals of working age in the UK (1971-2051)



Source: ONS (2012): 2-3)

However, more optimistically, increasing longevity does not have to suggest increased dependency. As well as generally becoming healthier, increasing numbers of individuals aged 65 and over remain in work, supporting themselves from an accumulation of savings and pension contributions; thus reducing demands for health, social care, and benefits (Ingham, 2009). Additionally, it has been estimated that those aged 65 years and over contribute £40 billion to the economy through tax contributions, spending, volunteering and charitable donations (WRVS, 2011; The King's Fund, 2015).

Nevertheless, with the rise in the numbers of 1940s baby boomers reaching retirement age, in addition to increasing longevity and declining birth rates, concern has been noted about the state's ability to support an increasing number of older people through adequate pension provision and social welfare (Tinsley, 2012). Ingham et al. (2009) suggested that in order to cope with the rising costs associated with increases in the old-age dependency ratio, such as decreased taxation income and increased pension provision, older workers should be encouraged to remain in the labour force for longer. Loretto et al. (2005b: 1) concurred, reporting that given the changes

to the population, workers aged 50 years and over will comprise an 'increasingly important' part of the workforce.

Living longer, as Vickerstaff (2010) reported, should be a cause for celebration rather than being seen as a problem. While accepting that longer working lives is a key initiative to enable the population in England to remain supported into old age, the implications for the older health and social care labour force are not clear. Investigation is required to determine the older health and social care labour forces' work patterns around the SPA, which can inform debate on whether current legislative measures in relation to later life working are adequate.

The notion of working longer is an important concept to address. Aside from state advantages gained from extending the working life, such as increased income from taxation, there are personal and social perspectives to be considered. The following section investigates the political impetus and justification for working longer and determines the implications of this debate for the older health and social care labour force.

1.3 The Extending Working Lives (EWL) agenda

Extending the working life beyond the official exit age (SPA) has become a necessity in England due to the changing structure of the population, increases to the age at which people can claim state pension and the current dearth of individuals' pension savings (Institute for Policy Research, 2012; PPI, 2012; Silcock, 2012). Moreover, 'to promote extending working life means providing opportunities for those who want to work longer' beyond the SPA (Strudwick and Kirkpatrick, 2013: 8).

The EWL agenda was borne out of a need to address the economic and social implications related to older workers leaving the labour force early (defined here as prior to the SPA), and has resulted in the Government giving priority to ways of encouraging older workers to remain in work for longer (Weyman et al., 2012). It is argued that from an economic perspective, extending the working life enhances the growth of the labour force, improves public finances by reducing the expenditure on retirement costs and increases public revenue via taxation (OECD, 2006; House of Lords, 2013). Silcock (2012) enhanced this argument, and suggested that there are also benefits for individual older workers as working longer can contribute to increased funds in retirement and reduces social isolation. The Department for Work and Pensions (DWP), having overall responsibility for strategy development for all areas of older worker employment, took up the mantle and outlined key policy initiatives that seek to encourage older workers to remain in work for longer. They include:

- influencing employer policies and practices relating to the employment of older workers;
- enhancing opportunities for older individuals to return to paid employment;
- encouraging employees to remain in paid employment for longer (Weyman et al., 2012).

These EWL policy initiatives have direct implications for the older health and social care labour force. Therefore, the following three sections address each of the key measures outlined and consider how they impact the older health and social care labour force.

1.3.1 Influencing employer policy and practice

One of the measures the Government implemented to encourage people to work for longer was to remove a barrier in the form of the Default Retirement Age (DRA). In 2006, the Employment Equality (Age) Regulations introduced the DRA, which enabled organisations to compulsorily retire older workers, either male or female, at the age of 65 (HM Government, 2006). However in 2010, following a judicial review, the Government took the decision to abolish it in favour of providing more choice to older workers as to when they exit the labour force (HM Government, 2011).

‘The Government believes that those who need or wish to work past 65 and are able to do so should not be denied the opportunity to benefit from working’ (DWP, 2010b: 8).

In addition to removing the main age barrier to working beyond 65 years, the Equality Act 2010 replaced all existing anti-discrimination legislation with one all-encompassing Act (HM Government, 2010). In 2012 new provisions of the Act became active; accordingly direct and indirect age discrimination became unlawful when providing services and carrying out public functions. Thus, individuals are now legally protected from being discriminated against based on a range of characteristics such as age, gender, race and sexual orientation (EHRC, 2011; 2012; HM Government, 2013a).

From the perspective of the older health and social care labour force, the abolition of the DRA represents a culture change for health and social care organisations and shows that the Government, in some part, is accepting that reform is necessary in light of the ageing population (BIS, 2011b). With this major obstacle to working longer eliminated, determining the patterns of work leading up to and beyond the SPA for the older health and social care labour force, will enable debate for the development of policy to support them to extend their working lives.

1.3.2 Enhancing opportunities for older individuals to return to paid employment

The Government recognises the need to 'recruit and retain the skills and experience of older workers', and is reforming the welfare system with an aim of encouraging people back into paid employment (HM Government, 2013c; DWP, 2014a: 35). The *Social Justice Report* (HM Government, 2012c) placed particular emphasis on promoting work as a sustainable route out of poverty, a key factor for financial security in retirement for the older health and social care labour force (DWP, 2014a: 12).

The introduction of stricter eligibility criteria for those who claim financial support via the Employment and Support Allowance (ESA), which replaced the Incapacity Benefit and Disability-Related Income Support in 2008, aims to reduce the number of claimants by around 110,000 by 2018 (DWP, 2008). Essentially those who are deemed able to work will be encouraged to re-enter the labour force, thus contributing to the economy rather than being supported by it. This measure is not without its detractors; due to reduced self-confidence and potential health issues associated with being out of work, many individuals aged 50 years and over who do not fulfil the new criteria, may find attaining a job difficult (Padilla, 2011). Additionally, the Pensions Policy Institute (PPI) (2012) noted that there is a difference between being able to work and finding work, and Tinsley (2012) reported that the unemployed over-50s are less likely than other age groups to find work. Furthermore, the Equality and Human Rights Commission (EHRC) (2010: 4) suggested that although extending working lives has attracted priority interest among policy makers, and the majority of older workers want to continue working in later life, 'little attention has been paid to creating the conditions to enable people to work beyond retirement age'.

With an aim of encouraging individuals back to work following a sickness absence, in 2010, the Government introduced the *Statement of Fitness for Work* or fit-note. The fit-note enables individuals and their employer to discuss ways in which necessary changes to the type of work or the work environment can be made to support the return to work (DWP, 2013a). In evaluating the introduction of the fit-note, the DWP (2013a) reported that the majority of the survey respondents (N=1,398) agreed that the fit-note was helpful, and around half agreed that it facilitated discussions with their employer to enable changes to assist their return to work. Given the physical and mental challenges of their job, for the older health and social care labour force, the ability to negotiate a phased return to work, and improved working practices (Chenery, 2013), may act as a positive driver in their decision to remain in work.

From the perspective of the older health and social care labour force, the majority of these reforms will affect those aged under 65. However, those aged 65 and over, who work in a low-paid job (for instance, nursing auxiliaries and support workers), will no longer be able to claim

Working Tax Credit, which may impact on the financial incentive to remain in work (Age UK, 2013). However, low-paid workers can still claim the state pension, which to some extent will offset the reduction in tax credits (HM Government, 2015).

1.3.3 Encouraging employees to remain in paid employment for longer

Successive Governments have encouraged working into later life, and further reform is being implemented to make it easier to work beyond the SPA (Padilla, 2011; DWP, 2014a). Of the reforms introduced to encourage extending working life, as they will affect all who are considering retirement, changes to the SPA will arguably have the greatest impact on the older health and social care labour force.

The introduction of the SPA (65 for men and 60 for women) in 1948 occurred when the average LE of a man aged 65 was 12 years and for a woman 15 years (OHE, 2013). As discussed, by 2010, LE for a man aged 65 had increased to 18 years and for a woman to 20 years; while for both genders, the average LE is projected to increase further (ONS, 2012f). The DWP (2010c) reported that the costs incurred with this rise in longevity, for example state pension and welfare support, can be estimated at £100 billion per year. Moreover, if the SPA remains static, the proportion of life spent in receipt of the state pension would continue to rise, which in turn, increases the cost to the state (PPI, 2012). In reality, the effective age of withdrawal from the labour market differs from the SPA for both genders. Between 2004 and 2010 the average age of retirement rose for both men and women; from 63.8 to 64.6 years for men and from 61.2 to 62.3 years for women (ONS, 2012d). Nevertheless, despite the increases in the average age of retirement, the retirement pattern remains constant; men still retire before the SPA of 65, and women retire after the SPA of 60 (ibid.).

Having simulated the effect to the labour force of the SPA remaining static (60 for women, 65 for men), Barrell et al. (2011) argued that by 2030 the labour force would be 7.1 per cent smaller (3 million individuals) than currently projected, with significant negative effects to the Gross National Product (GDP). To compare, they proceeded to simulate the impact of increasing the SPA by 1 year, which subsequently increased the labour force population, and concluded that by increasing the SPA by even 1 year, the impact over time would be to reduce Government spending, increase the receipt of taxes and increase the real level of GDP (ibid.). Silcock (2012: 231) concurred, and suggested that rises to the SPA are not only advantageous to the state, but for the individual older worker 'a rise in [the] SPA could actually result in an increase in income both before and after [the] SPA'.

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In response to these data, and taking advice outlined by the Pensions Commission (2006b), the Government is now phasing-in rises to the SPA for both genders. In 2012, the SPA for women rose from 60 to 61 and will continue to increase until reaching that of men (65 years) in 2018. A gradual rise in the SPA for both genders will then take place, bringing the SPA to 67 years by 2028, and it is anticipated that the rise to 68 years will occur by 2046 (HM Government, 2007, 2014b; c).

In respect to the older health and social care labour force, and in light of the planned increases to the SPA, concern has been noted with regard to being able to complete the tasks required within the occupations involved with health and social care. The Royal College of Midwives (RCM) (2012) reported that 91 per cent of their labour force disagreed with proposals to work until age 68, with trepidation surrounding the notion of meeting the physical and mental demands that the profession demands. Leversidge (2013) continued the debate on behalf of midwives, and explained that in the 2015 NHS Pension Scheme (NHS Employers, 2015a), the normal age of retirement will equal that of the SPA, whereas older National Health Service (NHS) workers' pensions will reduce for every year they retire early. Therefore, even though disability benefits can be claimed by those who are incapable of working longer, increases to the SPA may result in a lower income until the adjusted SPA is reached (Silcock, 2012). Additionally, older health and social care workers with similar job role demands, such as nurses, occupational therapists and care workers, may have similar unease about extending their working life. In 2012, a tripartite review commenced to address the impact of working longer in the NHS. The Department of Health (DH), NHS Employers and the NHS trade unions will review available evidence to establish the implications of the EWL agenda for the NHS, and when published, will identify organisational measures required to support working longer in the NHS (NHS Employers, 2015b).

The challenge for policy makers in the face of the increasing average age of the labour force, and the need for workers to remain in employment into later life, is to support those older workers who wish to continue working. Changes to legislation alone will not encourage individuals to work for longer; changing attitudes to the older worker and access to continued support are also required (Loretto, 2010; Padilla, 2011; Walker, 2013).

1.4 Research questions

This research offers unique insights into the composition of the older health and social care labour force in England. By exploring their demographic, socioeconomic, health and employment characteristics, the implications of the EWL agenda and the need for future workforce planning can be considered.

The study therefore investigates the following research questions:

1. What are the characteristics of the older health and social care labour force in England that are associated with later working life employment decisions and how do these compare to the general labour force of the same age?
2. To what extent do the demographic, socioeconomic, health and employment characteristics of the older health and care professionals and the older health and care support staff differ?
3. Among the health and social care labour force aged at the SPA and over, what factors are associated with working part-time and what are the differences between the genders?

These questions are addressed using a range of indicators extrapolated from the literature review (Chapter 2), summarised in the conceptual framework (Section 2.7) and described in the methodology (Chapter 3). Chapters 4, 5 and 6 present the results of the analysis, and Chapter 7 discusses the findings in relation to the research aims, research questions and implications for policy. Finally, Chapter 8 provides concluding remarks, addresses the limitations of the research, and suggests recommendations for further research.

With a brief discussion of each chapter, the following section provides further detail regarding the structure of the thesis.

1.5 Structure of the thesis

By outlining the phenomenon of the ageing population (Section 1.2), and the policy initiatives to encourage longer working lives (Section 1.3), Chapter 1 provided the premise and rationale for investigating the older health and social care labour force in England.

Chapter 2 provides a critical literature review, and focuses on establishing evidence pertaining to the older health and social care labour force. Although evidence relating specifically to this occupation group is limited, by using evidence from the wider labour force as a guide, factors associated with employment and work-patterns in later working life are considered. A conceptual framework derived from the literature is presented, and used to model the empirical analysis discussed in later chapters. The literature review concludes by discussing the contribution of this research, and outlines the limitations in the available literature.

Chapter 3 discusses the methodological approach to the research, and the research design and study population is introduced. Following preliminary analysis, to ensure an adequate sample population, five years from the LFS were identified (2009-2013), and were merged into one

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dataset to be used in the analyses (see Appendix B, Table 8.7). In the latter half of this chapter, the method of analysis is described and justified, along with the details of the bivariate and multivariate methods used.

Chapter 4 reports the results of the descriptive and bivariate cross-tabulation analysis. The comparisons of the demographic, socioeconomic, health and employment characteristics of the older health and care labour force and older general labour force (2009-2013) are presented, and commentary on observed differences that may have policy implications is provided for discussion in subsequent chapters.

Chapter 5 develops the results from Chapter 4, and reports the findings from the descriptive and bivariate analysis of the demographic, socioeconomic, health and employment characteristics of the older health and care labour force when divided into selected occupation groups; the health and care professionals, and the health and care support staff.

Chapter 6 develops our understanding of the older health and social care labour force further by using multivariate analysis (binary logistic regression) to determine factors associated with the likelihood of working part-time at the SPA and beyond.

Chapter 7 discusses the results reported in Chapters 4, 5 and 6, and considers the implications in relation to the literature identified in Chapter 2.

Chapter 8 revisits the aims of the thesis and related research questions, and discusses potential policy implications of the key findings of the study. Limitations of the study and recommendations for further research are also included for consideration.

Chapter 2: Literature Review

2.1 Introduction

This literature review provides an overview of the evidence relating to the older health and social care labour force in England, with a particular emphasis on work patterns in later life. Although the review is focussed on the older health and social care labour force, due to the paucity of evidence concerning this group, much of the review relates to older workers in general.

Nevertheless, the topics reviewed have relevance to the older health and social care labour force. A variety of online databases such as AgeInfo, Web of Knowledge and Ingenta Connect were searched using key terms to identify relevant literature. Scientific journals were also an important source of information, most notably *Ageing & Society*, the *Journal of Social Policy* and the *Journal of Advanced Nursing*. Additionally, specific agencies were targeted, including the Department for Work and Pensions (DWP), the Centre for Workforce Intelligence (CfWI), and Skills for Care.

The literature review is divided into eight sections, with Sections 2.2 through 2.7 forming the body of the review. Section 2.8 provides a conceptual framework derived from the literature, and was used to guide the research questions, rationale and research design. Finally, Section 2.9 summarises the key themes from the literature and notes its limitations.

2.2 Older workers' labour market participation

The participation of workers aged 50 years and over is 'at the forefront of the socio-political agenda in the UK' (Porcellato et al., 2010: 86). As outlined in Section 1.3, the EWL agenda has been borne out of a social, economic and political need to encourage older workers to remain in work for longer. In recent decades, the phenomenon of early-exit and early-retirement from the labour force has over-shadowed the options for employment for those aged 50 years and over (Lissenburgh and Smeaton, 2003; Porcellato et al., 2010). However, with an ageing population and a changing demographic structure, new employment patterns that place focus on the importance of older workers are necessary (Gannon and Roberts, 2011). To promote new patterns of work in later working life, i.e. age 50 and over, including up to and beyond the SPA, an understanding of current trends and factors that affect decision-making around employment in older age is required. In the following sections, the concepts of retirement, early retirement and transitions from work to retirement will be critically analysed, with a view to providing background for the introduction of flexible work patterns that may benefit the older health and social care labour force and the EWL agenda. Older workers' understanding and expectations of retirement are

important in forming employment decisions in later life (Marshall, 1995; Post et al., 2013; Beehr, 2014); as such within this research these concepts require exploration to determine factors that may influence the working patterns of the older health and social care labour force.

2.2.1 The concept of retirement

Retirement as a concept is a relatively new phenomenon. From its origins in the late nineteenth- and early twentieth century, the development of retirement as a social institution and stage of the life course in industrialised countries of Western Europe and North America, only really started to take shape following the Second World War (Vincent et al., 2006; Phillips et al., 2010).

Over the latter half of the twentieth century, the notion of leaving employment with the provision of state support in the form of a pension had become the social norm (Vincent et al., 2006).

Individuals in western societies today have an established expectation that after being economically active for most of their lives, on reaching a certain age, they can leave the labour force to pursue a lifestyle of choice with financial support from the state (Victor, 2005). This occurrence is rarely seen in developing countries, where for the most part, the concept of retirement is non-existent. In a similar manner to pre-twentieth century working patterns in the westernised world, people in developing countries work until they are no longer able to, and frequently working lives are only ended by death (Marshall and Taylor, 2005; Phillips et al., 2010).

Defining retirement is in itself a challenge and although a consensus cannot be reached, it is often referred to in the academic literature as an older worker's withdrawal from paid employment and the receipt of a pension (Victor, 2005; Denton and Spencer, 2009). This definition is however restrictive in nature; for example it is not clear whether one needs to be a paid employee in order to retire, and whether the receipt of a pension indicates retirement (Berry, 2010: 6). Denton and Spencer (2009: 64) argued that defining retirement is difficult because its 'boundaries are fluid'. This notion is supported by Phillips et al. (2010) who suggested that retirement should be considered as a transitional process that changes with social conditions and individual expectations. This transitional process of modern retirement may be seen with the move from full-time to part-time work, or the use of flexi-time and flexible pension withdrawal (Victor, 2005; Denton and Spencer, 2009). Although the expectation that retirement forms an integral part of the life course remains strong within western countries, alternative ways of progressing to or through this period are being sought by Government, organisations and individuals. Moreover, Marshall and Taylor (2005: 572) argued that retirement is a 'socially constructed and evolving institution', with there being 'no such thing' as a normal retirement age (ibid.).

Despite this broad view of retirement, there is considerable evidence to suggest that gender has an influence on retirement; from financial planning and the timing of retirement, to the adjustment in roles and one's choice of activities after leaving the labour market (Griffin et al.). Additionally, it has been argued, that to a large extent, evidence around the concept of retirement and decisions within the process reflect an innately male perspective (Griffin et al.; Dahl et al., 2002; Duberley et al., 2014). Nevertheless, authors such as Loretto and Vickerstaff (2011), Wong and Hardy (2009) and Mavin (2001) posit that as women experience a more fragmented approach towards their working lives than men, that expectations of retirement and the retirement process itself differs between the genders. In support of these notions, Kinsella and Velkoff (2001) found that in developed countries women are more likely to work in old age than men, as due to gaps in employment, women have insufficient finance in later life and require extension to their working life to support themselves and their families (Smeaton and McKay, 2003; Wong and Hardy, 2009; Loretto and Vickerstaff, 2013). However, in studying older Americans following the recent economic crisis, as a result of 'broader macroeconomic forces', Cahill et al. (2013a: 2) found that both men and women are 'responding to their economic environment' by extending their working lives, and concluded that differences in retirement behaviour between men and women may dissipate over time as a result of these the changing economic landscape (ibid: 2). Additionally, in their UK-based study, Duberley et al. (2014) concluded that men and women still have very different expectations and experiences of the retirement process.

Although retirement research now considers differences associated with gender, disparity remains. However, while the reasons are not yet clear, it is generally agreed that gender has a role in retirement expectations and behaviour (Griffin et al.; Wong and Earl, 2009). Thus, to suggest that retirement is a homogenous concept appears inherently incorrect; for both men and women, the concept of retirement is perhaps, as Cahill et al. (2013a: 24) suggested, 'best viewed as a process' that has varied (heterogeneous) influences depending on work histories and employment experiences.

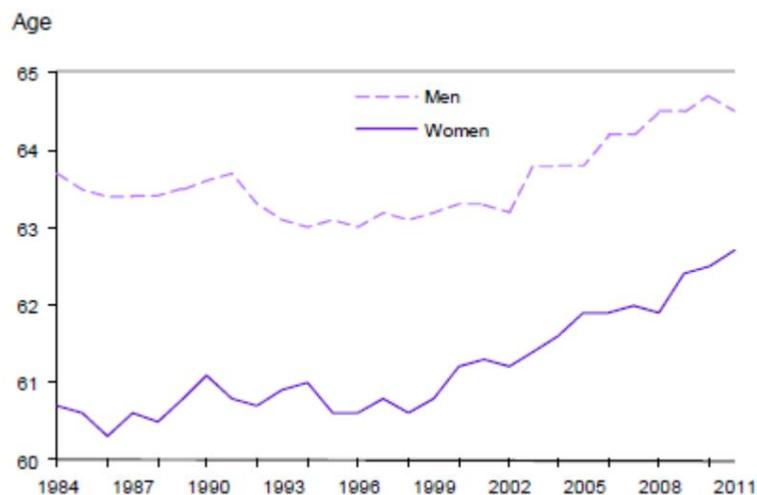
While the concept of retirement involves a variety of definitions and influences, in the latter stages of the twentieth century, a new retirement phenomenon developed which would affect labour market participation of the older worker; the trend of early retirement is considered in the following section.

2.2.2 Early retirement

Since the beginning of the 1980s, early retirement (defined here as leaving the labour force before the SPA), has to some extent become embedded in the social consciousness as an expectation. Reports from the UK suggest that there is a strong cultural assumption, especially among baby-boomers, that retiring early to enjoy a period of free time to pursue leisure activities is the foremost aspiration when nearing the SPA (Phillipson, 2002, 2007; Vickerstaff, 2010). Having completed a qualitative study involving workers aged 50 to 65, Vickerstaff (2010) confirmed that many respondents, especially the men, who had worked from the age of 15 or 16, viewed retirement as a just reward for a long working life. From an organisational perspective, historically, early retirement has been used as a means to create space in the workforce to allow recruitment of younger workers (Padilla, 2011), with the costs (productivity and financial) of retaining older workers being perceived to out-weigh the benefits of retention (Karpinska et al., 2013). However, from their study of Canadian older workers, Armstrong-Stassen and Cattaneo (2010) found that encouraging older workers to leave employment implies that they are disposable, and that the organisation does not value their skills, knowledge and attributes. While, Conen et al. (2011) found that in the Netherlands, an increasing amount of employers are encouraging older workers to remain in employment, even when changes in demand for labour and experience shortages were evident.

The trend for early retirement has more recently begun to decline in the UK, and since the mid-1990s there has been an increase in the labour market participation of the 50 plus cohorts (Vickerstaff, 2010). The longer-term trends for men and women withdrawing from the labour market are however different.

Figure 2.1 shows that since 1984, the average age of withdrawal from the labour market for women demonstrated a steady rise until the beginning of the twenty-first century, with a sharper rise since 2001. For men, there was a reduction in the average age of retirement in the early 1990s that continued to the early 2000s and then in 2002 the average age began to rise again, peaking in 2010 at 64.7 years (ONS, 2012m).

Figure 2.1 Average age of labour market withdrawal 1984 to 2011 by gender (UK)

Source: ONS (2012m: 4-10)

Historically, the long-term pattern of labour market withdrawal is different for men and women; the average age of women's labour market exit has been above the SPA (60 years) since 1984, and from 2008 has exceeded 62 years (concomitant with the rise of the female SPA in 2011). In contrast, for men, although the average age of labour market withdrawal has been increasing since 2002, by 2011 it had not yet reached the SPA of 65 years (ONS, 2012m). With the gender differences in labour market withdrawal evident, EWL policy that focuses on a generic individual may not be sufficient in providing incentives to remain in work for those who tend to retire before the SPA (men) and those who retire after the SPA (women).

It is more likely for older women to have experienced a 'discontinuous or interrupted work history' than older men, due to family and domestic responsibilities such as child-rearing (Szinovacz and DeViney, 1999: S208); with both 'financial and career progression consequences [for the women]' (Griffin et al., 2013: 207). This is demonstrated by the gender gap in pension provision, where in 2013-2014 men received on average £19 per week more from their occupational pension and £14 more from personal pension income than women (DWP, 2015). As such, to compensate for reduced pension and personal savings resulting from disjointed career earnings, it has been suggested that older women are more likely than older men to extend their working life rather than exit the labour force early (Finch, 2014). However, evidence also suggests that women are still more likely than men to give family responsibilities as reasons for opting for early retirement (Humphrey et al., 2003; Phillipson and Smith, 2005). Cahill et al. (2013b) reported that with regard to the culture of early retirement, significant changes became apparent from the mid-1980s. The trend for progressively earlier retirement, for both men and women decreased, largely due to economic demands, and increases were noted in the median age of the

labour force (ibid.). Despite the notion that women now remain in the workforce longer than men due to being less able to afford retirement (Kanfer et al., 2001; Rau and Adams, 2005), the Office for National Statistics (ONS) (2013d) assert that until the SPA for men and women becomes aligned, comparing the age of labour market withdrawal between the genders cannot be conclusive.

Within the UK, from a state perspective and for some individuals, working longer (beyond the SPA) has become a necessity (Weyman et al., 2012; DWP, 2014b). Yet, the challenge for policy makers lies with encouraging extended working lives. Understanding the factors that affect employment decisions in later life is necessary in order to provide personal and legislative incentives for older workers to remain in work for longer (Zaidi et al., 2006; Vickerstaff, 2010).

Thus, in the following section, with consideration to demographic, socioeconomic, health and employment influences, factors evident from the literature that affect labour market participation in later working life are presented.

2.3 Factors associated with labour market participation

Factors that affect labour market participation in later working life are both complex and diverse. With regard to past or current work experiences, older workers do not constitute a heterogeneous group, rather they are hugely diverse in attitudes, skills, health, family duties and financial circumstances and consequently, their aspirations for work in later life vary (Marshall, 1995; Lissenburgh and Smeaton, 2003; Loretto et al., 2005b; Flynn, 2010b; Padilla, 2011).

Literature pertaining specifically to the older health and social care labour force is limited. Of the available evidence, in most instances, research is related to nurses, with evidence from authors such as Buchan (1999), Fitzgerald (2007) and Blakeley and Ribeiro (2008). There was some evidence of research including social workers (HCPC, 2012; Croisdale-Appleby, 2014); however, with regard to allied health professionals (AHPs) and care workers, evidence relating to factors that affect later life work patterns and employment decisions was not apparent. Nevertheless, despite the lack of evidence relating to the research labour force, there are topics that are relevant to all older workers irrespective of their occupation.

Within the literature, the terms *push* and *pull* are often used to describe factors that affect decisions made by individuals in later working life. *Push* factors are generally negative, pushing an individual away from the labour market whereas *pull* factors act in the opposite manner, by encouraging an individual to remain in work. Despite extensive debate, there is not one single *push* or *pull* factor that can be identified as impacting a decision; rather, it is the amalgamation of

several factors (both *push* and *pull*), combined with the heterogeneity of individuals and their circumstances that result in the decision to remain in work, to adopt a different employment pattern or to retire (Higgs et al., 2003; Vickerstaff and Cox, 2005; Oakman and Wells, 2012; Radl, 2012).

Thus, it is recognised that a diverse set of factors impact decisions around the working patterns of older workers in the health and social care labour force, and that these are intertwined and cannot necessarily be viewed independently (Smeaton et al., 2009; Morrell and Tennant, 2010; Oakman and Wells, 2012).

2.3.1 Demographic factors associated with later life labour market participation

2.3.1.1 The influence of age

According to Lissenburgh and Smeaton (2003), the most important factor associated with moving out of full-time employment in later life is age. However Flynn (2010b: 311) reported that the age at which an individual retires influences their willingness to consider a 'phased retirement transition', as the longer an individual is not economically active, the more accustomed to retirement they could become (*ibid.*). Although there is no consistent effect of age on work performance, there is evidence that an individual's (older) age can lead to discriminatory behaviour at work (Griffiths, 2007); a concern that Lissenburgh and Smeaton (2003) suggested increases the likelihood of older workers leaving the labour market prior to the SPA. With the introduction of the Employment Equality (Age) Regulations (2006) and the Equality Act (2010), age discrimination in the workplace has become illegal, leaving options open for older workers to remain in work for longer (HM Government, 2006; 2010).

2.3.1.2 The influence of gender

While gender appears to be a common factor that influences later life work patterns, there is a 'strong debate over its influence' (Flynn, 2010b: 309). Nevertheless, Banks and Tetlow (2008: 1) found evidence that men 'respond to the financial incentives for retirement that are provided by their private pension'; however, for women this incentive is not always available. The literature suggests that in comparison to older men, older women experience 'cumulative disadvantage' in later life (O'Rand, 1996: 232); throughout the working life course, women are on average paid less than their male counterparts (Booth, 2009), have interrupted careers to focus on raising children and providing care for parents (Gangl and Ziefle, 2009; Kearns, 2010; Finch, 2014), and subsequently have lower occupational- and state pension contributions (Bardasi and Jenkins, 2010; Gardiner et al., 2015; Mishra, 2015; Rahman et al., 2015). As women are more at risk than

men of being in poverty aged at the SPA (Clayton, 2010), this cumulative disadvantage may contribute to the notion that to increase their financial well-being in later life, more women than men choose to extend their working life (Flynn, 2010b).

Finch (2014) concurred with such a notion, and suggested that it is gender inequalities over the life course that influence choice around later life work patterns. Without career interruptions or gaps to provide care, together with higher wages (on average), older men are advantaged as they are able to accrue greater pre-retirement savings levels and pension contributions, which create an element of choice around employment in later life (Dixon, 2003; Lissenburgh and Smeaton, 2003; Flynn, 2010b).

Although the labour market participation of women has increased since the 1950s (Griffin et al.; Steinmetz, 2012; ONS, 2015b), older female workers are still more likely than their male counterparts to work part-time (Loretto et al., 2005b). While part-time work can enable women to continue with non-work responsibilities (such as child care) (Valletta and Bengali, 2013), it can contribute to reduced savings and pension provision in later life, negating a level of choice around work patterns in later life (Clayton, 2010). Lissenburgh and Smeaton (2003) supported the notion of gendered labour market participation, and suggested that although the range of *push* factors explaining women's exit from full-time work in later life was similar to that of men, important differences are evident. For men, it is age, health problems and housing tenure which were the most influential *push* factors in leaving full-time work, whereas for women, whether their partner was retired was found to have the most impact (ibid.). Nonetheless, when women experienced positive (*pull*) opportunities at work, such as managerial responsibilities or the opportunity to receive training, these were able to alleviate the negative effect on labour market participation caused by factors such as health concerns and spousal retirement (Arber et al., 2003; Smeaton and McKay, 2003; Meade, 2012; Radl and Himmelreicher, 2015).

2.3.1.3 The influence of marital status

Marital status has been identified by a number of authors, such as Loretto and Vickerstaff (2013), Szinovacz (2013a) and Vespa (2013), as having an influence on the labour market participation of older workers. Although literature pertaining to the older health and social care labour force is limited, it is not unreasonable to suggest that the influence of marital status found for older workers in general could also relate to older workers in the health and social care labour force.

Evidence over the last thirty years has suggested that among older married couples, the work pattern of a spouse can have an influence on the employment behaviour of the partner. Among others, Gustman and Steinmeier (1984), Arber and Ginn (1995), Szinovacz et al. (2001) and Cahill

et al. (2013a) all reported that the presence of a retired spouse is likely to encourage the other spouse to favour retirement over work. Additionally, studies using the English Longitudinal Study of Ageing (ELSA) showed that individuals with a working spouse were less likely to exit the labour force than those with non-working spouses (Lissenburgh and Smeaton, 2003; Banks and Tetlow, 2008).

To some extent, the literature in regard to the degree to which spousal influence is associated with exiting the labour market is contradictory. Gustman and Steinmeier (2000) opined that women's retirement decisions were not strongly influenced by their husbands'; but wives influence on their husbands' decisions was significant. However, Loretto and Vickerstaff (2013: 67) posited that 'husbands play a more significant role in women's retirement decisions than vice versa', and Denaeghel et al. (2011: 122) suggested that women are more likely to retire due to 'pressure' asserted from their husbands than vice versa. Lissenburgh and Smeaton (2003) agreed and reported that married women were more likely to leave employment before the SPA in order to retire at the same time as their partner, and more recent evidence (possibly with a nod to the changing behaviours of older cohorts labour market participation), suggests that married women often work beyond their current SPA (60-62), having delayed their retirement to coincide with their spouse (Cebulla et al., 2007; Morrell and Tennant, 2010).

Despite contradictions in the literature, Wood et al. (2012) and Barnes et al. (2004) observed that individuals who retire at the same time as their partner are more likely to report mutual satisfaction in retirement, although in regard to older nurses, it was marital satisfaction rather than being married that influenced their decision to retire (ibid.).

Among married and cohabiting couples, evidence of joint decision-making with regard to later life labour market participation is becoming more prevalent (Denaeghel et al., 2011; Matthews and Fisher, 2012; Vespa, 2013; Hospido, 2015). With regard to joint retirement decisions, when considering later life labour market participation, it has been suggested that couples experience a 'bargaining process' (Hospido, 2015:1), with joint consideration of finances, health status and leisure requirements, and the need to 'balance the preferences and constraints of both partners' (Warren, 2013: 3). Yet, while Pozzoli and Ranzani (2013) acknowledge that joint retirement is becoming increasingly common, having found that 27 per cent of couples retire at least twelve months apart (concurring with evidence from Hurd (1990), they suggest that joint retirement is not universal.

In comparison to married older individuals, for older individuals who are not married, differences in labour market participation have been noted. Older men who are not married are more likely to exit the labour market than their married counterparts, whereas older women who are not

married are less likely than their married counterparts to leave employment (Dahl et al., 2002). More recent reports concur with these observations; Szinovacz (2013b) found that married women were less likely than unmarried women or men to be working beyond the SPA, and that unmarried women were more likely than married women to consider working reduced hours over retirement. Additionally, from an older health and social care labour force perspective, older nurses who were divorced or widowed were less likely to consider retirement, whereas older nurses with a spouse or partner in retirement were more likely to choose retirement over working for longer (Blakeley and Ribeiro, 2008).

While Loretto and Vickerstaff (2013) suggested that there is limited information to support the reasons for differences in the behaviour of individuals in relation to their marital status and retirement decisions, from the literature that is available, factors such as finance and health are considered influential. Consequently, these factors will be considered later.

2.3.1.4 The influence of ethnicity

It is acknowledged that evidence regarding ethnicity and later life labour market participation is largely from American literature, and that there is a paucity of UK-based evidence. Additionally, while data suggests that the health and social care labour force and the general labour force in the UK comprise a minority population from the Black and Minority Ethnic (BME) group (12.6 per cent and 10.5 per cent respectively) (HSCIC, 2013a; ONS, 2014c), it is not clear what proportion of these individuals are older workers. Thus, the research within this thesis aims to provide information which will, to some extent, contribute to the gaps in the available documented evidence.

According to Phillips et al. (2010) the importance of ethnicity in later life combines cultural characteristics (such as expectations of retirement), and the influence of minority status over the life course (such as discrimination experienced at work), and as such can influence decisions made around employment patterns in later life (Flynn, 2010b).

While ethnic diversity differs between the United States of America (USA) and the UK, Honig (1996) noted that expectations of labour market participation between African-American and White men differed; for White men, jobs involving interaction with people were associated with higher expectations of remaining in work beyond the age of 62, whereas African-American men in these roles expected to retire before the age of 62. Honig (1996) also reported that for both White and African-American men who worked in the public sector, there was a lower expectation of working beyond the SPA. Jobs within the older health and social care labour force in the UK involve both skilled interactions with people, and are generally found within the public sector,

therefore Honig's (1996) observations may have resonance in the choice of work pattern and labour market participation of the older health and social care labour force.

In his investigation into retirement and the typologies of older workers, Flynn (2010b) observed differences in labour market participation among ethnic groups. He noted that although inconsistent, the attitudes of older adults from the BME group towards employment in later life differed to that of their White counterparts. This was largely due to the effects of emotional stress as the result of discrimination experienced during the working life (Fernandez et al., 1998), and that individuals from BME groups were more likely than Whites to experience involuntary unemployment immediately prior to retirement (Flippen and Tienda, 2000).

This section has reviewed the evidence relating to key demographic factors that affect work patterns in later working life. In the following section our understanding is broadened by concentrating on key socioeconomic factors that influence older workers' employment patterns.

2.3.2 Socioeconomic factors associated with later life labour market participation

On reviewing the literature, three key socioeconomic factors that influence labour market participation in later life were identified. This section therefore critically evaluates the influence of education, finance and housing tenure in relation to older workers and their work patterns.

2.3.2.1 The influence of education

Higher educational attainment (degree level and above) is correlated with occupational skill level, higher wages, and in older age, due to informed lifestyle choices and access to healthier nutrition, better health (Piha et al., 2010; Devereux and Fan, 2011; Tinsley, 2012). It has also been shown that higher levels of education are a key factor in greater productivity among the workforce (Florea, 2013). With these associations in mind, Burtless (2013a) reported that older workers with a higher level of education tend to be more willing to work for longer in later life.

Older workers can be compromised by a lack of qualifications; in the UK the proportion of people aged 50 years and over with a higher education is lower than in the total population, demonstrating an important cohort effect (Porcellato et al., 2010). However, in their random samples of older employees in Europe (no industries specified), Järnefelt (2010) and Bohlinger and van Loo (2010) found that to the older workers' advantage, there is an innate assumption that intellectual capital gained throughout the life course and employment, is favourable to employers and can disadvantage the organisation should the older worker leave employment.

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Throughout the twentieth century there was a consistent increase in education levels with each generational cohort, resulting in younger workers receiving an 'educational advantage' over older workers (Burtless, 2013a: 2). However, since the 1990s, older workers (aged 60 years and over) have been as likely to have attained higher level education as workers aged in their 40s (Devereux and Fan, 2011; Burtless, 2013a). While, Devereux and Fan (2011) suggested that the development of education raised educational attainment levels and subsequently improved earnings, Blanden and Machin (2004) reported that the increases in higher level education since the 1960s have mainly benefitted those from higher income households, potentially disadvantaging those from lower income backgrounds in regard to employment choice. It is pertinent to note that higher level education is a prerequisite for the professional occupations within the health and social care labour force, which may subsequently provide the opportunity for a higher earnings and better health in older age (Piha et al., 2010; HSCIC, 2014b).

Piha et al. (2010: 1) stated that 'education provides general knowledge and health-literacy, which may lead to healthier behaviours'. While Tinsley (2012) confirmed that older workers are now more healthy and are in a better position to remain employed in later life, Schuring et al. (2015) suggested that due to issues with ill-health, older workers with lower educational attainment still exit the labour force early. Whether the current generation within the older health and social care labour force are in a better position to remain in work remains to be seen, as although younger, better educated workers are likely to extend their working lives (Järnefelt, 2010), other factors in addition to education have an influence on older workers' later life intentions (Smeaton et al., 2009; Flynn, 2010b).

However, in order to maintain a competitive position within the labour force, ongoing educational development via training opportunities is essential. Training is critical in retaining older workers and thus plays an important role in the EWL agenda (Armstrong-Stassen and Templer, 2005; Padilla, 2011), and importantly in relation to this thesis, literature regarding older nurses showed that improving access to appropriate training is crucial in their decision to continue to work in later life (Andrews et al., 2005). Nevertheless, Padilla (2011: 3) suggested that employers generally believe that they would not appreciate a 'good return on their investment' in providing training for older workers, and that in comparison to younger workers, employers themselves attribute a reduced ability to learn to older employees. Additionally, Bohlinger and van Loo (2010) found in their study of older European workers that the adoption of negative stereotypes about older employees, such as being change-resistant and unable to cope with new technologies, compounds decisions to reduce opportunities to learn new skills. It has not been clearly proven that productivity of the aged worker declines; however, some older employees in the UK report that when approaching the SPA, opportunities for training wane, which contributes to decreased

job satisfaction and the likelihood of choosing retirement over working longer (Morrell and Tennant, 2010; Sykes et al., 2010).

Nonetheless, reluctance to engage in opportunities for training among older workers does not lie purely with the employer. Older workers' willingness to commit to training may depend on the perceived benefits of such training, as well as its cost, time-commitment, method of delivery and the individuals' attitude (Zwick, 2011; Oakman and Wells, 2012). Research from Europe that included older workers from a variety of occupations (including manufacturing, management and health care), showed that employees who view work and learning as two separate entities are far less willing to engage in training than those who understand that training and learning are integral to the job (Bohlinger and van Loo, 2010). Furthermore, a negative attitude towards learning not only affects the older workers' ability to carry out their job, it also reduces the likelihood of undertaking any form of continuous professional development (CPD) (Padilla, 2011).

2.3.2.2 The influence of finances

Finance is often a key factor in decision-making about employment patterns in later life. Individuals in a good financial position, such as having a good occupational or private pension, substantial savings and minimal or no mortgage commitment, tend to look forward to choices in later life and are in a more advantageous position to adopt a flexible approach to later life working and retirement (Vickerstaff et al., 2004; Flynn, 2010b). Conversely, for those individuals in a poorer financial situation, having experienced such life crises as redundancy or divorce, who have had inadequate retirement planning, or for those who have no choice but to retire from work due to ill-health or domestic responsibilities, decision-making in later working life is less about choice and more about necessity (Barnes et al., 2004).

From an older health and social care labour force perspective, evidence available regarding the impact of finance in later working life employment patterns relates mainly to nurses. Andrews et al. (2005: 303) reported that finance has a 'major influence' on older nurses' decision-making whereby for example, reduced contribution to occupational pension schemes due to taking time out of the labour market to raise a family, may influence retirement behaviour and compel them to remain in employment for longer than they would ideally choose. This view supports the notion presented by Buchan (1999), who suggested that older nurses' decision to retire is dependent on financial stability. However, Bennett et al. (2007) found in their study of nurses aged 45 and over, that it was a lack of retirement planning, which led to dissatisfaction when making decisions about later life employment.

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Berry (2010) suggested that the main financial consideration for individuals in later working life was that of pension provision, however Vickerstaff (2010: 871) proposed that a major obstacle to retirement planning was 'widespread financial illiteracy', as many individuals do not understand their pensions or the financial requirements for retirement. Regular financial guidance from Government and employers, throughout the working life, on the nuances of pensions and financial requirements in later life, may result in older health and social care workers preparedness, enabling them to have choice in older age (Bennett et al., 2007). Moreover, Blakeley and Ribeiro (2008) suggested that flexibility around salary and pension withdrawal could incentivise older nurses to consider working later; however without adequate planning, this measure may be out of reach for many older health and social care workers.

The financial benefits of working beyond the SPA enable individuals to maintain their quality of life, to support domestic responsibilities, increase pensions and savings and enhance the feeling of security (Mermin et al., 2007; Clayton, 2010). Nonetheless, many of those individuals who choose retirement are prepared to forfeit the benefits of a salary, and accept a lower standard of living in favour of not being constrained by the labour market (Barnes et al., 2004).

From a gender perspective, women who have occupational pensions but have had career gaps, tend to remain in work to enhance their pension contributions (Clayton, 2010). This is especially relevant to the older health and social care labour force, where in particular, nurses take career breaks and return to part-time or occasional work (Bennett et al., 2007, 2009; Harris et al., 2010). With marital status in mind, separated or divorced women are more likely to remain in work beyond the SPA, and joint decision-making among couples may balance the risks and opportunities in respect to joint finances and pensions provision (Vickerstaff et al., 2004; Denaeghel et al., 2011). Whereas for divorced or widowed individuals, who generally have a lower income than married couples, Wilmoth and Koso (2002) concluded that there is a propensity for them to remain in the labour market for longer.

Feldman and Beeher (2011) reported that retirement decisions are being made in an ever more complex financial context. While older workers, may continue to receive pensions based on age and years of service, due to uncertainties around depreciation in housing stock and pension investments, an increasing proportion of older workers are complementing their retirement funds with private pension contributions and additional savings (ibid.). Thus, in today's economic climate, older workers, whatever their expectations of life in older age, 'cannot retire until they can afford to do so financially' (Feldman and Beehr, 2011: 5).

2.3.2.3 The influence of housing tenure

With regard to older individuals, housing tenure can be considered a socioeconomic indicator (Lynch and Kaplan, 2000; Galobardes et al., 2006b), since it demonstrates the 'accumulation of income and wealth during the life course' (Dalstra et al., 2006: 2057). It is described as 'the legal status under which people have the right to occupy their accommodation', with the most common forms of tenure being owned-outright, mortgaged and rented (Diaz, 2009: 2).

There is currently a dearth of evidence relating to the health and social care labour force and the influence of housing tenure on their later life employment patterns. Nevertheless, from the wider literature, clear themes are evident that may have relevance.

Owner-occupation (either owned-outright or with a mortgage) has been the dominant tenure status among older people since the late 1990s (Diaz, 2009; Connolly, 2012; Department for Communities and Local Government, 2013). However, as suggested by Painter and Lee (2009), for the increasing population of older individuals, there is a desire to relinquish the home-maintenance required from owner-occupier status in favour of rented accommodation, or to sell and reap the financial rewards for retirement or to pay for social care.

With regard to the influence of age on housing tenure, the Department for Communities and Local Government (2013) reported that among households that owned their home outright, 83 per cent were aged 55 years and over. Furthermore, Frogner (2002) reported that there was a correlation between increased age and owning a home outright; the older an individual, the more likely they are to own their home rather than to be paying for it with a mortgage. However, in contrast, Carter (2011) suggested that rather than age, income over the life course was the main determinant of home ownership in older age.

It has been posited that an individual's health can be related to their housing tenure. Frogner (2002) stated that individuals ascribe a great deal of emotional and physical well-being to their housing tenure status, and Carter (2011: 159) suggested that becoming a home-owner was a 'crowning achievement' in an individual's life. It was also reported by Hartig and Fransson (2006) that owner-occupiers generally have better health than those who rent their accommodation, with a suggestion that this was due to the increased feelings of security and autonomy that are afforded with home ownership. Hartig and Fransson (2006) concluded that there is a correlation between housing tenure, health and early retirement; therefore, while there is no direct evidence related to the older health and social care labour force, it is conceivable that housing tenure may indirectly affect the labour market participation of this workforce.

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As well as an association with health, the Department of Communities and Local Government (2013) reported that differences were noted in housing tenure status with regard to employment patterns and ethnicity. Among those who owned their house outright, 72 per cent were working on a full-time basis, and 61 per cent worked part-time (ibid.). At the same time, BME individuals were more likely to rent than to own their home, whereas White individuals were more likely to own their property than rent it (ibid.).

While there is a sizable gap in the literature relating to the older health and social care labour force and the influence of housing tenure on their later life employment decisions, these data from the wider population suggest that further investigation is necessary to understand the characteristics of this under-researched group.

Having explored the key socioeconomic characteristics that are associated with labour market participation in later working life, the following section addresses additional factors that can influence, both positively and negatively, an older worker's later life employment decisions.

2.3.3 Health and occupational factors associated with later life labour market participation

In addition to demographic and socioeconomic factors, the literature reported that other factors, such as the influence of health, length of service, job satisfaction and ageism, can have an influence on later life labour market participation.

2.3.3.1 The influence of health

Within the literature, there is evidence to suggest that there is a relationship between age and declining health (Spiriduso, 2005; Shankar et al., 2011; Mitnitski et al., 2015; Santoni et al., 2015). Moreover, in their *European Health Report*, the WHO (2015a) reported that with increasing age, most health indicators (such as LE, obesity and chronic pain) worsen with age. This is corroborated by reports that within the UK, the prevalence of obesity at age 50 and over is greater than observed in younger age groups (HSCIC, 2015b), and that 'two-thirds of the population with a limiting long-term illness are aged 55 and over' (Grundy and Holt, 2003: 1).

In regard to the association between health status and labour market participation among older workers, Berry (2010: 9) suggested that among the research community there is a 'virtually unanimous' opinion that individuals experiencing ill-health retire earlier than those in good health. This argument is supported by Post et al. (2013) who reported that health greatly influences the later life employment decisions of older workers, with individuals who reported ill-health expecting to retire earlier than colleagues who reported good health. Additionally, the

Equality and Human Rights Commission (EHRC) (2010) noted that older individuals experiencing health concerns felt that they could not perform their job in the same way as when they were younger, and were therefore more likely to plan for early retirement, even at the detriment of their financial future.

Denaeghel et al. (2011) also suggested that health is a major determinant of the decision to retire, and Warren (2013) reported that this was evident, not only for an individual's health, but also in relation to spousal or partner health. With regard to a partner's health status, Cahill et al. (2013a) and Pozzoli and Ranzani (2013) found that a gender effect was also evident; women were more likely to choose retirement if their spouse's health was poor, whereas men whose wife was in poor health would typically remain in work. To some extent these observations agreed with evidence from Gustman and Steinmeier (2004); they argued that a partner in poor health may increase the need for care, thus encouraging the healthy partner to retire in order to provide such care; however, they also suggested that having a partner with poor health may require the healthy partner to remain in work in order to fulfil financial obligations (*ibid.*).

Yet health is not solely the responsibility of the individual, as the work environment itself can negatively affect an individual's health. Stress, working conditions, and the uncertainty of job stability are all factors that contribute to the likelihood of older workers leaving employment rather than remaining in work (Lund et al., 2001; Joyce, 2010; Wood et al., 2010; McNair et al., 2012). In relation to nurses, continued pressure, stress and the exhaustion experienced at work were reported to be influential factors in later life employment decisions, and stress management was identified as a crucial element of determining whether nurses retire early (Watson et al., 2003b; Andrews et al., 2005; Blakeley and Ribeiro, 2008). Additionally, in their study of older employed and retired workers, Morrell and Tennant (2010) found that their participants associated periods of stress with additional responsibilities and working hours, and blamed physical symptoms on physical work they were tasked with completing.

Work based practices, particularly in the health and social care sectors, have been noted to be cumulatively detrimental to health over the course of the working life. Nurses in particular reported a high incidence of back pain, and an age-based decline was associated with an older worker's potential for injury (Buchan, 1999; Brooke et al., 2012). However, although there is some evidence of age-related decreases in physical strength (Spirduso, 2005; Milanović et al., 2013), and minor changes in cognition (Seidler et al., 2010; Salthouse, 2012), older workers remain heterogeneous. Older workers' health is often determined by their biological make-up, life experiences and their lifestyle over the life course (Fitzgerald, 2007; Brooke et al., 2012; Oakman and Wells, 2012). Moreover, in their qualitative study of older workers from a diverse range of

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occupations, Barnes et al. (2004: 38) confirmed that older workers, while recognising the potential for health decline, were generally positive about working beyond the SPA, and would continue to do so 'as long as they were physically able'.

More positively, the workplace can also be a key environment for improving workers' health. Good health and well-being not only increase the quality of life for individuals, they also add value to organisations by promoting better health, and increasing motivation (Lund et al., 2001; Ilmarinen, 2006; Timms et al., 2015). In assisting organisations to understand the important role that occupational health (OH) services have in encouraging older workers to remain in work for longer, it is argued that the public sector, of which the health and social care sector form a large part, maintains a critical role (Black, 2008; EHRC, 2010). McDermott et al. (2010) and Maertens et al. (2012) reason that within the workplace, good OH support is required to retain older workers in the labour market. While in agreement, Brooke et al. (2012) also suggested that there should not be an age-based presumption of need; organisational OH policies should recognise the diversity of the workforce, and adapt accordingly to factors that affect individual retirement decisions.

Thus, the retention of the older labour force requires older workers to maintain good health. As health is a key factor in employment pattern decision-making in later working life, the older health and social care labour force require the support of Government and OH policies to encourage and support good health, and to implement strategies to combat occupational stressors.

Having reviewed the evidence relating to the influence of health on older workers' later life employment patterns, the following section considers the influence of length of service.

2.3.3.2 The influence of length of service

Oshagbemi (2000) and the Ministry of Health and Long-Term Care (2008) define length of service as the continuous number of years an individual has spent working for an organisation. Importantly in relation to the older health and social care labour force, Oakman and Wells (2012) proposed that as well as age, length of service was a strong predictor of the intention to retire. Moreover, although not widely discussed, a number of authors have suggested that there is an indirect relationship between length of service and older workers labour market participation (Oakman and Wells, 2012; Kosana and Gordana, 2013; Kelarijani et al., 2014; Śliwiński et al., 2014).

Oshagbemi (2000) reported that on average, nurses have longer lengths of service than non-nursing staff groups; however in contrast, Kessler et al. (2012) found that health care assistants

had a similar work history to nurses, with an average length of service of nine years. From the literature, it was also evident that among the nursing profession, competence in coping with problems increased with the number of years served (Sygit, 2009). And, as Sargeant (2009) concluded, that as experience runs concomitantly with length of service, it should follow that older workers who have a long length of service, should be able to perform their duties more effectively than their younger counterparts. However, caution should be noted with this argument, as it has been suggested that older workers lack the technological skills to manage job requirements in later life, and may be reluctant to engage in training to gain the knowledge required (Zwick, 2011; Carmichael and Ercolani, 2012; NIACE, 2014).

The Canadian Ministry of Health and Long-Term Care (2008) reported that length of service is often used as a measure of staff retention and attrition, and noted that high turnover rates can affect the stability and capacity of the organisation to complete its objectives successfully. As a recognition of experience, a reward for loyalty and to incentivise staff to remain working for an organisation, certain rights may be afforded to individuals based on the length of their continuous employment (i.e. from the first day of work in a given organisation) (DTI, 2006; HM Government, 2014a). Within the NHS and social care services, such rights may include employment breaks, flexible working requests and redundancy pay (NHS Employers, 2005; HM Government, 2014a), which may encourage the older health and social care labour force to remain in the labour market rather than retire from it. However, if an organisation is required to consider redundancies, longer serving employees, who would be entitled to a larger financial compensation package, may choose to exit the labour market in favour of retirement (Sargeant, 2009; NHS Employers, 2005).

In determining behaviour patterns associated with length of service, it has been suggested that the level of organisational and occupational commitment from an individual are relevant factors (Igbeneghu and Popoola, 2010; Kelarijani et al., 2014; Bano et al., 2015). Organisational commitment, an 'individual's identification and involvement with a particular organisation', can be viewed as a positive construct, enhancing organisational development and quality of work (Bano et al., 2015: 26). At the same time, occupational commitment, 'the relative strength of identification and involvement in a particular profession' (Jafari Kelarijani et al., 2014: 95), is demonstrated by the 'willingness to exert effort on behalf of the profession' in conjunction with continued membership (ibid.: 95). Moreover, with regard to nurses, McNeese-Smith and Crook (2003) agreed that organisational commitment was strongly correlated with length of service, and Jafari Kelarijani et al. (2014: 95) found that a nurse's occupational commitment was an 'important factor' in the performance of their duties and was associated with increased length of service.

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The relationship between length of service and ill-health was apparent from the literature reviewed. In particular, the association between length of service and burnout syndrome, defined as '[emotional] exhaustion, depersonalisation and reduced satisfaction in performance' (Weber and Jaekel-Reinhard, 2000: 512), was evident from a number of studies relating to healthcare workers. Śliwiński et al. (2014) found that due to the physical exertions required in their professional role (such as articular, skeletal and muscular strain), physiotherapists with more than 15 years of service were prone to burnout. Similarly, Smajović et al. (2013: 129) found that burnout was more prevalent in health care workers with longer lengths of service, and posited that this was in response to the 'job duties and challenges' that are an extension of work in the healthcare setting. Moreover, Kosana and Gordana (2013: 153) concurred, and found that due to 'chronic emotional and interpersonal stressors' associated with the working environment, older individuals with longer lengths of service are more likely to experience burnout syndrome.

Given these findings, it has been posited that to assist healthcare workers cope with the stressors associated with their job role, organisations need to address work-place stress and to increase job satisfaction. By demonstrating care about the 'physical, psychological, social and spiritual dimensions' of their employees (Bano et al., 2015: 26), employers can support older workers with lengthy service records to maintain job satisfaction and to remain in work for longer (Ministry of Health and Long-Term Care, 2008; Sygit, 2009; Stanetić and Tešanović, 2013).

The following section builds on the arguments relating to length of service by considering the influence of job satisfaction on the labour market participation of older workers.

2.3.3.3 The influence of job satisfaction

Oakman and Wells (2012) reported that as the construct of job satisfaction is complex, it is difficult to define concisely. They suggested that the most useful definitions are multifactorial and cited Kalleberg and Loscocco (1983) who described two main features: first, the structural determinants that include work-related factors, and second, psychosocial determinants, which comprise self-valuation of job characteristics and the importance of work to the individual. However, it was noted by Oakman and Wells (2012) that the interplay between structural and psychosocial determinants is a dynamic process and changeable over time.

Job satisfaction is an important factor in encouraging older workers to remain in work. Those who enjoy their job are more likely to choose to extend their working life rather than feel the *pull* of retirement (Vickerstaff, 2010; Post et al., 2013). Having positive working relationships with employers, finding one's job interesting and feeling like one is making a contribution, are all positively correlated with older workers choosing to remain in work for longer (Barnes et al.,

2004; Carr, 2010; Wood et al., 2010). Additionally, as older workers age, job satisfaction becomes increasingly important; the EHRC reported that 9 per cent of people aged 50-55 cited enjoyment as the main reason for working, with this proportion rising to 27 per cent for those aged 65 and over (EHRC, 2010).

Research suggests that satisfied workers are more productive, and are more likely to remain with the organisation for longer than those who consider themselves to be dissatisfied with work (Jalal Sarker et al., 2003). Frequent work-related factors noted in the literature that cause dissatisfaction were work intensification, feeling undervalued and a lack of autonomy (Desmette and Gaillard, 2008; Clayton, 2010; Wood et al., 2010). As job satisfaction becomes more important to workers as they age, organisations can encourage older staff to remain in work by recognising the contributions their older staff make and creating environments that are conducive to high levels of job satisfaction (Saari and Judge, 2004; Oakman and Wells, 2012).

From the perspective of the older health and social care labour force, the literature reported that physiotherapists and social workers are generally highly committed to their work and are motivated by making a real difference to people's lives (Duncan, 2003; Śliwiński et al., 2014). However, excessive workloads, staff shortages, bureaucratic procedures and negative media coverage lead to the loss of job satisfaction and the potential for burnout syndrome (Duncan, 2003; Stanetić and Tešanović, 2013; Śliwiński et al., 2014); thus for many older workers, retirement appears to be the more 'attractive choice' (Vickerstaff, 2006a). Nurses report similar reasons for losing satisfaction with their jobs; with combinations of low autonomy and high stress contributing to decisions to withdraw from the profession around the SPA (Blakely and Ribeiro 2008). Nurses want to feel appreciated by their employer and garner respect from their colleagues; they want to feel that their knowledge and expertise are recognised and that they are involved in clinical decision-making (ibid.). Therefore in relation to the EWL agenda, there is a need to nurture older workers in the health and social care labour force, to acknowledge their contributions and to respect their experience (Fitzgerald, 2007; Kirgan and Golembeski, 2010).

An important factor to consider in relation to the level of job satisfaction felt (and subsequent labour market participation), is whether individuals feel they are subject to discrimination. The following section therefore considers the impact of ageist attitudes and behaviours on decision-making in later working life.

2.3.3.4 The influence of ageism

Discrimination on the grounds of age is not a new phenomenon; however, with the ageing of the population and subsequent ageing of the labour force it has become more apparent (Loretto et

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al., 2000). In 1969, Robert Butler coined the term *ageism* to describe the way society denies older people opportunities. He went on to develop this notion, comparing ageism with other forms of discrimination such as racism and sexism. Butler was a pioneer in associating heterogeneity with older people and wrote extensively about dispelling the myths of age-sameness, senility, dependence and sexlessness. Although latterly he recognised that there might be some reduction in personal ageist attitudes, he argued that within westernised society, ageism remains deeply embedded (Butler, 1982; Snape and Redman, 2003).

Individuals who feel discriminated against at work may experience lower work self-esteem and lower job satisfaction, and may perceive a narrower range of options in decision-making in later working life (Post et al., 2013). Hence, individuals who report having experienced discrimination while at work plan to retire earlier than those who have not been discriminated against (Desmette and Gaillard, 2008). However, it is not clear whether ageism towards older workers is formed from actual experience or as a reflection of society's prejudice towards older people in general (Loretto and White, 2006).

Perspectives held regarding the ageing body and the continued engagement of older workers in the labour market are yet to be reconciled. It has been suggested that the visible signs of ageing and chronological age form the basis of negative age stereotypes on which further negative belief and attitude is built (Brooke et al., 2012). As Loretto (2010) suggested, the introduction of the Employment Equality (Age) Regulations (HM Government, 2006) may have challenged organisational policy, however it is not clear how these regulations have effected change. Moreover, Parry and Harris (2011) posited that the development of anti-age discrimination legislation is not in itself enough to change the attitudes and beliefs of the employer or the older worker. Whatever the basis for age-related discrimination, negative attitudes towards older workers persist. Without a concerted effort on the part of older workers and employers working together, these attitudes will remain factors in reducing job satisfaction, with the potential to discourage working longer (Oakman and Wells, 2012).

That said, common beliefs and attitudes about older workers can be both positive and negative. Positive images include the older worker being motivated, conscientious, enthusiastic and loyal, with negative beliefs ranging from being inflexible and resistant to change, to being physically and cognitively less able than younger workers (Taylor and Walker, 1998; Brooke and Taylor, 2005; Loretto and White, 2006; Thomas and Pascall-Calitz, 2010). Positive and negative stereotypes are usually made when comparing older workers with younger workers, however with evidence gathered from a range of stakeholders from both the public- and private sectors (for instance, professional associations, trade unions and academics), Sykes et al. (2010) noted that generally

speaking, there is no difference between the effectiveness of older and younger workers, and that ability in any age group can vary. Padilla (2011) recounted that although physical and cognitive capacities change with age, the extent of such changes varies amongst individuals. Additionally, Wood et al. (2008) suggested that the relationship between age and productivity is complex and cited Welford (1988), who found that older workers are not less receptive to learning new skills, rather it is the employer who is required to adapt training methods to the needs of the older worker.

The ability to discriminate against the older worker does not lie exclusively with employers; older workers themselves also have the capacity to undermine older colleagues. Discriminatory attitudes, assumptions and beliefs can be internalised by the older worker, manifesting as expectations of themselves and fellow older workers (Taylor and Walker, 1998). From the moment individuals are categorised as older workers, they have the potential to become targets for age-related discrimination, and many older workers, in order to avoid the stigmatisation associated with a negative social identity, choose to retire (Desmette and Gaillard, 2008). However, being labelled an older worker can have its advantages. Positive discrimination sees older nurses providing greater empathy for patients, with the ability to offer experience and wisdom to younger colleagues; characteristics that signify the older nurse as an expert and a valuable professional (Fitzgerald, 2007).

Older workers are faced with numerous *push* and *pull* factors that may influence their employment patterns and choices in later working life. A common theme throughout the literature was the element of choice in later life and the ability to move gradually into retirement. The following section therefore considers flexible working in later working life and the concept of a phased transition to retirement.

2.4 Flexible work patterns in later working life

In order to accommodate the growing ageing labour force, the workplace may increasingly be expected to adapt to the needs and expectations of older workers to ensure the skills, expertise and experiences of this labour force is not lost. Many older workers are keen to extend their working life beyond the SPA, but require alternative and flexible working patterns to suit their needs (Cebulla et al., 2007; EHRC, 2010; Sykes et al., 2010).

Vickerstaff (2010: 875) reported that 'there is a strong preference amongst older workers for access to flexible work options'. Flexible working includes a number of alternate work patterns to traditional full-time employment, such as temporary work, job sharing, annualised hours and term-time working, although part-time work is by far the most common (Loretto et al., 2005b;

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Cebulla et al., 2007; Padilla, 2011). From an older nurse's perspective, flexible hours, the ability to work shorter shifts or to reduce to part-time hours is encouraged to retain them in employment; with flexible working hours, they can maintain caring responsibilities for parents, children or partners (Watson et al., 2003b; Andrews et al., 2005; Blakeley and Ribeiro, 2008). However, as Harris et al. (2010: 418) reported, there is some evidence to suggest that flexible working practices can create disharmony among members of staff who may be required to compensate for the flexible work patterns of others; suggesting that the implementation of flexible working needs to be completed in a 'fair and equitable' way.

The option for flexibility in working patterns for older workers can increase job satisfaction, and there is evidence to imply that those who are not intending to work beyond the SPA may be encouraged to do so if flexible working patterns were available (Carr, 2010; Padilla, 2011). With the multiple roles that older individuals have, and with older workers being encouraged to work for longer, it is argued that flexible working can address issues relating to the management of the work-life balance (Loretto et al., 2005b). There are a variety of reasons for an older worker to choose a flexible work pattern, including spending more time with family, pension provision, caring responsibilities or ill-health, and such an arrangement may provide a transition between full-time work and full-time retirement (Clayton, 2010; Loretto, 2010; Gannon and Roberts, 2011).

Historically, from an individual and societal perspective, retirement has been associated with a distinct transition from work to full-time retirement; at a specific age (i.e. the SPA) the individual ceases to be paid in favour of spending the rest of their lives pursuing leisure activities. However, it is becoming increasingly common (and increasingly necessary) for the end of working life to become less 'crisp' and more 'blurred' (Marshall, 1998: 10). Rather than experience an abrupt or premature exit from the labour market, a phased transition into retirement (usually by reducing working hours) can be viewed as a feasible option for older workers who wish to make the transition to retirement a gradual one (Gannon and Roberts, 2011; Cahill et al., 2013b). Phased retirement is often seen as a means of maintaining labour market participation whilst reducing work hours and effort, and it has been argued that for the individual this can provide a more satisfactory path to retirement while preserving human capital (Hutchens, 2010). From an employer's perspective, older workers choosing a phased transition into retirement provides benefits to the organisation by increasing the pool of staff that can be drawn on, and retains the valuable skills and expertise that they have garnered over their working lives (Frank, 2013). Yet, although opportunities for a phased transition into retirement are well-received by older workers, they remain rare. Arano et al. (2011) suggested that individuals who are better educated and have greater household wealth and income are more likely to opt for a phased retirement, and Loretto

et al. (2005b) reported that occupational pension and tax guidelines constrain options around a phased retirement decision.

Having considered factors that affect labour market participation in later working life and the availability of flexible working opportunities to encourage older workers to remain in work for longer, the following section focuses on the benefits of working beyond the SPA and policy initiatives to extending the working life.

2.5 Working beyond the SPA

Older workers' preferences for remaining in work beyond the SPA are highly diverse. Individual attributes play an important role in the decision to remain in work in later life, and both organisational and individuals *push* and *pull* factors contribute to that decision. Although not relating directly to the older health and social care labour force, the Centre for Research into the Older Workforce (CROW) (CROW, 2004a; b) suggested that certain older workers are more likely to work beyond the SPA than others. *Choosers* (qualified professionals such as nurses and AHPs), are more likely to work beyond the SPA, whereas *survivors* (the less highly qualified workers, such as nursing auxiliaries and carers), would elect not to work in later life, but do so out of necessity (CROW, 2004a).

Older workers in the UK are among the most likely in Europe to remain in work beyond the SPA (Clayton, 2010). Those who are in good health, in paid work immediately prior to the SPA or with limited caring responsibilities, are the most likely to choose to remain in employment (EHRC, 2010). Since 1994, labour market participation rates of older workers has grown (ONS, 2015a), and since 2001, employment rates of those aged 50 to 64 have increased from 62 per cent to 66 per cent in 2012 (ONS, 2012m). Moreover, in 2012 it was shown that 12.2 per cent of men and 11.6 per cent of women aged at the SPA and over (65, and 60 to 62 years respectively) were in employment, demonstrating that the rates of older workers aged beyond the SPA have increased by 4 percentage points (to 9 per cent) since the start of the twenty-first century (DWP, 2012; ONS, 2013d; 2015b). These figures have demonstrated a change in the pattern of older workers labour market participation, as historically a greater proportion of women than men continued to work beyond the SPA (ONS, 2012m). However, while these patterns are currently evident, the change is apportioned to the gradual increase in the SPA for women, and is expected to readjust when women's SPA comes in line with men's (ONS, 2011c; Padilla, 2011; ONS, 2012m).

Both men and women are more likely to work on a part-time basis after the SPA (67.2 per cent); for women, part-time working is evident in all age groups, for men, it increases from the 55 to 59 years age group onwards (ONS, 2013d). Differences in the skill level of jobs after the SPA are also

evident between genders; men are often concentrated in highly skilled jobs such as management or professional roles, whereas women tend to occupy lower skilled jobs such as care and domestic work (ONS, 2012k, 2013d). The ONS suggested that the types of jobs held beyond the SPA reflect the adaptability to flexible working arrangements that enable the older worker to remain in employment for longer (ONS, 2012m).

Having considered the pattern of who works at and beyond the SPA, the following section focuses on how policy initiatives influence older workers' choices in later life.

2.5.1 Policy initiatives and retirement culture

The abolition of the DRA, the implementation of a greater range of anti-discrimination legislation, and increases to the SPA are all policy initiatives aimed at encouraging the older worker to remain in work for longer; though, as Wood et al. (2010) argued, changes to age legislation alone will not encourage individuals to continue working longer. The EHRC (2010: 5) concurred, and suggested that a 'concerted drive' by Government and employers to address stereotypes and meet the health, caring and employment needs of older workers is required to enable them to stay in the labour market.

Hedges and Sykes (2009: 8) advised that the development of a 'retirement culture' is necessary to raise awareness of positive options around the SPA, and to encourage effective planning for eventual retirement. Employers report that older workers have greater experience, loyalty, productivity and maturity, yet approaches to retaining staff around the SPA, where they do exist, are not comprehensive (EHRC, 2010). Employers need to develop organisational practices to encourage opportunities for older workers, by allowing flexible working and phased transition to retirement. An open dialogue between employer and worker is required to pre-empt planning around the SPA; however, for this to occur successfully, employers need to make these discussions routine, open and non-prejudicial (BIS, 2011b).

While Government is encouraging older workers to remain in work for longer for societal and economic purposes, there are benefits to the older individual in continuing in working beyond the SPA. In the following section key benefits of working beyond the SPA are reviewed.

2.5.2 Benefits of working beyond the SPA

Although the literature relating to the older health and social care labour force is limited, evidence relating to the wider older working population has salience concerning the benefits of working beyond the SPA. Aside from the financial advantages, such as earning without paying

national insurance contributions, increasing savings and extending pension contributions for eventual retirement, there are other less tangible benefits (Hedges and Sykes, 2009; Dowling, 2013). As long as work beyond the SPA involves meaningful tasks and stimulating activity, and takes place in a conducive environment, older workers who remain in work report better levels of physical and psychological health than those who do not work (Oakman and Wells, 2012).

Social connectedness, the social interaction and a sense of purpose gained from going to work, reduce the risk of social isolation in older age, and the physical exercise and mental stimulation required to complete any type of work ensures well-being (Lancee and Radl, 2012). It could be argued that for older health and social care workers, the interactions with colleagues and peers on a regular basis and the satisfaction gained from interacting with clients and their families are highly beneficial to maintaining self-worth and well-being. Flynn (2010b) reported that networks created and established at work can have a strong influence towards retaining older workers. Moreover, respondents in the Barnes et al. (2004: 37) study suggested the sociability of their employment was a 'particularly valued aspect of remaining in paid work'.

Although individuals with a high sense of social connectedness remain in work until later life, less engaged individuals retire from work much sooner, increasing the chance of social exclusion and isolation which can contribute to both physical and psychological health issues (BIS, 2011a; Lancee and Radl, 2012). While in general older workers recognise that there are benefits to working longer, negative aspects, such as obligation, tend to be focused upon when considering their options (Vickerstaff, 2010). Nonetheless, as Hedges and Sykes (2009) reported, working longer does not necessarily mean working indefinitely, and by focusing on working for a couple more years, the notion becomes less daunting.

The benefits to working longer support the concept of *active ageing*, the main principle being to provide those in older age with the support to ensure full participation in life, based on their own choice and potential. Active ageing attempts to prevent negative social impacts of a changing population structure by mitigating the potential burden on health and welfare systems (Šímová, 2010). The concept emerged in the 1990s and has been developing since, with the emerging modern principle combining elements of productive ageing, i.e. 'any activity by an older individual that produces goods or services' (Bass et al., 1993: 6), with an emphasis on quality of life, and physical and mental well-being. By working longer, older workers can continue their activity in meaningful pursuits and maintain intergenerational solidarity, and are participative and empowered, all of which can increase independence and productivity. Within the EWL agenda, the Government, by placing emphasis on employment in later life, has increased scholarly interest in the active ageing concept (Walker, 2002; Walker and Maltby, 2012). In relation to older

workers in the health and social care labour force, this heightened academic interest can only be beneficial in raising awareness of the need for robust organisational policy and practice to support those working later in life.

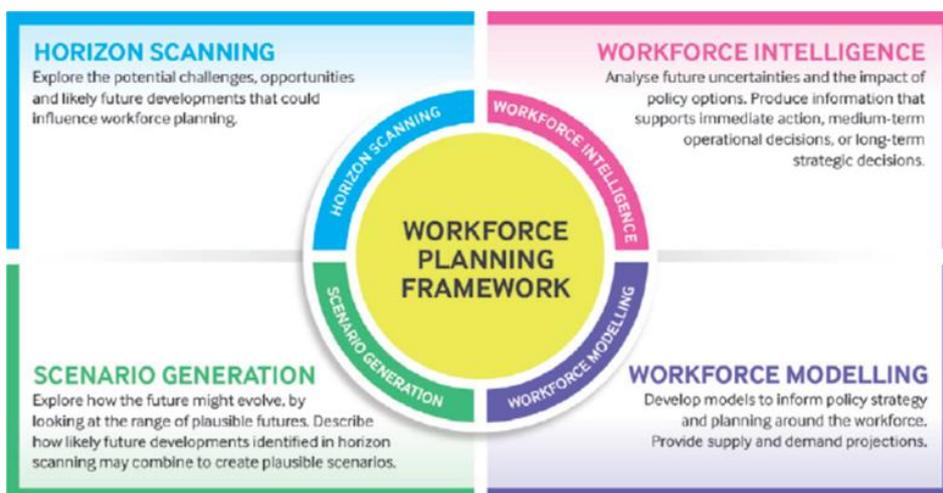
With working beyond the SPA being seen as beneficial, employers need to ensure that their organisations can accommodate staff choosing to remain in work. The following section therefore examines the documented evidence around workforce planning.

2.6 Workforce planning

The workforce is central to the health and social care system; how effectively the supply, education, training and development of staff are undertaken, is vital for the future viability of health and social care (Dixon, 2011; Skills for Care, 2011b). Effective workforce planning is imperative for the older health and social labour force. While the EWL agenda aims to encourage older workers to remain in work for longer (Weyman et al., 2012), without adequate skill-mix, availability of full- and part-time job opportunities and support (for instance, OH practitioners), health and social care cannot meet the demands made by the ageing population (HM Government, 2013b; House of Lords, 2013).

Workforce planning is the process of an organisation employing ‘the right number of employees with the right knowledge, skills and behaviours in the right place and at the right time’ (CfWI, 2013: 2). Effective workforce planning requires decisions to be based on reliable workforce intelligence, and the *Workforce Planning Framework* (Figure 2.2) provides a dynamic model by which this can be developed.

Figure 2.2 Workforce Planning Framework



Source: CfWI & Skills for Care (2013: 2)

Within the context of health and social care, the following four sections consider effective workforce planning and the challenges encountered.

2.6.1 Effective workforce planning

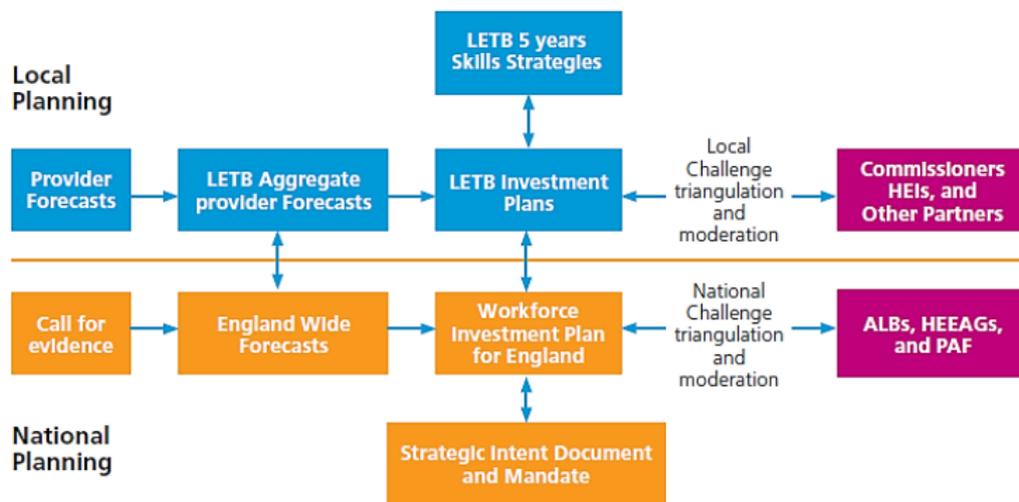
Health and social care workforce planning aims to achieve an appropriate balance between the supply and demand of different occupation groups, both for short- and long-term service provision (Ono et al., 2013). The House of Commons Health Committee (HCHC) (2007: 5) suggested that workforce planning should be a simple process; that organisations should 'decide what workforce is needed in the future and recruit and train it'. Additionally, Ono et al. (2013) reported that effective workforce planning is not only necessary to guide policy decisions for education funding, but also to establish the impact of service redesign required to respond to service demand; particularly important in the context of the health and social care sector due to the financial implications and timescales required for training new staff.

Nevertheless, in reality, workforce planning is a complex and difficult process. In the report *A Health Service for all Talents* (DH, 2000a) it was acknowledged that health sector workforce planning had become outmoded and that a new system was required in light of technological advances, and the demands of an ageing population. As a result, actions such as improved training and education of staff, increases in staff numbers and flexibility of skills were implemented (HCHC, 2007). However by 2005, it was clear that actions taken from the *A Health Service for all Talents* report were no longer tenable (DH, 2000a). Within the NHS, staff numbers increased by more than 24 per cent between 1999 and 2005 (exceeding expectations and recommended targets), the anticipated increase in productivity failed to materialise, and it was evident that in some organisations workforce planning and the link to financial planning was lacking (HCHC, 2007). With financial deficits evident in many NHS trusts, the Government implemented strategies, such as removing posts, placing a freeze on recruitment and cutting training budgets, in an effort to regain a financial balance (ibid.). It became evident that workforce planning within the health sector was not an efficient process, and it was observed that the 'expansion of the workforce was reckless and uncontrolled' (ibid.: 30). In the *Workforce Planning* report (HCHC, 2007), the HCHC concluded that improvements were required with the long-term strategic elements of the workforce planning system. Thus, a move towards creating a more integrated and aligned planning system was developed.

From the recommendations in the *Workforce Planning* report (HCHC, 2007) a number of workforce planning frameworks were developed to improve workforce planning at the national, regional and local level (DH, 2010c). The most recent incarnation, *A National Framework for*

Workforce Planning (Figure 2.3) developed by Health Education England (HEE) serves as a reference point for the process, and outlines how HEE ‘approaches problems and identifies solutions’ to maintain a patient-centred focus (Smith, 2015: 10). By involving partnerships with agencies such as the Local Education and Training Boards (LETBs), Higher Education Institutes (HEIs) and Patient Advisory Forums (PAFs), the framework demonstrates that ‘all parts of the system have parts to play in ensuring the adequate supply of staff with the right skills, values and behaviours in the right numbers to deliver safe, effective high quality care’ (ibid.: 11).

Figure 2.3 A National Framework for Workforce Planning



Notes: Arm’s Length Bodies (ALBs); Health Education England Advisory Groups (HEEAGs); Higher Education Institutes (HEIs); Local Education and Training Boards (LETBs); Patient Advisory Forum (PAF)

Source: Smith (2015: 13)

Given recent evidence, such as the *Francis Report* (Francis, 2013), the *Berwick Review* (Berwick, 2013) and the *Cavendish Review* (Cavendish, 2013), which place workforce development at their centre, the HEE has committed to develop a workforce that has ‘flexible skills’, the ‘ability to adapt and innovate’ and are ‘able to work across acute and community boundaries’ (Smith, 2015: 11). And importantly, given the history of inadequate workforce planning, limited communication between professions and a lack of integration with financial planning, this framework suggests a positive approach to integrated health workforce planning (Dixon, 2011).

Having determined the requirements for effective workforce planning, the following section considers the challenges faced in achieving this in regard to the health and social care sector.

2.6.2 Challenges to effective workforce planning in health and social care

In 2010, in response to pay freezes for health care workers, NHS Employers reported that fundamental changes were required in the NHS and would have inevitable consequences for the workforce (Buchan and Seccombe, 2010). The constraints on funding led to policy changes that favoured staffing reductions and the improvement of productivity of those staff remaining by the implementation of skill-mix and alternative work patterns. The Royal College of Nursing (RCN) noted concerns with these measures, most notably with the lack of evidence to support the plans, but also with the development of unacceptable regional variations in the delivery and access to services (RCN, 2010). The RCN argued that the health sector still required delivery of an effective service while meeting the challenges of the future, and that workforce planning should be in place to ensure a sustainable workforce. Data on the nursing workforce in England is limited, and at times out-dated; in order to achieve effective workforce planning, improvement in data collection for nurses working in a variety of settings, student nurse intake and attrition rates are required in a central database (Buchan and Seccombe, 2010).

Buchan and Seccombe (2010) reported that the ageing of the workforce is a challenge, and as such requires policy attention; in 2008, fewer than 1 in 10 nurses were under the age of 30, while 1 in 3 were aged 50 and over. Retirement patterns of older nurses require further understanding as these have implications for workforce planning and may be influenced by changes to policy. While some nurses may choose to delay retirement, addressing supply in the short-term, if past trends continue, this older workforce are more likely to choose part-time over full-time employment which does not address increased service demand (ibid.). Additionally, along with health sector reforms, social care also faces a period of unprecedented change. In the next 20 years, the number of people aged 65 and over in England is expected to increase by half, and those aged 85 and over will double (CfWI, 2011b). Within the literature, the economic value of social care remains unexplored, making it difficult for social care providers to argue the benefits of increased spending in this area. However, reductions in funding to social care increases the shortage of resources which may lead to service users' needs not being met (CfWI, 2011a; b). Within social care and social work, with service redesign, there will be a need for greater flexibility in the workforce with the provision of a broader range of services across more integrated services. Social workers will require a greater degree of managerial and technical competence as they take on more specialist roles, while social work assistants will require up-skilling to adopt some traditional social worker roles. As services develop, the social care and social work labour force will require training for new roles or skill-mix requirements; however, the challenge lies with identifying funding to achieve this (CfWI, 2011b).

In 2012, the DH commissioned the CfWI to identify challenges faced by health and social care, and to extrapolate workforce implications. Rather than examining issues in professional silos, the challenges were considered in the context of the whole workforce. The CfWI (2013: 3) stated that workforce challenges are ‘fundamental’ for policy makers across health and social care, and that the challenges require action at the highest levels. The four challenging areas identified by the CfWI cover i) demographic and social elements, ii) health and social care system design, iii) quality and productivity, and iv) economic constraints, and are summarised in Table 2.1. For example, a health and social care system design challenge, involves shifting the focus towards prevention and well-being.

Table 2.1 Workforce challenges

Category	Challenge
Demographic and social	<ul style="list-style-type: none"> ■ Planning to meet the needs of an ageing population with an ageing workforce ■ Managing changing demand resulting from an increasing prevalence of complex long-term conditions and co-morbidities ■ Managing changing public expectations about care they receive
Health and social care system design	<ul style="list-style-type: none"> ■ Achieving better integration between health, social care and support organisations ■ Shifting the focus of the system towards prevention and well-being ■ Delivering the personalisation agenda and providing person-centred care within financial constraints
Quality and productivity	<ul style="list-style-type: none"> ■ Ensuring the system delivers high-quality services within financial constraints ■ Developing effective measures for quality of care and productivity and ensuring high-quality data is collected ■ Preparing for changes resulting from innovation and technology
Financial and economic	<ul style="list-style-type: none"> ■ Planning service delivery given the uncertainty about level of funding in the future and how this will affect future demand for and supply of care services ■ Uncertainty about how investment in life science, health and care will support the UK economy

Source: CfWI (2013: 6)

To respond to challenges faced by the health and social care sector, there is further need for a ‘capable, responsive, well-trained and empowered’ labour force (Skills for Care, 2011b: 2). Additionally, the profile, knowledge and skills of the future health and social care workforce needs to ‘evolve constantly’ in order to maintain high quality services in an era of increased longevity and technological advances (DH, 2012b: 10). While it is acknowledged that the current health care system cannot continue in *status quo*, constant change has been apparent within the health and social care sector over the last decade (HCHC, 2007). It is therefore essential that responses to current challenges consider long-term requirements and do not only provide a ‘quick fix solution’ (Gantz et al., 2012: 436); rather solutions should be achieved through deliberate and careful planning that allows pressures to be addressed (DH, 2012b).

Finally, the paucity of reliable data relating to the health and social care labour force is evident throughout the literature. Yet to complete effective workforce planning, up-to-date evidence is necessary to adequately inform the various agencies involved within the workforce planning

framework as presented in Figure 2.3. To enable effective predictions about future health and social care workforce requirements, it is therefore essential to develop a single-source health and social care labour force database that comprises consistent, reliable and informative demographic and socioeconomic data (Buchan and Seccombe, 2010; Dussault et al., 2010; Ono et al., 2013).

With the challenges to workforce planning in mind, the following two sections consider the challenges relating to the supply and demand of health and social care workers.

2.6.3 The future supply of health and social care workers

In England, the numbers of individuals entering pre-registration training for health and social care each year are the result of funding decisions made by Government and policy makers, such as the HEE (Figure 2.3) (Buchan and Seccombe, 2010; Smith, 2015). From the late 1990s to the mid-2000s international recruitment of health and social care workers was a key national policy in achieving workforce growth, offering a cost effective and timely solution to staffing shortages (Buchan, 2008). However, with the introduction of the Points Based System (PBS) (Appendix B, Table 8.3) for controlling in-migration, the ability to recruit internationally has been severely constrained (Buchan and Seccombe, 2010).

In spite of the importance in projecting the future nursing workforce, there is little evidence available on the transition rates between pre-registration education and the labour market (Buchan and Seccombe, 2010). Based on data gathered through the Freedom of Information Act, Walters (2010) suggested that the non-completion rates for nurses was increasing; from 24.8 per cent in 2006 to 27.6 per cent in 2009. Although Buchan and Seccombe (2010) noted concern with this information, the CfWI (2010) estimated a smaller attrition rate (20 per cent), which would result in an over-estimation of the supply of nurses in the future. While opinions differ, they do illustrate the need for robust data collection regarding attrition, in order to produce reliable models from which effective commissioning policy can be developed (Buchan and Seccombe, 2010).

Due to increasing demands for medical competency and rising levels of responsibility, in 2008 it was agreed that in England all pre-registration nurse education would be taught at degree-level (RCN, 2007; The Willis Commission, 2012). However, with the move to degree-based education, repercussions for the future supply of nurses were noted. Buchan and Seccombe (2010) and Andrew (2012), argued that the move towards graduate training may negatively affect older nurses' retirement behaviour, and although they acknowledged that nursing needs to be degree-based to meet the demands of an increasingly complex patient-led service, they suggested that degree-based education may affect the skill-mix available in the longer-term by encouraging the

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use of lesser-qualified assistant practitioners in an effort to fulfil basic nursing care. Moreover, along with changes to nurses' education, the social work degree is also being developed, with the aim to improve the quality of graduate social workers to enable more complex cases (such as those involving clients with severe mental health issues) to be addressed (CfWI, 2011a). However, like the concerns noted regarding skill-mix among nurses, changes to the social work degree may influence the future employment prospects for social workers in favour of social workers assistants.

While in comparison to the NHS, workforce planning within social care is less resourced, the structure of the future social care sector requires serious consideration if it is to cope with the increasing demand for care services (CfWI, 2011b). The CfWI (2012b) therefore suggested a series of state and organisational measures to improve social worker workforce planning, which included increasing the quality and quantity of student placements, improving the retention of experienced social workers, and reviewing the funding of education to control the supply of qualified social workers to the labour market. Again, like the health sector, the number of social work staff entering education and the supply of qualified staff to the social care sector is under the control of policy makers (National Audit Office, 2014), further reinforcing the need for robust data to inform policy decisions.

2.6.4 The future demand for the health and social care labour force

Calculating the demand for the health and social care workforce is far less predictable than managing its supply, as it involves anticipating probable and unexpected events (Ono et al., 2013; National Audit Office, 2014). The main drivers used to forecast demand are population changes, health and social care service utilisation, service delivery models and economic growth (Ono et al., 2013). While Ono et al. (2013) suggested that demographic changes can be predicted with a degree of certainty, Franklin (2014: 16) argued (based on his analysis of ONS population projection and the Family Resources Survey) that 'life expectancy and disability are notoriously hard to predict'. Moreover, other drivers of future demand, such as technological advances and personal preference regarding the type of care received, involve a greater level of ambiguity, making the prediction of demand more complex (CfWI, 2013; Ono et al., 2013; Franklin, 2014).

Despite the uncertainty involved, it is likely that the personalisation agenda will increase the demand for personal care assistants (Appendix B, Table 8.4). It is also probable that the demand for Occupational Therapists (OTs) will increase to meet the needs of an ageing population and for those with complex long-term conditions such as dementia and learning disabilities (Blood, 2010; Falkingham et al., 2010; CfWI, 2012a). Furthermore, for OTs, specific initiatives such as

reablement, vocational rehabilitation and the influence of the OH agenda may result in an increased demand for their specialist assessment and rehabilitation skills (CfWI, 2012a). However, the demand for social workers may be in decline; with the introduction of self-directed support and personal budgets, much of the assessment for and implementation of care packages will become obsolete. In addition, with the introduction of the assistant practitioner role and a move towards skill-mixing, it is likely that the social worker role in adult services will be in less demand (CfWI, 2012b).

Having considered challenges to both the supply and the demand for health and social care workers, given the changing nature of health and social care (Beresford, 2008), it is reiterated that to manage health and social care workforce planning effectively, robust data is required to support decisions made by policy makers.

2.7 The health and social care labour force in England

This section provides an overview of the organisations, occupations and individuals who provide health and social care in England; collectively known as the health and social care labour force.

The health and social care labour force comprises individuals who provide direct health and social care to individuals in need (Yar et al., 2006; Evans et al., 2012). Delivery of these services takes place in a variety of settings, including hospitals, individuals home and care homes, and to accommodate the range of services required, the health and social care labour force incorporates a diverse range of occupations, with doctors, nurses, nursing auxiliaries and support workers comprising 43 per cent of staff (Howlat et al., 2015). Furthermore, care can be considered formal when it is delivered via a care organisation or institution such as the NHS, social services or an independent care company, or informal, where the caregiver is usually an unpaid friend or family member (Boddy et al., 2006; The King's Fund, 2006; Hiel et al., 2015).

With increasing demand for health and social care from the ageing population, the size of this labour force will have to increase substantially to meet requirements, however as discussed in Section 2.6 a balanced approach to workforce planning is necessary (Eborall et al., 2010; Evans et al., 2012; Imison and Bohmer, 2013).

2.7.1 The healthcare labour force in England

In England, the majority of healthcare is provided by the publically-funded NHS, although private sector organisations such as independent hospitals and nursing homes also support demand (Yar et al., 2006).

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The healthcare labour force comprises a wide range of occupations that are considered broadly as medical or non-medical, ranging from doctors, dentists, nurses, allied health professionals (AHPs) (e.g. occupational therapists, physiotherapists), support workers and clerical staff (Yar et al., 2006; HSCIC, 2014b).

2.7.2 The social care labour force

There are around 1.52 million jobs within 17,300 organisations in England that provide adult social care services (residential and non-residential), and include organisations such as councils, large international companies and charities (Skills for Care, 2014). Although the voluntary or third sector (charities) is a relatively small social care provider, the evidence suggests that older workers are attracted to working with these organisations, with this sector employing the largest proportion of workers aged 60 to 75 (Hussein and Manthorpe, 2011).

Like in health care delivery, a variety of professional and non-professional occupations deliver adult social care, including social workers, occupational therapists, care workers and senior care workers (Skills for Care, 2014). Interestingly, in regard to the older social care labour force, it has been found that older staff employed as care workers tend to remain in their jobs into later life, whereas those employed in a professional role such as occupational therapist or social worker, on reaching age 60 tend to retire from the labour force (either because of financial security or because their job has become less desirable) (Manthorpe et al., 2010; Hussein and Manthorpe, 2011).

2.7.3 Direct Payments

In an effort to enable greater choice and control for individuals receiving care, provision of social care has undergone significant changes in recent years, with a move from traditional local council providers towards private and voluntary provision, and importantly the development of the personalisation agenda (HM Government, 2007; Manthorpe et al., 2010). The personalisation agenda aims to 'promote choice, control and independence', and introduced a system of Direct Payments where social services give money to the service user to pay for their own care, rather than access care provision from the Local Government (DH, 2010a: 5; NHS Choices, 2016). Direct payments enables service users to tailor services to their specific needs, enabling control over who they employ (many employ friends and family) and how their care is delivered (Manthorpe and Hinds, 2010; Moriarty et al., 2014).

Direct payments can be seen to empower individuals, however limitations have also been noted, in that this method relies heavily on social networks (which is a disadvantage for the socially

isolated), and that many of the workers employed via direct payments were previously employed by care organisations, thus reducing the availability of staff for those not receiving direct payments (Eborall et al., 2010; Manthorpe and Hindes, 2010; Glendinning et al., 2011).

2.7.4 Informal Care

To meet the growing demand for health and social care, Governments are increasingly relying on the provision of informal care; that is unpaid care provided by family and friends (Costa Font et al., 2015; Hiel et al., 2015; Torbica et al., 2015). Informal care provision is wide ranging, and can include assistance with personal care, instrumental care or supervision, and takes place outside of the system of organised professional care (Hiel et al., 2015). However, while the estimated 5.4 million informal carers in England make a significant contribution to the health and social care sector, as yet they are generally not included in employment statistics (Skills for Health, 2014), making their contributions difficult to evidence, and effecting realistic workforce planning.

Informal carers are generally unpaid, and often provide support to individuals who require long term care (Krol et al., 2015). While most informal caregivers do so altruistically, familial obligation can be apparent and some informal carers consider the role burdensome (Do et al., 2015; Krol et al., 2015). Moreover, informal caregiving is associated with negative effects on the health and well-being of the carer, and some experience financial challenges through informal care costs and the impact on their paid work (Krol et al., 2015).

In recognition of the rising need to combine paid work with informal care giving tasks, authors such as Imison and Bohmer (2013: 5) suggest a 'strategic approach' is required to support those providing informal care. Plaisier et al. (2015) and Frate and Jenull (2015) concur and suggest there is a need for policy to recognise the contribution of this workforce, and for Government to enable employers to provide support, through for example, flexible work, to maintain their invaluable role within the health and social care labour force.

To summarise emergent themes from the literature review, and to place into context the development of the research questions, the following section presents the conceptual framework of this thesis.

2.8 The conceptual framework of this thesis

The demand for health and social care is increasing with the ageing population, and while the Government is encouraging older workers to remain in work for longer, little is known about the

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workforce that will contribute to their care (Fitzgerald, 2007; Boorman, 2009; Cracknell, 2010; DWP, 2010b; Sykes et al., 2010; HM Government, 2013b).

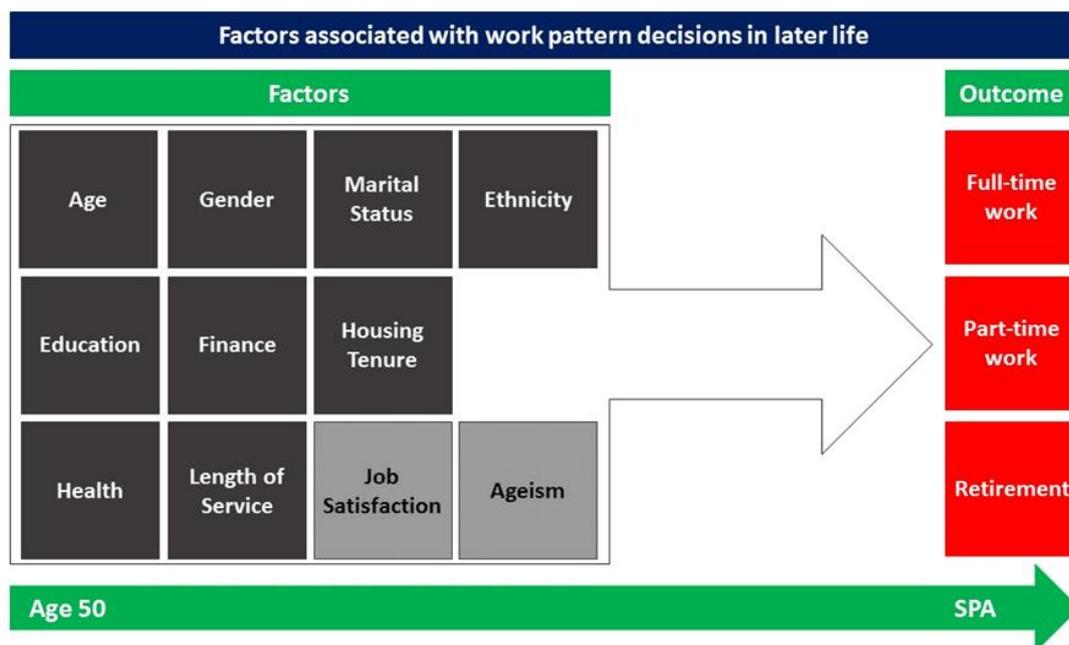
The conceptual framework of this thesis (Figure 2.4) draws together key factors identified from the literature that are associated with employment decisions in later life, and uses these to explore the older health and social care labour force by guiding the research questions, rationale, variable selection, design strategy and analysis of this study.

As shown, demographic characteristics such as age, marital status and ethnicity (Maltby, 2011; Joly, 2012; Oakman and Wells, 2012; Weyman et al., 2012), socioeconomic factors such as education and housing tenure (Coulson and Fisher, 2009; Morescalchi, 2011), health (RCP, 2015; Timms et al., 2015), and employment factors, such as length of service (Kosana and Gordana, 2013; Śliwiński et al., 2014), were noted as being associated with older workers' decisions regarding labour market participation. Although from the literature review job satisfaction (Saari and Judge, 2004; Pagán, 2013) and ageism (Loretto et al., 2000; Wood et al., 2008) were noted to be influential in their association with labour market participation in later life, the LFS does not provide variables to support sufficient analysis of these factors; thus, analysis of these influences was not conducted within this study (acknowledged by the grey shading in Figure 2.4).

Although the conceptual framework suggests a linear approach, in reality older workers are heterogeneous (Morrell and Tennant, 2010), therefore the number of factors relevant to each individual, and the point at which an older worker reaches the outcome stage, will vary depending on their individual experiences and circumstances.

In the twenty-first century with regard to working patterns, older workers have choices that include remaining in full-time work, working part-time, or moving into full-time retirement (Clayton, 2010; Šímová, 2010; Finch, 2011; Weyman et al., 2012). However, the literature suggested that the opportunity to work on a part-time basis is an important factor in encouraging older staff to work for longer (Gannon and Roberts, 2011; Valletta and Bengali, 2013). Therefore, as little is known about what influences the older health and social care labour force to extend their working lives, the framework presents a focus on those who work part-time at and beyond the SPA.

Figure 2.4 Conceptualising factors associated with employment decisions in later working life



Notes: Job satisfaction and ageism are shaded grey to acknowledge that although they were identified as relevant within the literature, due to limitations in the LFS they were not considered within this research

Source: Author's own

2.9 Summary and limitations of the literature

Changes to the structure of the population caused by increasing longevity and reduced fertility rates were evidenced throughout the literature reviewed for this research. In an effort to stem the costs of an ageing population, along with many countries in western society, the UK Government has implemented measures to encourage older workers to work for longer in later life (Danson, 2007; Cracknell, 2010; DWP, 2010b; Barrell et al., 2011; Silcock, 2012; Weyman et al., 2012). The ONS (2013d) reported that in 2012, in regard to the employment rate of those nearing the SPA in the UK, 55 per cent of men aged 60 to 64, and 66 per cent of women aged 55 to 59 were still in employment. The aim of the EWL agenda is to encourage greater numbers of older workers to remain in work for longer, and to increase the proportion of older staff in work at and beyond the SPA (age 65 for men, ages 60 to 62 for women), in preparation for the increases to the SPA planned up to 2020 and beyond (HM Government, 2013b; ONS, 2013d; Strudwick and Kirkpatrick, 2013).

For older workers, the prospect of working for longer is a controversial subject. Over the last half century, retirement has become an expectation for many workers in older age, a social institution that forms a rite of passage from years of working, to the freedom to pursue activities of choice (Marshall and Taylor, 2005). For some however, the potential to work for longer is seen as a

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benefit. For those who profit from the social interaction at work and identify themselves in a specific role, or those without sufficient funds, extending their working life can reduce the prospect of poverty or social isolation in old age (Zaidi et al., 2006; Vickerstaff, 2010).

Although there is substantial evidence regarding labour market participation, employment patterns and retirement, there is limited information relating specifically to the older health and social care labour force. Nurses have been considered to some extent, however in respect of older AHPs, social workers and social care workers, little is known about the working patterns during the 'retirement zone' (those aged 50 to 64 years) (Vickerstaff, 2006a: 508) and beyond.

Older workers experience a range of different work and life experiences that contribute to the expectations of work and retirement in later working life, and when entering the 'retirement zone' (ibid.: 508), a number of factors (for example, demographic and socioeconomic) can influence their decisions about work patterns and retirement. Nonetheless, one of the important themes evident within the literature was the element of choice; older workers who have choice in their work patterns, such as flexibility in the form of part-time work, are more likely to remain in work and continue to provide an effective service (Vickerstaff, 2006b; Flynn, 2010b; Morrell and Tennant, 2010).

The labour market participation of older workers in general is gradually increasing (ONS, 2013d), although robust data is required to establish the pattern amongst the older health and social care labour force. Additionally, regarding older workers in general, work by McNair (2011), the DWP (2012), Post et al. (2013), Sahlgren (2013) and Oakman and Wells (2012) provided considerable evidence of factors that are associated with decision-making in later working life, and the benefits of working beyond the SPA. However, empirical evidence relating specifically to the older health and social care labour force was again insufficient.

Workforce planning is the means by which organisations employ the right number of people, with the right skills, in the right place, at the right time (CfWI and Skills for Care, 2013). The UK has demonstrated ineffective workforce planning in recent years, for example, with the reactionary increases in nursing numbers between 1998 and 2008 (Bach, 2010). This type of reactive policy decision led to situations where the balance between workforce supply and demand was not maintained. Thus, the challenge for effective workforce planning in health and social care is to provide the necessary data to support the longer view. The CfWI at the behest of the DH is examining effective planning for the future service demands and this will have implications for policy, as ultimately policy drives the provision of funding for education and training. Effective workforce planning is achieved by gathering valid and robust data from which workforce modelling can inform policy strategy. Concerning the older health and social care labour force,

there is a dearth of consistent data on individuals' demographic and socioeconomic characteristics and working patterns in later life, without which, projections for supply and demand are ineffective (Dussault et al., 2010; CfWI and Skills for Care, 2013; Ono et al., 2013).

The most important issue emanating from the literature is the lack of evidence relating to the older health and social care labour force. With population ageing leading to the increased demand for health and social care, it is vital that further evidence is gathered on this labour force. With greater knowledge, Government and employers can implement improved policy and practice to encourage the older health and social care labour force to remain working for longer. Furthermore, evidence will inform policy strategy on workforce supply and demand factors assisting in effective workforce planning.

The conceptual framework presented in Figure 2.4 summarises the factors which according to the literature are associated with extending one's working life or entering retirement. This framework was used to guide the formulation of the research questions, and the following chapter (Chapter 3) provides an explanation of how the research was carried out, including details of the research design, methodology, the dataset used and the variables considered.

Chapter 3: Methodology

3.1 Introduction

In Chapter 2 empirical and theoretical literature was considered and demonstrated a paucity of evidence relating to the older health and social care labour force. The purpose of this chapter is to introduce the research design, to outline the data and to present the study population. Moreover, definitions of, and the rationale for the key measurement concepts and variables used are presented. The data analysis strategy will be described and includes the modelling strategy developed for the regression analysis that is reported in Chapter 6.

3.2 Research design

Data using a repeated cross-sectional design was employed to explore the research questions posed in Section 1.4. Cross-sectional studies are used to investigate change, and although the collection of data may take place for different individuals over a period of time, they are often utilised when the research questions investigate a particular point in time (Maxim, 1999; Ritchie and Lewis, 2003; Bryman, 2008).

Cross-sectional analysis to determine factors that are associated with labour market participation has been used in a variety of studies. Kim and Kim (2014) investigated labour force participation in Korea using cross-sectional analysis of secondary data (the Gender Inequality Index), and Miller and Volker (1983) used a cross-sectional methodology to analyse the Census Population and Housing dataset (Australia) in order to examine the labour market participation of married women. Similarly, in the USA, Blanck et al. (2003) used a cross-sectional design to investigate individuals' labour force participation and income, and Muller et al. (1996) pooled cross-sectional data to determine labour force participation and earnings among those with a disability.

In this study, secondary analysis of the LFS (see Section 3.3) produced findings that investigated the research questions and informed the discussion. Bryman (2008) outlined several advantages to using secondary data analysis as part of a research design. Firstly, it allows more time for analysis and interpretation of the data and as such reduces the costs involved in a study. Secondly, most large datasets are nationally representative suggesting high quality, i.e. sampling procedures have been rigorous and problems of non-response are kept to a minimum, and thirdly, with large samples, nationally representative sub-groups can be created and analysed, saving time and money on small localised studies. Nevertheless, it is recognised that secondary

data analysis also has its limitations, such as a lack of familiarity with the data and absence of key variables; however, time spent becoming familiar with the dataset and its nuances prior to analysis is invaluable (ibid).

Because the UK has an asymmetric devolved Government structure that allows divergence in policy delivery through greater ability for local policy formation, as the country with the largest population (HM Government, 2009), the decision was taken to focus this research on the population of England. The labour force in England comprises two sectors: the public sector and the private sector. The public sector can be defined as ‘that owned, funded or run by central or local government’, and the private sector, which refers to all other business and includes self-employed individuals, public limited companies, limited companies, charities, trade unions and housing associations or other voluntary organisations (ONS, 2012i: 97), consists of the difference between total employment and public sector employment (ONS, 2013c). From the perspective of health and social care, the NHS and Local Authorities are within the realm of the public sector, and the private sector consists of independent and voluntary organisations such as Bupa and Age UK. As health and social care employees span both public and private sectors and to maximise cell counts, in this research the *health and social care labour force* refers to the amalgamation of both private and public sector workforces.

In the next section the LFS is introduced and its use within this research is justified.

3.3 Data: the Labour Force Survey (LFS)

The LFS is the largest regular social survey in the UK, and offers a unique resource that uses international definitions of employment, unemployment and economic inactivity (ILO, 1982). The LFS not only includes a wide range of employment-related topics such as occupation, work pattern and hours of work, it also includes a variety of demographic and socioeconomic data that is used to inform social, economic and employment policy in the UK (ONS, 2011a; ESDS, 2012).

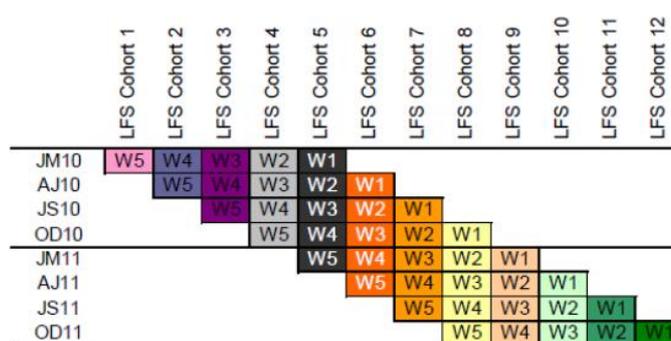
The inclusion of demographic data, such as gender, age and ethnicity, together with socioeconomic information, such as education and earnings, adds to the richness of the LFS and is a major strength for the analysis required to address the research aim of this thesis. Nevertheless, the LFS does have its limitations. Factors identified within the literature as being relevant to older workers in their decisions about work patterns in later life, such as job satisfaction and ageism, are not adequately addressed within the LFS. Therefore, it was decided that these factors would be best investigated in further research, using methods that could effectively capture relevant data.

One of the most important reasons for choosing to work with the LFS in this research was that individuals' occupations are recorded to the *Unit Group* level of the Standard Occupational Classification (SOC) (ONS, 2010b), with examples such as social worker, physiotherapist or care worker. This contrasts with other datasets that only record to either the *Minor Group* level, where Welfare Professional is used to encompass social workers, probation officers and clergy and or to the *Major Group* level where the broad sector is identified i.e. Professional Occupations. In order to illustrate this point, the complete structure of one Major Group, the Professional Occupations, can be found in Appendix B, Table 8.5 and Table 8.6.

The target population of the LFS is based on the resident population of the UK and aims to include all people who reside in private households, student residences and NHS accommodation, such as nurses' residences. Having been first conducted in Great Britain in 1973, the survey is well-established and has undergone several redesigns over the years, including becoming UK-wide in 1994 and transitioning from seasonal to quarterly estimates in 2006 (Werner, 2006; ONS, 2011a; ESDS, 2012).

The survey uses a rotational sampling design, whereby a household or unit, once initially selected for interview, is retained in the sample for five consecutive quarters. The main reasons for this design are that where there is an overlap in the sample, improved estimates of change over time can be established and longitudinal datasets can be produced (ONS, 2011a). The LFS defines Wave 1 to be the first quarter that an address is selected, Wave 2 to be its second quarter, Wave 3 to be its third quarter and so on. Wave 5 is the last time the address is interviewed, and as the selection is based on the address not the individuals living there, new people can be identified in sample waves other than Wave 1. In each quarter approximately one-fifth of the selected addresses in the whole sample are in Wave 1, one-fifth in Wave 2 *etcetera*. 'Thus between any two consecutive quarters, about eighty per cent of the selected addresses are in common' (ONS, 2011a: 12). This is illustrated in Figure 3.1.

Figure 3.1 The LFS sample selection design



Source: ONS (2011a)

Since 2006, the LFS has used calendar quarters (Q1–January to March, Q2–April to June, Q3–July to September, Q4–October to December) to enhance comparability with similar surveys across the EU (ONS, 2011a). Although the LFS was designed to produce cross-sectional data, it has been recognised that linking together data on each individual across quarters would produce longitudinal data that is useful when considering for instance, the effects of government policies. In response, the UK Data Service (2013), using a synthesis of material from existing LFS data, produced two-quarter and five-quarter datasets. However, these datasets have a restricted upper-age limit of 64 years. As this research is interested in exploring the characteristics of the older health and social care labour force, which may include workers aged beyond 64, the use of the two- and five-quarter data sets was deemed too restrictive (ESDS, 2012; ONS, 2012h).

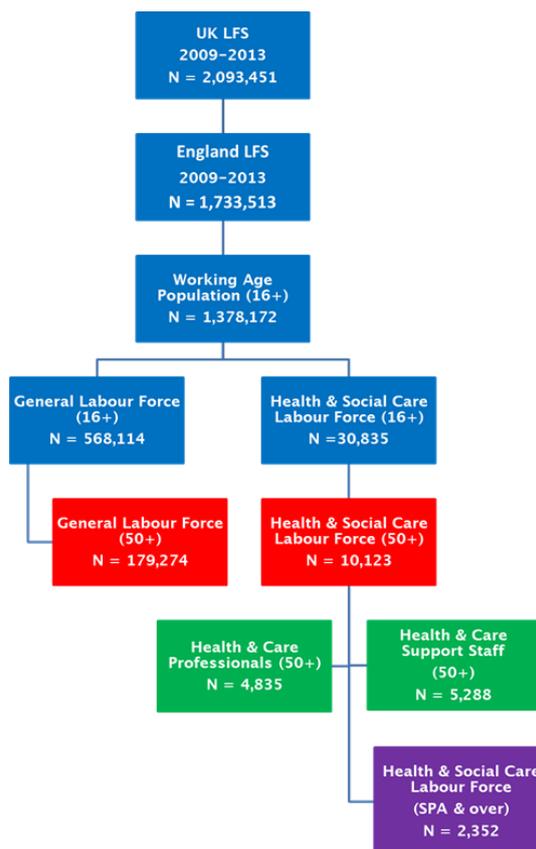
Following exploratory analysis it was established that after merging five years' worth of data (2009-2013) a sufficient sample population was established. To avoid repetition in the final merged dataset, only responses from those interviewed in Quarter 1 (of a possible 5) were included. The details of this merging process can be seen in the Appendix B, Table 8.7.

3.4 Study population

The study population comprised men and women aged 50 years and over who worked in the health and social care labour force in England in any (or all) of the following years: 2009, 2010, 2011, 2012 and 2013 (N=10, 123).

The first results chapter, Chapter 4, presents the analyses of this sample population and the general labour force aged 50 years and over (N=179,274) (shown in red in Figure 3.2). The use of the older general labour force allowed comparison with the findings from the research population; thus facilitating discussion as to the relevance of the results and the implications that the results may have on policy development. Chapter 5 describes the results of the analysis of the older health and social care labour force when divided into two selected occupation groups; the health and care professionals (N=4,835), and the health and care support staff (N=5,288) (shown in green in Figure 3.2), and Chapter 6 focuses on the health and social care labour force aged at the SPA and beyond (N=2,352) (shown in purple in Figure 3.2).

Figure 3.2 The study population in context: LFS (2009-2013)



Notes: Red colour = focus in Chapter 4, Green colour = focus in Chapter 5, Purple colour = focus in Chapter 6; N = sample number unweighted

Source: Author's own analysis LFS 2009-2013

3.4.1 Selected occupation groups

Dividing the older health and social care labour force into two occupation groups using Health and Social Care Information Centre (HSCIC) definitions (HSCIC, 2013b, 2014b), enabled effective interpretation and comparison of results using existing literature, such as that published by the ONS (ONS, 2012j). The first selected occupation group consisted of health and care professionals, that is, individuals in occupations that have a common requirement for a professional qualification such as social workers, registered nurses and AHPs. The second selected occupation group comprised health and care support staff. This group included care workers, senior care workers, support workers and nursing auxiliaries, all of whom are involved in providing direct care and support while under the supervision of a health and care professional (HSCIC, 2013c). Table 3.1 summarises the proportions of staff by selected occupation group and individual occupation.

Table 3.1 Study population by selected occupation group and occupation

Selected occupation group	Occupation	N	%
Health & Care Professionals	Nurses	3,091	30.5
	Allied Health Professionals	1,071	10.6
	Social Workers	673	6.7
	Sub-total	4,835	47.8
Health & Care Support Staff	Care Workers	3,788	37.4
	Nursing Auxiliaries	1,500	14.8
	Sub-total	5,288	52.2
	Total	10,123	100

Notes: *N = sample number unweighted*

Source: *Author's own analysis LFS 2009-2013*

Inclusion into the selected occupation group was based on two criteria. First, because of commonalities within each occupation group, such as hands-on clinical role, pay structure and registration requirements, and second, because of the differences between each of the occupation groups, such as responsibility level and physical, mental and emotional expectations (HSCIC, 2013b; c). In a simplified example, nurses and nursing auxiliaries would both have responsibilities to maintain a patient's skin condition; however, the tasks would differ by responsibility, where nurses would devise the care plan and administer medication, and the auxiliaries would turn the patient in bed and report any changes to the skin to the nurse (ibid.).

3.5 Key variables

The analysis used eighteen explanatory variables and one outcome variable that are defined and discussed in this section.

3.5.1 Explanatory variables

To provide answers to the research questions outlined in Section 1.4, using evidence from the literature by authors such as Lynch and Kaplan (2000), Grundy and Holt (2001), Lissenburgh and Smeaton (2003), Vickerstaff et al. (2008) and Smeaton et al. (2009), explanatory variables from the LFS were identified. The key demographic variables of age, gender, marital status and ethnicity were included, and from the socioeconomic perspective, variables relating to one's educational attainment, earnings and housing tenure were incorporated. Additionally, variables that enabled the analysis of health, and whether health problems affected work, as well as variables that considered employment characteristics such as, length of service and job sector were included.

Variables providing rich data relating to job satisfaction and ageism were not available within the LFS dataset, therefore these factors were not included in the analysis. In addition, non-relevant responses such as 'not applicable' and 'don't know' were eliminated. To capture important information within the analytical sample, while retaining adequate cell counts, where necessary, certain smaller categories were merged into larger groups. For example problems with 'arms and feet', 'back and neck', and 'legs and feet' were recoded into a new category named 'skeletal or joints'. For details of the recoding of variables see Appendix B, Table 8.8 and Table 8.9.

Labour Forces: The LFS variable SOC10M categorises all individual occupations and as such is invaluable in identifying relevant occupations for inclusion in the research population. To identify relevant labour forces for this research, SOC10M was recoded into three new variables. The first new variable, LABOURFORCES, has two categories: i) health and social care labour force, and ii) general labour force, and enables the analysis and comparison of these two categories in relation to research question 1 (Section 1.4). The second new variable, HSCLF2X, divides the health and social care labour force into two selected occupation groups (i.e. health and care professionals, health and care support staff) to enable analysis relating to research question 2 (Section 1.4). And the third new variable, HSCLF1X, divides the health and social care labour force by occupation: i) AHPs, ii) nurses, iii) nursing auxiliaries, iv) social workers and v) care workers to allow a more nuanced examination of the selected occupation groups.

Age: Within the LFS, age (AGE) is entered as a continuous variable that records the individuals' age at the end of the week that they were interviewed. To identify this variable within this research, AGE was renamed AGE1, although no changes to the variable configuration were made. However, to capture pertinent data, following iterations and exploratory analysis, the LFS AGE variable was recoded into two new variables; AGE14 and AGE24X. AGE14 captured individuals in the following four age groups, i) 50 to 54, ii) 55 to 59, iii) 60 to 64 and iv) 65+ as these achieved adequate cell counts for the purpose of the analysis. There are however implications to reducing the number of age categories, such as the inability to analyse individuals at a specific age, for instance, those aged 80 years and over. To enable a control to be placed on the data for the regression analyses performed to address research question 3 (Section 1.4), AGE24X captured individuals who were aged at the SPA and over. As the SPA currently differs for men and women (as discussed in Section 2.5, women's SPA currently varies from 60 to 62 depending on the year that they were born), AGE24X included men aged 65 years and over and women aged 60 years and over.

Gender: As the literature suggested that gender may influence employment decisions in later working life (for example, Duberley et al. (2014); Finch (2014); Vickerstaff (2014)), it was

important to include a variable that could explore the relevance of gender within this study. Thus, the LFS variable SEX was renamed (but not recoded as appropriate binary data was available) to GENDERX.

Ethnicity: As authors such as Joly (2012) and Eborall et al. (2010) suggested that one's ethnicity may influence expectations in later life, it was important to include a variable that recognised to which ethnic group the older workers within this study identified with. Within the LFS, questions relating to ethnicity are concerned with descent rather than one's country of birth (ONS, 2012i). The LFS ETHEWEUL variable had fifteen categories comprising British, Other White, White and Black Caribbean, White and Black African, White and Asian, Other Mixed, Indian, Pakistani, Bangladeshi, Other Asian, Black Caribbean, Black Africa, Other Black, Chinese and Other. However, following exploratory iterative analysis, it was established that by using these categories, insufficient cell counts were available to conduct any meaningful analysis. As such, in line with authors such as the ONS (2014e) and Skills for Care (2014), ETHEWEUL was recoded into ETHNICITY3X and comprised two categories: i) White (comprising all White groups) and ii) BME (comprising all other Black and Minority Ethnic groups). ETHNICITY3X achieved adequate cell counts throughout the analysis, however the implications of compressing the categories in this manner include the inability to analyse specific ethnic groups, such as Black African or Chinese, or to discuss cultural differences in greater detail.

Marital Status: Authors such as Radl and Himmelreicher (2015), Szinovacz (2013a) and Panisoara and Serban (2012) reported that marital status can be associated with employment decisions in later life. As such, in order to consider the marital status of the older workers investigated within this research, and whether this status was associated with employment choice at and beyond the SPA, the LFS variable MARSTA was considered. Following iterative exploration, to ensure adequate cell counts and to reflect evidence from the literature, MARSTA was recoded and renamed into DOMRELS4X and included three categories: i) married (including civil partnerships), single (never married/civil partnership) and separated/divorced/widowed (including civil partnerships).

Education: Educational attainment can be seen as a traditional measure of socioeconomic position and is generally attained relatively early in life (Lynch and Kaplan, 2000; Galobardes et al., 2006b). HIQUAL11 'applies to all respondents of working age (16 to 69) or those in employment with qualifications (including respondents aged 70 to 99)' (ONS, 2011a: 260), and encompasses eighty qualifications that can be achieved. For ease of analysis and using the *National Qualification Framework* (Office of Qualifications and Examinations Regulation, 2013) for guidance, these categories were recoded into a new variable, EDUCATION1X, which comprised

five categories: i) degree (or higher), ii) diploma, iii) A-level, iv) GCSE, and v) no qualifications. When interpreting results, each category should be considered as representing the named qualification or its equivalent, for example, NVQ level 3 is the equivalent to A-level (ibid.).

Earnings: According to Galobardes et al. (2006a: 10) earnings 'is arguably the best single indicator of material living standards'. With this in mind, and with guidance from the report on consumption patterns of older people (Atkinson and Hayes, 2010), INCOME2X was derived using the LFS variable for gross weekly earnings (GRSSWK). GRSSWK included individuals that were in employment (aged 16+) and divided pay into 34 bands within 3 broad categories: i) annual, ii) monthly and iii) weekly (ONS, 2012i). For example, within the 'weekly' category, point 3.1 related to £0 earned, point 3.2 related to £1-9 earned and so on up to point 3.34 which referred to £750– or more earned within a week (ONS, 2012i). As it is common for individuals working in shift or bank contracts (such as those in the NHS) to be paid on a weekly basis (NHS Professionals, 2015), within this research the variables included in the 'weekly' pay bands have been used. Following exploratory analysis, based on data from the ONS (2012c; e), NHS Careers (2015) and AXA Wealth (2015) three earnings categories were created within INCOME2X: i) highest (£700 per week and over), ii) middle (£325 to £699 per week) and iii) lowest (£0 to £324 per week). The lowest earnings category represented earnings up to the lowest UK earnings threshold (AXA Wealth, 2015), and the highest earnings category included earnings received by professionals working in the health and social care sector who undertake specialist or management roles (NHS Careers, 2015). This configuration enabled comparison between labour forces and occupation groups.

Housing tenure: Housing tenure was included as a socioeconomic indicator as it can be used as a proxy measurement of income or social status (Macintyre et al., 2003). The variable HOUSINGTENURE1X was derived from the LFS variable TEN1 based on evidence from the literature (Frogner, 2002; Hartig and Fransson, 2006; Connolly, 2012), and comprised four recoded categories: i) owned outright, included those who owned (no mortgage) and occupied their property, ii) mortgaged, included those who were paying for their accommodation via a loan agreement or mortgage, iii) rented, encompassed those who paid rent to a landlord (both privately or to a local authority to ensure adequate cell counts, although it is acknowledged that this may comprise individuals with different socioeconomic backgrounds), and iv) rent free, included those who did not pay for, or own their accommodation, for instance a squatter.

Health: Within the literature, the influence of health (or ill-health) on employment decisions in later life was evident. Authors such as Nilsen et al. (2014) and Lee (2013) considered the impact of work-related stress, the Royal College of Physicians (2015) and McNair et al. (2012) discussed the need to maintain staff well-being, and Schofield et al. (2013), Post et al. (2013) and Oakman and

Chapter 3

Wells (2012) suggested that ill-health may be a contributory factor in older workers early retirement from the labour market. Therefore, in the first instance it was important for this study to establish a) whether individuals had an existing health problem and b) if a health problem existed, whether it affected their ability to work. Secondly, as the type of health problem may be associated with the decision to retire or to remain in work, for those who reported that a health problem did exist, it was important to establish what type of health problem was experienced (Mitnitski et al., 2015; Santoni et al., 2015). Therefore using exploratory analysis of the LFS health variables two new variables were created. HEALTH10X was derived using the LFS variables LINGLIM (have a health problem lasting more than 12 months) and LIMITA (whether a problem affected the amount of work) and comprised three categories: i) no health problem exists, ii) yes a health problem exists BUT does not affect amount of work, and iii) yes a health problem exists AND the problem affects the amount of work. And, HEALTH6X was derived from LINGLIM and HEALTH (main health problem) and comprised five categories describing the type of health problem experienced: i) skeletal or joints, ii) chest or breathing, iii) heart or circulation, iv) diabetes and v) other (defined as problems with skin, eyesight, hearing, speech, mental health or learning disabilities).

Employment: Having access to flexible working was highlighted in the literature as an important factor associated with older workers' employment practices in later life (Cebulla et al., 2007; Sykes et al., 2010; Vickerstaff, 2010). To enable investigation of the working patterns of older workers within this research, the LFS variable FTPTWK was renamed and recoded into PARTTIME and was divided into two categories, i) full-time and ii) part-time. In order to explore the reason for working part-time, the LFS variables YPTJOB and YNOTFT were merged, recoded and renamed into WORKPATTERN6X that included six categories: i) student, ii) ill or disabled, iii) could not find full-time work, iv) financially secure, v) domestic commitments and vi) other. Additionally, as the literature suggested that length of service may be associated with the decision to work for longer (Stanetić and Tešanović, 2013; Jafari Kelarijani et al., 2014; Śliwiński et al., 2014), the LFS variable EMPLEN was recoded into EMPLOYMENT3 to create five categories representing the length of time in years that an individual had worked for their employer (i.e. <1, 1 to 4, 5 to 9, 10 to 19, 20+ years). Furthermore, as the health and social care labour force comprises individuals employed by the private sector (for example, Age UK and Bupa) and the public sector (NHS) (HM Treasury, 2010), to provide a full understanding of the employment characteristics of the labour force under consideration, the LFS variable SECTOR was renamed (but not recoded as sufficient binary categories were present) into SECTOR1X.

3.5.2 Outcome variable

Having established the demographic, socioeconomic, employment and health characteristics of the older health and social care labour force, the outcome of interest in this thesis is the association of these characteristics to working part-time at or beyond the SPA. For the regression analyses, the variable PARTTIME was derived from FTPTWK and comprised two categories. The first category, based on the hours of a standard working week in the NHS (NHS Jobs, 2015) was full-time, described those who worked 37.5 hours and over per week, and the second category, part-time, described those respondents who worked less than 37.5 hours per week. PARTTIME was used as the dependent variable in the binary logistic regression analysis, which provided findings for discussion to address research question 3 (Section 1.4).

In the next section, the types of data analysis methods this research utilised are discussed.

3.6 Data analysis strategy

3.6.1 Data analysis methods

This research used cross-sectional analysis to analyse merged (2009–2013) LFS datasets. A number of statistical methods were employed throughout the study, with the major techniques outlined in this section and more nuanced approaches discussed in detail within each analysis chapter (see Chapters 4, 5 and 6). To present a quantitative description of the data, in the initial stages of the analysis, descriptive statistics were used to assess the frequency of responses and the range of values for the variables used in the study. Bivariate analysis was performed to investigate the relationship between the variables, and the Pearson chi-square test was used to assess the independence of the variables. Multivariate analysis in the form of binary logistic regression was employed to measure the association between the dependant and explanatory variables (Bryman, 2008; Field, 2009).

3.6.2 Bivariate analysis

Bivariate analysis examines the relationship between two variables and utilises a two-way distribution known as a cross-tabulation or contingency table (Bryman, 2008). Within a two-way contingency table, the sum of frequencies in the total column must equal the sum of the totals recorded and each should equal the number (N) of cases in the analysis. To establish whether there is a relationship between categorical variables noted in the contingency table, a statistical test is required to determine whether any association found is significant or not; within this research the Pearson chi-square test for independence was used, as it does not rely on

assumptions such as having normally distributed data (common to categorical data) (Diamond and Jefferies, 2001; Field, 2009), and is detailed in the following section. Accordingly, the analysis completed for Chapters 4 and 5 to determine the association between demographic, socioeconomic, employment and health characteristics, used bivariate analysis. All calculations used in these analyses used sampling weight to reflect a nationally representative population (a more detailed discussion on weighting is included in Section 3.6.5).

3.6.3 Pearson chi-square test

The Pearson Chi-square test for independence (hence forward the chi-square test) assesses whether two variables are independent of each other, and is used to determine whether there is a significant difference between the expected and observed frequencies in one or more categories; it is denoted by the symbol χ^2 . If the variables are not independent, there is evidence that there is an association between them (Diamond and Jefferies, 2001).

The chi-square test uses tables of counts rather than percentages, as it takes into account the number of individuals in the sample when determining the association. The counts in the original cross-tabulation are known as the observed values and describe what the survey actually found. For the chi-square test, the expected values are required; those values that are expected in each cell if there were no association between the two variables. The observed and expected values are then compared to establish whether they are significantly different (ibid.). The formula used to calculate the expected values for each cell is:

$$\text{Expected value} = \frac{\text{column total} \times \text{row total}}{\text{grand total}}$$

With the expected values calculated, they are checked to ensure that they add up to the same row and column totals as the original table.

Once the expected (E) and observed (O) values have been calculated it is possible for the chi-square test statistic to be computed using the following formula:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

While noting that the chi-square test can only be carried out on counts, it is also only valid if the cell count of each expected value is greater than five. The chi-square value is meaningless on its own and can only be interpreted in relation to its associated level of statistical significance ($p <$

0.05 or $p < 0.01$). Whether the chi-square test determines significance is not only dependent on the cell count, but also on the number of categories of the two variables being analysed i.e. the degrees of freedom. The number of degrees of freedom follows this formula:

$$\text{number of degrees of freedom} = (\text{number of columns} - 1) * (\text{number of rows} - 1)$$

Therefore, the chi-square value that is ascertained is affected by the size of the table, which is taken into consideration when deciding whether the chi-square value is statistically significant.

The null hypothesis (H_0), for instance that an individual in the older health and social care labour force does not work after the SPA, is rejected if the chi-square test statistic is greater than the critical value. If the test statistic is equal to or less than the critical value, then the null hypothesis is accepted (Diamond and Jefferies, 2001; Field, 2009). To establish whether an association can be interpreted as a relationship, bivariate analysis can be broadened to include multivariate analysis; thus bivariate analysis is essential in establishing key associations that can be further explored through multivariate regression analysis (Maxim, 1999; Field, 2009).

3.6.4 Logistic regression

Binary logistic regression is a statistical method that tests a dependent variable with two categories, using predictor or independent variables that can either be continuous or categorical (Pallant, 2007). The logistic regression model predicts the probability of an event occurring for a given case based on observations of whether or not the event did occur for that case (Field, 2009).

As with most statistical methods, when conducting logistic regression, the size of the sample should be considered (Pallant, 2007). Thus, as discussed earlier (Section 3.5.1), the variables used have been recoded and re-categorised to ensure sufficient relevant data was ascertained while maintaining adequate cell counts, in order to provide findings that could aid discussion in addressing research questions 1, 2 and 3 (Section 1.4). All analyses were conducted using PASW SPSS v18 and the default method of logistic regression in this software is the forced entry method where all the predictors are forced in themed blocks into the model simultaneously (Field, 2009). Other regression methods are available, such as step-wise techniques; however, as strong themes were identified in the conceptual framework and within the empirical analysis, this research had a good theoretical basis for choosing the default method (Field, 2009). For a regression model to be generalisable, a number of assumptions need to be tested, therefore sample size and outliers were investigated in the exploratory analysis and multicollinearity was tested and deemed to have not been violated, as the tolerance level was not less than 0.1 and the VIF was not greater

than 10 (Myers, 1990; Menard, 2002; Pallant, 2007; Field, 2009). For example, the gender variable was found to have a tolerance of 0.826 and a VIF of 1.211 (Appendix B, Table 8.10).

To answer research question 3 as outlined in Section 1.4, a sequential model-building strategy was employed (Table 3.2). Here, PARTTIME (Full-time=0, Part-time=1) was used as the dependent variable, and in each model groups of independent variables were added, for example, Model 1=demographic variables and Model 2=demographic variables + health variables and etcetera. The variable groups were inputted in this order to ensure that, in the first instance factors that, to some extent, the individual had little or no control over, i.e. demographic and health characteristics, were examined. Once these factors were analysed, factors (to which some degree of control by the individual could be maintained), such as socioeconomic and employment characteristics were included.

Table 3.2 Modelling strategy for dependent variables

Model 1	Model 2	Model 3	Model 4
Age	Age	Age	Age
Gender	Gender	Gender	Gender
Ethnicity	Ethnicity	Ethnicity	Ethnicity
Marital status	Marital status	Marital status	Marital status
	Health problem exists and whether it affects work	Health problem exists and whether it affects work	Health problem exists and whether it affects work
		Earnings	Earnings
		Educational attainment	Educational attainment
		Housing tenure	Housing tenure
			Job sector
			Selected occupation group
			Length of time with current employer
<hr/>			
-2 LLR			
% Change -2 LLR			
R Square			

Source: Author’s own analysis LFS 2009-2013

Logistic regression allows the assessment as to how well one’s predictor (independent) variables explains one’s categorical outcome (dependent) variable. It gives an indication of the adequacy of the model by assessing the goodness of fit (see Section 6.1), and provides an indication of the relative importance of each predictor variable (Pallant, 2007; Field, 2009). Logistic regression does

not make assumptions regarding the distribution of scores for the predictor variables; however it has sensitivity to high correlations among the predictor variables (multicollinearity) (ibid.).

The results of the logistic regression are presented as odds ratios (ORs) and the category within each variable most likely to be associated with the outcome was identified as the reference group. The ORs represent ‘the change in odds of being in one of the categories of outcome when the value of a predictor increases by one unit’ (Pallant, 2007: 176), and for each of the ORs there is a 95 per cent confidence interval displayed giving the lower and upper value (Pallant, 2007). To assess whether a model fits the data, the observed and predicted values of the outcome are compared using the log-likelihood statistic (LLR):

$$\sum_{i=1}^N [Y_i \ln(P(Y_i)) + (1 - Y_i) \ln(1 - P(Y_i))]$$

The log-likelihood is based on summing the probabilities associated with the predicted and actual outcomes, and is an indicator of how much unexplained information there is after the model has been fitted (Pallant, 2007; Field, 2009). Large values of the LLR indicate poorly fitting statistical models, because the larger the value of the log-likelihood, the more unexplained observations there are (Field, 2009). An indication of how the model performs overall is referred to as the *goodness of fit* test. SPSS v18 reports this via two tables: i) the Omnibus Tests of Model Coefficients, and ii) the Hosmer and Lemeshow Test (Pallant, 2007), and although these are not presented within the results chapters, they were examined for anomalies prior to reporting the regression results.

3.6.5 Weighting

‘Population weight adjustments reweight or adjust the sample to reflect the known distribution of the population. The advantage of population weight adjusting is that biases in both point estimates and variances can be corrected’ (Maxim, 1999: 304).

The LFS collects information from a sample of the UK population, therefore in order to make inferences relating to the entire population, the sample data requires a weight attachment. Weights are calculated to reflect the sum of a set of known population totals; the weight of the entire dataset will therefore amount to the eligible population for the UK. This ensures that estimates reflect the sample design and compensate for non-response (non-response factors are currently not used on the LFS) in sub-groups of the population, such as ethnic minorities and young people (ONS, 2011a). Weighting also allows proportions to be estimated appropriately and

may reduce standard errors. The variable PWT10 refers to the person-weight and was the main weight used for inference to person-level population characteristics (*ibid.*).

3.7 Summary

This research used bivariate analysis and binary logistic regression methods to determine the characteristics of the older health and social care labour force and the likelihood of them working part-time at or beyond the SPA. These methods were employed to answer research questions presented in Section 1.4, and were derived from the conceptual framework described in Section 2.7. Levels of significance were determined using the chi-square statistic for the bivariate level analysis and the likelihood ratio (goodness of fit) test for the regression models. Based on documented evidence, the choice of research design reflects the research problems posed (Bryman, 2008), and the LFS was chosen for this research because it captured the responses of an appropriate sample population, it was nationally represented and detailed occupation to the unit (job) level (ONS, 2011a; b).

In the subsequent three chapters, results of the analysis are presented. These begin in Chapter 4 by reporting the findings from the analyses of the older health and social care labour force and the older general labour force.

Chapter 4: Results 1

The characteristics of the older health and social care labour force in England with comparisons to the older general labour force in England (2009-2013).

4.1 Introduction

As discussed in the literature review in Chapter 2, to date, little is known about the older health and social care labour forces' work patterns; indeed, little is known about the older health and social care labour force *per se*. To address this issue and as identified through the wider literature, this chapter uses key characteristics, such as age and earnings, to determine the characteristics of the older health and social care labour force in England (Barnes et al., 2004; Cebulla et al., 2007; Padilla, 2011). The findings are compared to those of the older general labour force, to ascertain whether differences are evident. The analysis in this chapter provides an overview of the older health and social care labour force, and offers a baseline for subsequent analyses reported in Chapters 5 and 6. Furthermore, it seeks to furnish discussion in relation to answering research question 1 as outlined in Section 1.4.

4.2 The sample population (2009-2013)

Of the health and social care labour force in the pooled LFS dataset for England 2009-2013 (N=30,835), 32.8 per cent were aged 50 years and over, and within the general labour force (N=568,114), 31.6 per cent were aged 50 years and over. As described in Chapter 3, the health and social care labour force aged 50 years and over form the research population, with the general labour force of the same age range providing a comparison (Figure 3.2). By comparing the two labour forces (Section 3.4), differences can be ascertained that may highlight difficulties implementing all-encompassing policies under the EWL agenda (Section 1.3). For example, opportunities for flexible working have been shown to encourage the retention of older workers within the health and social care sector (Dodd et al., 2009; Storey et al., 2009; Skills for Care, 2010, 2011a; Webb and Carpenter, 2012; Frank, 2013). It is therefore important to determine whether access to flexible work is available for the older health and social care labour force, and to compare their prospects to those available within the older general labour force. Thus, influencing discussion around the need for further development of flexible working legislation.

The following sections present the results of the analyses of the demographic, socioeconomic, health, and employment characteristics of the older health and social care labour force.

4.3 Demographic characteristics of the older health and social care labour force (2009-2013)

This first section begins the empirical exploration related to the older health and social care labour force. Findings from the analyses of key demographic characteristics are presented, and include age, gender, marital status and ethnicity.

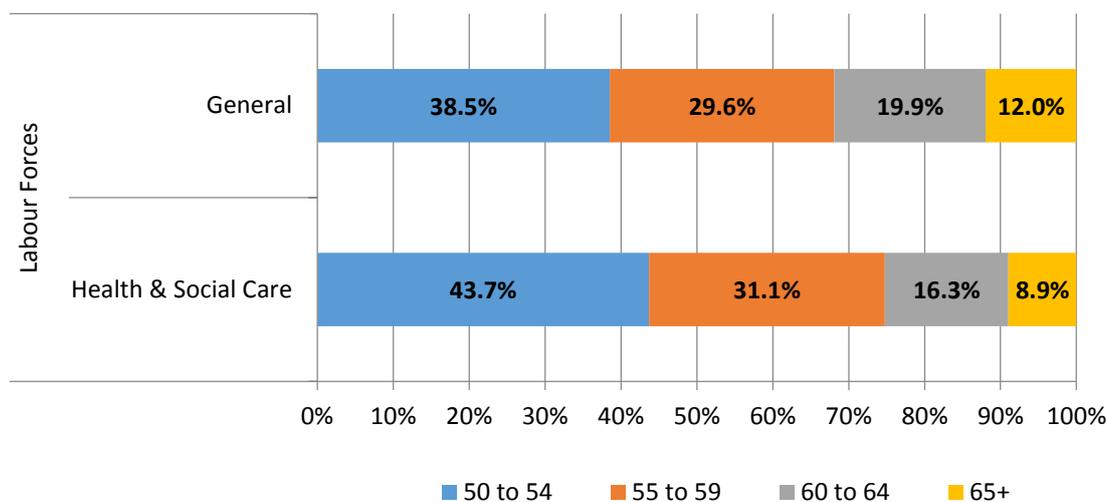
4.3.1 The age distribution

With Government legislation encouraging older workers to remain in work for longer (Weyman et al., 2012), it was important to ascertain the age profile of the older health and social care labour force to determine the proportions in specific age groups.

The older health and social care labour forces' age ranged from 50 to 84 years; while in contrast, the age range of the older general labour force was from 50 to 94 years (Appendix C, Table 8.11). However, despite the extended age range in the general labour force, the proportion of individuals working at age 80 and over in both labour forces was similar (0.5 per cent in the health and social care labour force and 0.8 per cent in the general labour force) (Appendix C, Table 8.12).

Within the older health and social care labour force, almost 75 per cent was aged 50 to 59, with the remaining 25.2 per cent aged 60 and over; the largest proportion of staff (43.7 per cent) comprised those aged 50 to 54 years (Figure 4.1). In contrast, within the older general labour force, 68.1 per cent of staff was aged 50 to 59 and nearly 32 per cent were aged 60 and over (Figure 4.1). The differences noted in the distribution of age between the two labour forces may reflect the physical and emotional nature of health and care work, or the availability of jobs in the health and care sector for staff aged 60 and over (Norman et al., 2005).

Figure 4.1 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by age group (2009-2013) (%)



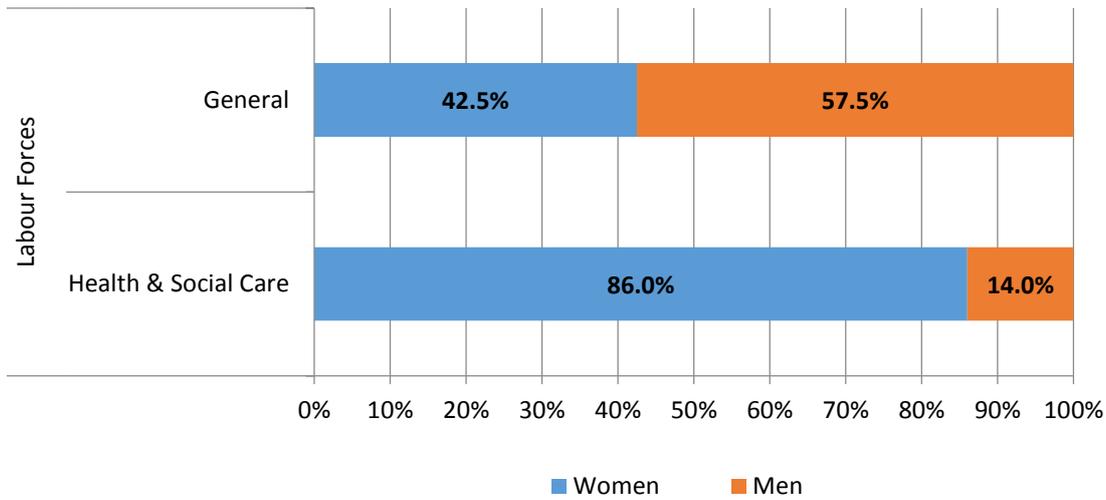
Notes: $\chi^2=61556.9$ (df 3, $p<0.001$); General Labour Force $N=179,274$, Health & Social Care Labour Force $N=10,123$

Source: Author's own analysis LFS 2009-2013

4.3.2 The gender distribution

As reported in Figure 4.2, the disparities in gender distribution between the two labour forces are clear; the older health and social care labour force is dominated by women (86 per cent), whereas the older general labour force has a more even distribution, with men in the majority (57.5 per cent). Such over-representation of women in the health and social care sector was also found in the literature (Eborall et al., 2010; Leeves and Herbert, 2014), and the investigation of the significance of gender in the work patterns of the health and social care labour force aged at the SPA and beyond is considered in the multivariate analysis reported in Chapter 6.

Figure 4.2 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by gender (2009-2013) (%)

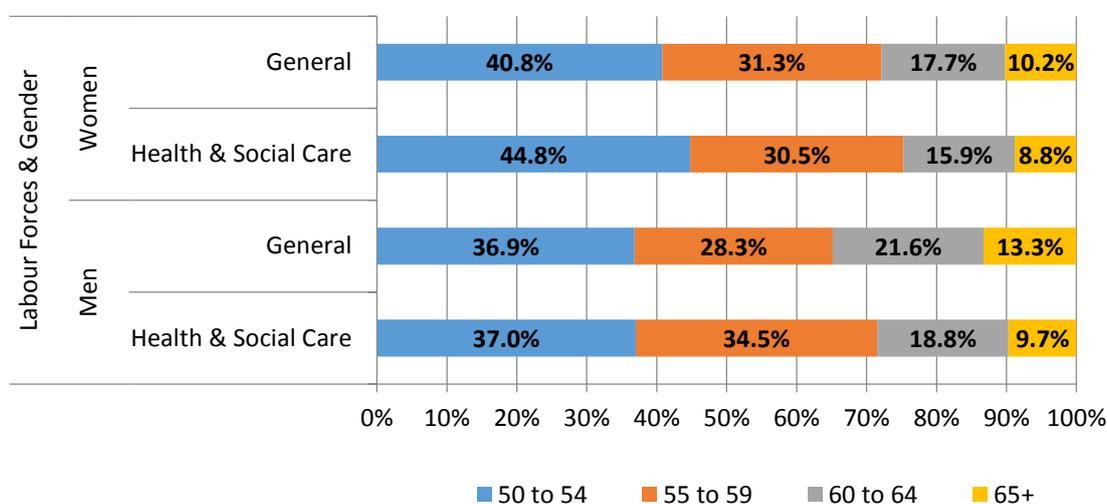


Notes: $\chi^2=2130888.2$ (df 1, $p<0.001$); General Labour Force $N=179,274$, Health & Social Care Labour Force $N=10,123$

Source: Author's own analysis LFS 2009-2013

Figure 4.3 highlights the age distribution among the older health and social care and older general labour forces by gender. Among the older general labour force the age distribution appears more even, with similar proportions observed within the gender categories. Nevertheless, with work beyond the SPA in mind, it is useful to note that among women in the older health and social care labour force, 8.8 per cent were aged 65 and over and within the older general labour force, 10.2 per cent of women were aged 65 and over.

Figure 4.3 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by age group and gender (2009-2013) (%)



Notes: Men: Health & Social Care Labour Force N=1,436, General Labour Force N=100,445; Women: Health & Social Care Labour Force N=8,687, General Labour Force N=78,829; All associations in this figure were statistically significant $p < 0.001$; for details see Appendix C, Table 8.15

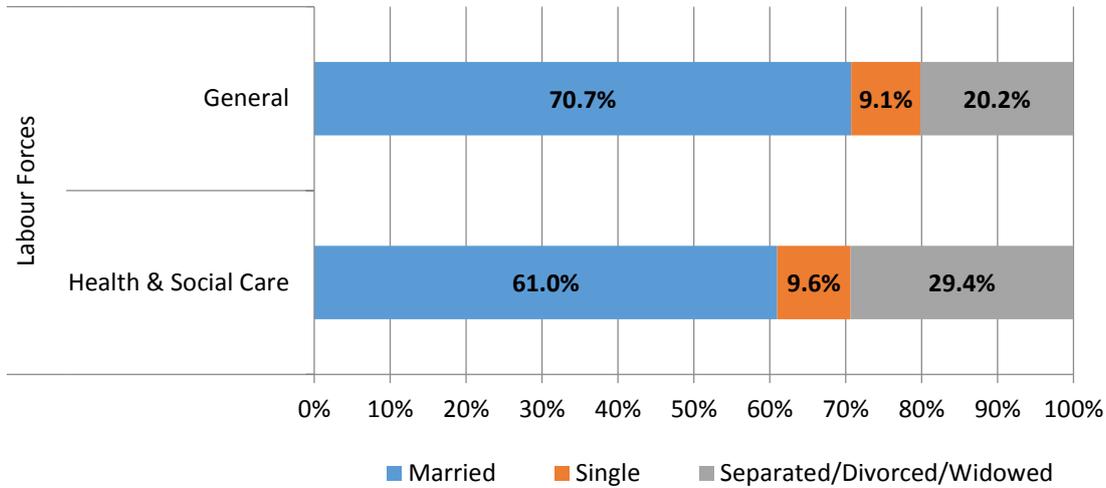
Source: Author's own analysis LFS 2009-2013

4.3.3 The marital status composition

The analysis of marital status provides an understanding of the partnership patterns of the labour force, as such characteristics as social interaction and finance, can have an impact on different types of resources that individuals have at their disposal during their working life and as they approach retirement (Cebulla et al., 2007; Morrell and Tennant, 2010). Additionally, analysing the marital status of the older health and social care labour force is important in developing our understanding of the factors that may be associated with decisions about working patterns in later life (Lissenburgh and Smeaton, 2003).

Figure 4.4 shows that among those who worked in the older health and social care labour force, the majority (61 per cent) were married and 29.4 per cent of staff were separated, divorced or widowed. Whereas, within the older general labour force, a greater proportion was married (70.7 per cent) and a smaller proportion were separated, divorced or widowed (20.2 per cent). However, the percentage of staff who were single was similar in both labour forces.

Figure 4.4 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by marital status (2009-2013) (%)

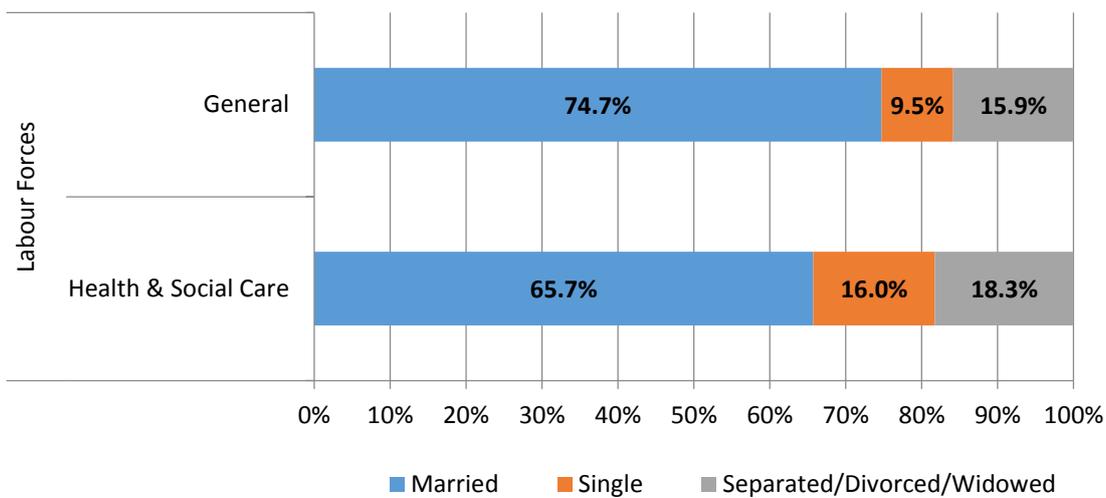


Notes: $\chi^2=89822.6$ (df 1, $p<0.001$); General Labour Force $N=179,274$, Health & Social Care Labour Force $N=10,123$

Source: Author’s own analysis LFS 2009-2013

When marital status was controlled for gender, the results for women (Appendix C, Figure 8.1) showed a similar pattern to the overall pattern as seen in Figure 4.4. However, of the men who worked in the older health and social care labour force, a larger proportion (16 per cent) than was seen in the older general labour force (9.5 per cent) were single (Figure 4.5).

Figure 4.5 Percentage of economically active older men in the health and social care labour force and general labour force in England, by marital status (2009-2013) (%)

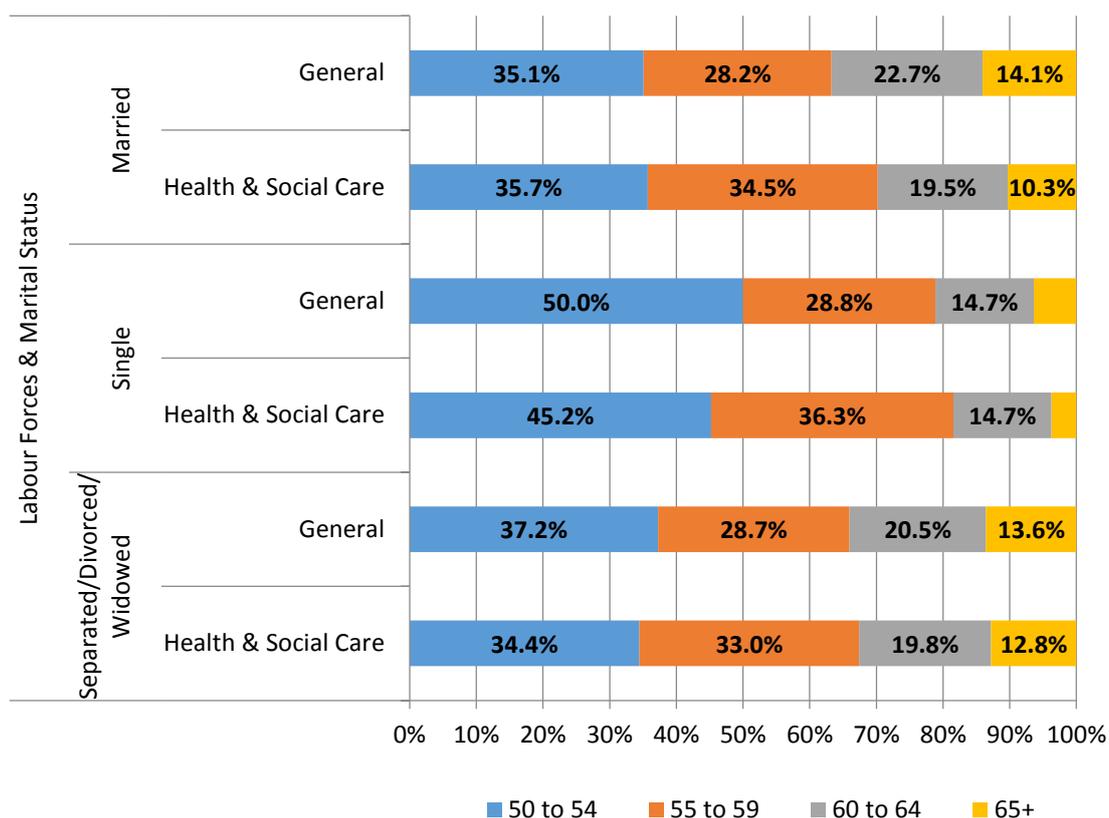


Notes: $\chi^2=24528.9$ (df 2, $p<0.001$); General Labour Force $N=100,445$, Health & Social Care Labour Force $N=1,436$

Source: Author’s own analysis LFS 2009-2013

As the majority of staff who worked in the older health and social care labour force were aged 50 to 59 (Figure 4.1), it is perhaps not surprising that when marital status was examined by age group, among single men, the majority (81.5 per cent) were aged between 50 and 59 (Figure 4.6).

Figure 4.6 Percentage of economically active older men in the health and social care labour force and general labour force in England, by age group and marital status (2009-2013) (%)



Notes: Total Health & Social Care Labour Force N= 1,436, Total General Labour Force N=100,445; All associations in this figure were statistically significant $p<0.001$; for details see Appendix C, Table 8.15

Source: Author's own analysis LFS 2009-2013

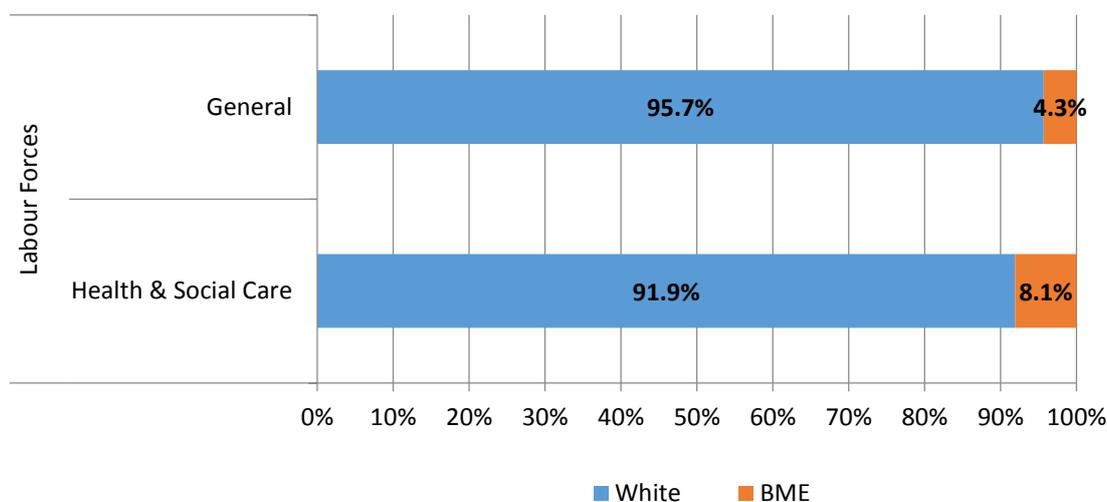
Within the literature, marital status has been shown to have an effect on later life employment within the wider labour force (Szinovacz, 2013a; Radl and Himmelreicher, 2015). To determine whether the marital status of men in the older health and social care labour force was associated with work patterns at and beyond the SPA, the sample population was investigated using multivariate analysis, the results of which can be found in Chapter 6.

4.3.4 The ethnic composition

As discussed in Section 2.3.1, ethnicity, such as in relation to finance, health, and social participation, has an influence on the experience of ageing (Jamieson et al., 1997; Phillips et al., 2010). Therefore, to develop our understanding of the current older health and social care labour force, the ethnic distribution was analysed.

In the older health and social care labour force and the older general labour force, over 90 per cent of the workers were categorised as White (Figure 4.7). However, as is evident in Figure 4.7, with 8.1 per cent, those in the BME group within the older health and social care labour force accounted for almost double the proportion of the BME group in the older general labour force. As discussed in Section 2.3.1.4, the contribution of BME individuals to the health and social care professions, such as nursing and care work, has also been evidenced in the literature (Bach, 2010; Skills for Care, 2011c).

Figure 4.7 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by ethnic group (2009-2013) (%)



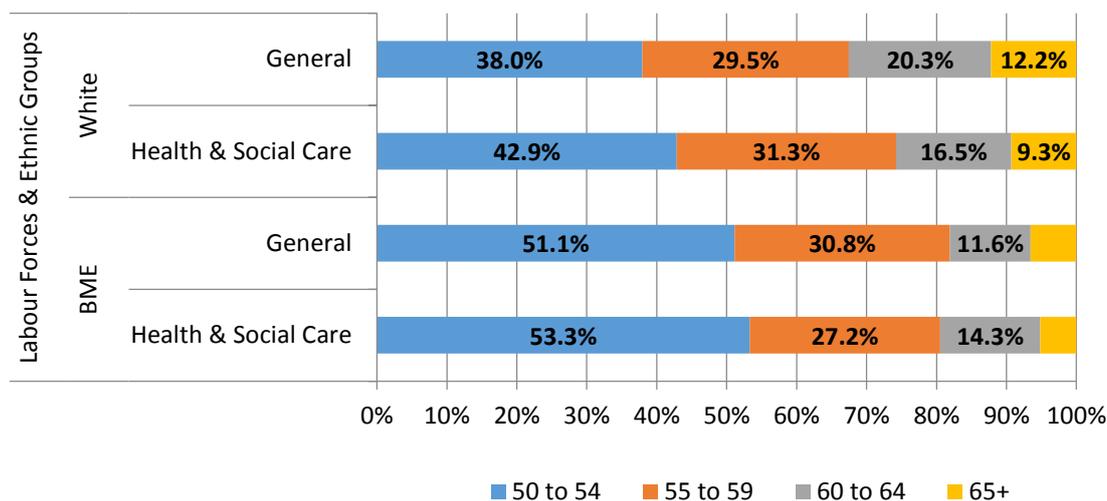
Notes: $\chi^2=89822.6$ (df 1, $p<0.001$); General Labour Force $N=179,150$, Health & Social Care Labour Force $N=10,107$

Source: Author's own analysis LFS 2009-2013

Figure 4.8 shows that within the BME group, among both labour forces the largest proportions of staff were aged 50 to 59, with over 50 per cent of each labour force aged 50 to 54. Yet, within the White ethnic group, the age distribution differed. Among the White older health and social care labour force, 74.2 per cent were aged 50 to 59, and among the White older general labour force, 67.5 per cent were aged 50 to 59 (Figure 4.8). These results suggest that although the proportions

may differ, there is a need to encourage staff within both ethnic groups to remain in the labour force for longer.

Figure 4.8 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by age group and ethnic group (2009-2013) (%)



Notes: $\chi^2=60779.9$ (df 1, $p<0.001$); General Labour Force $N=179,150$, Health & Social Care Labour Force $N=10,107$

Source: Author's own analysis LFS 2009-2013

In addition to demographic characteristics, within the literature, the importance of socioeconomic factors in determining decisions and actions in later life was highlighted (Galobardes et al., 2006a; Cann and Dean, 2009). Thus, the following section considers socioeconomic characteristics in relation to the older health and social care labour force, and provides a comparison with the older general labour force to determine differences that may have implications on work patterns in later working life.

4.4 Socioeconomic characteristics of the older health and social care labour force (2009-2013)

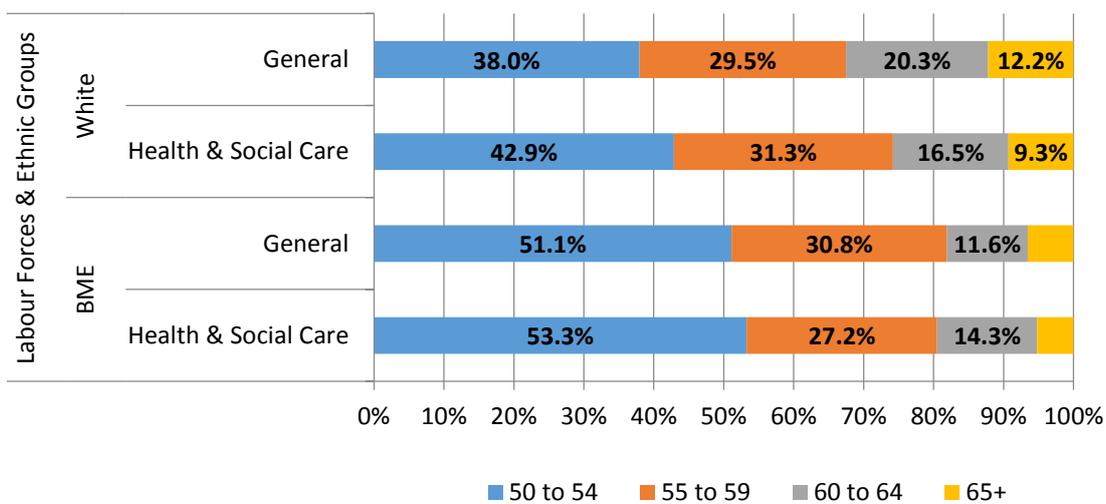
Four indicators of socioeconomic status are considered in this section; educational attainment, individual earnings, housing tenure and employment characteristics (Lynch and Kaplan, 2000; Blake, 2004; Galobardes et al., 2006a).

4.4.1 The educational attainment distribution

Educational attainment is a particularly important consideration given the specialised training undertaken by older workers in the health and social care sector (HSCIC, 2013c). In establishing educational attainment levels, comparisons can be made with the older general labour force that provide a platform for discussion as to whether differences in education levels between the two labour forces are associated with decisions around extending the working life and result in potential implications for policy.

Overall, there are some distinct differences between the labour forces with regard to education. Among the older health and social care labour force, almost 50 per cent of staff had attained either diploma or degree (or equivalent) level education, whereas in the older general labour force, this proportion was closer to one-third (Figure 4.9). A lower percentage among the older health and social care labour force, of 29.6 per cent, had achieved a diploma (or equivalent) and 27.4 per cent had attained GCSE (or equivalent) qualifications. However, in spite of the high education level attained by a large proportion, a small proportion (5.8 per cent) reported no qualifications. In contrast, among workers in the older general labour force, the largest proportion was observed in the GCSE (or equivalent) level (31.9 per cent) and more staff (13 per cent) reported no qualifications. Such differences may reflect specific qualifications required for certain occupations within the health and care sector (HSCIC, 2013c).

Figure 4.9 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by highest educational attainment (2009-2013) (%)



Notes: $\chi^2 = 1144165.0$ (df 4, $p < 0.001$); General Labour Force $N = 179,274$, Health & Social Care Labour Force $N = 10,123$

Source: Author's own analysis LFS 2009-2013

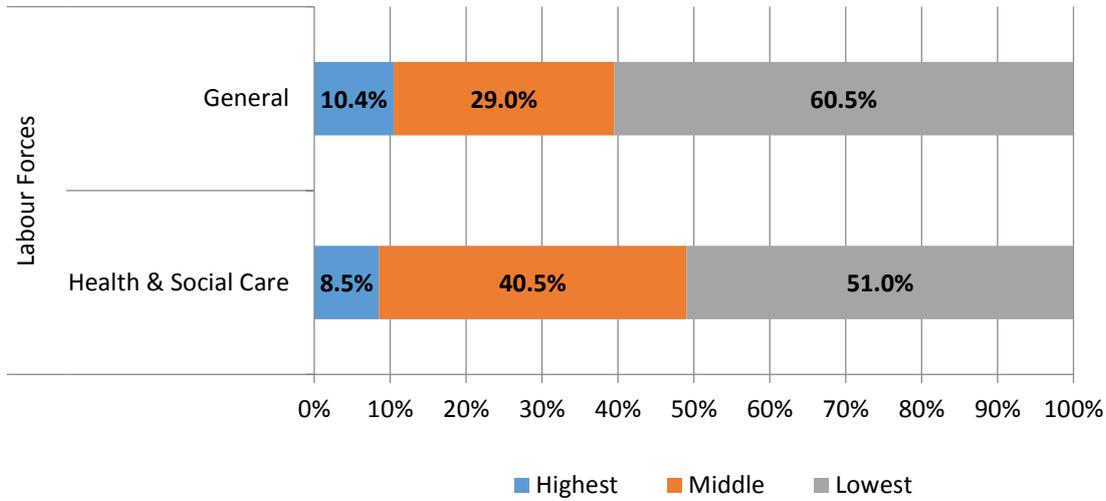
The results suggested that overall the older health and social care labour force was more highly educated than the older general labour force. This result is perhaps not surprising, as the older health and social care labour force comprises five occupational groups (see Section 3.4.1), three of which require professional qualifications (HSCIC, 2013b; c). By contrast, the older general labour force contains all other occupations that do not fit the criteria for health and social care sector work and as such comprises a selection of occupations that do not require formal qualifications, such as those involved with unskilled administration and manual labour (ONS, 2010b). The educational attainment of the older health and social care labour force may have implications for work patterns in later life, as qualifications can influence one's earnings, health and job type (Lynch and Kaplan, 2000).

4.4.2 The earnings distribution

Understanding the earnings characteristics of the older health and social care labour force is important as earnings can be used as a measure of one's socioeconomic position, and can have wide reaching influence on employment choices in later life, such as through effects on one's health and well-being (Galobardes et al., 2006a; Flynn, 2010). Additionally, as disparities are evident among the wider labour force (Loretto et al., 2007b; Cann and Dean, 2009), it was important to establish whether this phenomena was apparent among the older health and social care labour force.

On a weekly basis, among women within the older health and social care labour force, the largest proportion (51 per cent) earned in the lowest (gross) earnings level (£0 to £324 per week) (Figure 4.10 and Section 3.5.1). When contrasted with the older general labour force, a similar pattern was noted, although with over 60 per cent, the proportion was greater. Another notable disparity between the two labour forces was the difference in the proportion of women that earned in the highest earnings level. Throughout the older health and social care labour force, whether professional or support staff, occupational salary is restricted by *bands*, therefore individuals can only earn to the top of each band in which their job title has been placed (NHS Careers, 2015). As such, remaining as a clinician throughout one's working life may restrict one's overall earnings. Whereas, within the older general labour force, which has been shown to be predominantly private sector work, there are no such restrictions, hence the opportunity for more women to earn in the higher earnings level (it is acknowledged that within the older general labour force, high-earning professions, such as medical practitioners and solicitors are included in the data, whereas medical practitioners were not included with the older health and social care labour force under scrutiny, due to alternate, non-compatible pay scales) (see Section 3.5.1).

Figure 4.10 Percentage of economically active older women in the health and social care labour force and general labour force in England, by earnings level (2009-2013) (%)



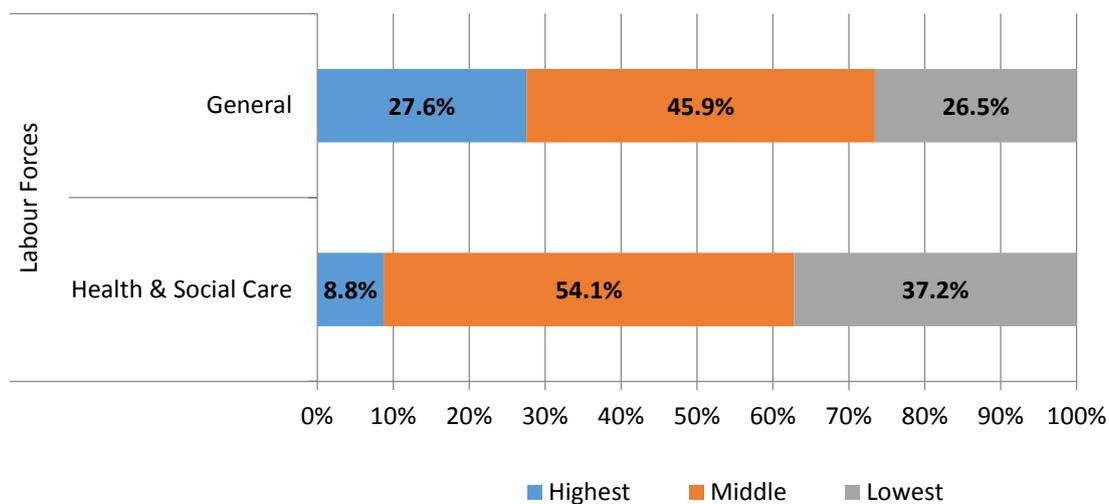
Notes: $\chi^2=51634.3$ (df 2, $p<0.001$); General Labour Force $N=34,017$, Health & Social Care Labour Force $N=3,981$. Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

Source: Author’s own analysis LFS 2009-2013

In comparison to the gross weekly earnings received by women, Figure 4.11 shows the equivalent earnings for men. It is apparent that in both labour forces, more men earn in the higher earnings level and fewer men earn in the lower level; an observation similar to that reported regarding the wider labour force in the UK (Hills et al., 2010). In contrast to the results seen for older female workers, among men in the older health and social care labour force, over 50 per cent earned in the middle earnings level.

However, the proportion of men that earned in the highest level (8.8 per cent) was similar to that of women (8.5 per cent). Within the older general labour force, the largest proportion of men earned within the middle level. Nevertheless, the proportions that earned in the highest and lowest levels were similar to each other at around 27 per cent. In comparison to women working in the older general labour force, a larger proportion of men earned within the highest earnings level.

Figure 4.11 Percentage of economically active older men in the health and social care labour force and general labour force in England, by earnings level (2009-2013) (%)



Notes: $\chi^2=26134.6$ (df 2, $p<0.001$); General Labour Force $N=35,847$, Health & Social Care Labour Force $N=650$. Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

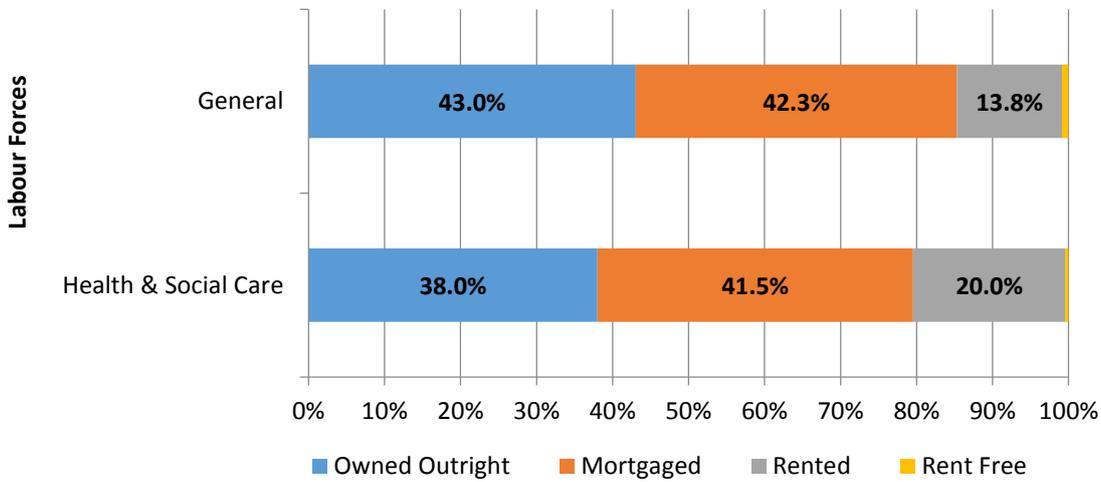
Source: Author's own analysis LFS 2009-2013

An additional indicator of one's socioeconomic position is housing tenure, which is investigated in the following section. This is particularly important in the British context, where housing wealth can act as a facilitator or barrier in terms of employment choices in later working life (Blake, 2004; Browning et al., 2013; Blundell et al., 2014).

4.4.3 The housing tenure composition

Among the older health and social care labour force, 38 per cent owned their property outright, a smaller proportion than observed in the older general labour force (43 per cent). In both labour forces similar proportions had a mortgaged property, while a larger percentage (20 per cent) of older health and social care staff than those in the older general labour force (13.8 per cent) rented their accommodation (Figure 4.12).

Figure 4.12 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by housing tenure (2009-2013) (%)



Notes: $\chi^2=97743.5$ (df 3, $p<0.001$); General Labour Force $N=179,274$, Health & Social Care Labour Force $N=10,123$

Source: Author’s own analysis LFS 2009-2013

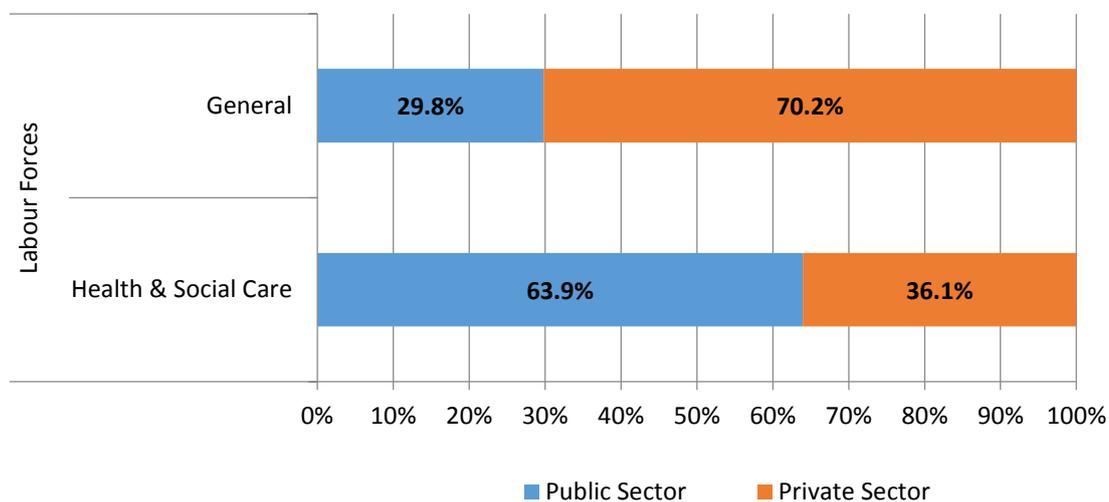
When age group was included in the analysis of housing tenure, it was evident in both labour forces that generally, older workers aged 50 to 59 were still paying for their accommodation either via a mortgage or rent, while those aged 60 years and over were either owner occupiers or lived rent-free. These findings are in agreement with the general pattern of mortgage repayment in the UK, where the standard 25-year mortgage is repaid before the age of 60 (Council of Mortgage Lenders, 2014). Nevertheless, a proportion of staff from both labour forces aged of 60 years and over, do still have to pay for their accommodation (18.3 per cent of the older general labour force and 15.9 per cent of the older health and social care labour force aged 60 years and over had a mortgage; 26.7 per cent of the older general labour force and 19.6 per cent of the older health and social care labour force aged 60 years and over paid rent), which may require them to work for longer in later working life (Appendix C, Figure 8.2).

4.4.4 The job sector and working pattern composition

There were distinct differences between the older health and social care and older general labour force in terms of job sector employment. Within the older health and social care labour force the largest proportion of staff was employed by the public sector (63.9 per cent) (Figure 4.13); perhaps not surprising given that the NHS is the largest public sector employer in England (NHS

Choices, 2013). While within the older general labour force, the largest employer was the private sector with 70.2 per cent (Figure 4.13).

Figure 4.13 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by job sector (2009-2013) (%)

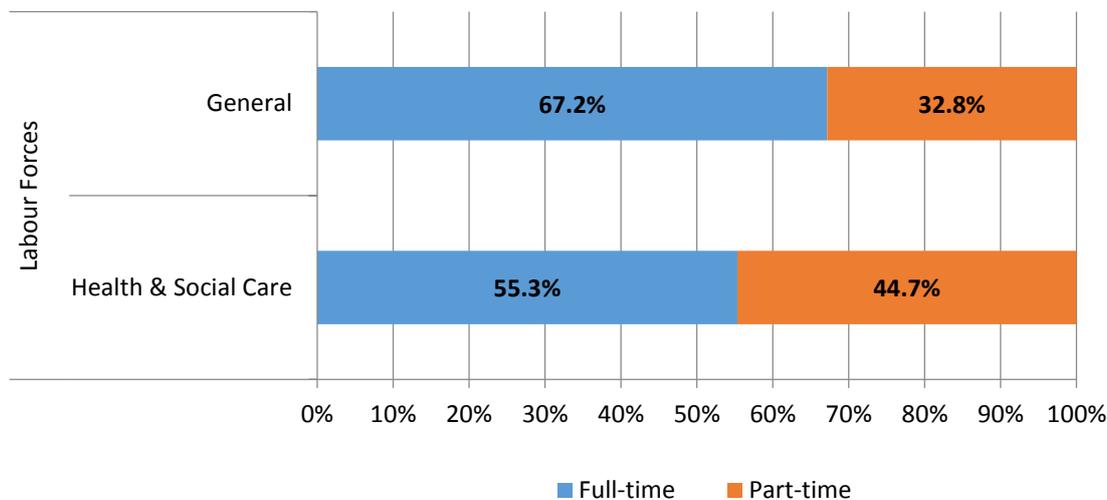


Notes: $\chi^2=1488037.9$ (df 1, $p<0.001$); General Labour Force $N=177,451$, Health & Social Care Labour Force $N=10,115$

Source: Author's own analysis LFS 2009-2013

As reported in Figure 4.14, within the older health and social care labour force, over half of the staff worked full-time and 44.7 per cent worked part-time. In contrast, in the older general labour force a larger proportion of staff (67.2 per cent) worked full-time. The variation in the overall work pattern between the older general labour force (predominantly private sector) and the older health and social care labour force (predominantly public sector) highlights an area with potential policy implications and as such will be discussed further in Chapter 7.

Figure 4.14 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by work pattern (2009-2013) (%)



Notes: $\chi^2=175153.1$ (df 1, $p<0.001$); General Labour Force $N=179,274$, Health & Social Care Labour Force $N=10,123$

Source: Author's own analysis LFS 2009-2013

As employment patterns between men and women in the older workforce may differ, it was important to investigate differences within the older health and social care labour force (Atkinson and Hall, 2009; Clayton, 2010; Lain and Vickerstaff, 2014). Therefore, Table 4.1 and Table 4.2 report the proportion of men and women who worked full- or part-time within the older health and social care labour force and the older general labour force by age group.

Overall, it was evident that for both genders in both the research and comparative labour forces, the proportion of individuals working on a part-time basis increased with age. While for men in both labour forces, the majority worked on a full-time basis until they reached 65 years and over, in comparison, among women in both labour forces, full-time work ceased to be the most common pattern at an earlier age (55 to 59 years). Additionally, the proportions of full- and part-time work for women in both labour forces was much closer in all age groups than observed for men.

Table 4.1 shows that of the men aged 50 to 54 and 55 to 59, the proportion of those working part-time in the older health and care labour force (14.9 per cent and 23.7 per cent respectively) was almost double the proportion of those working part-time in the older general labour force (7.7 per cent and 12.4 per cent). However, in the age group 60 to 64, although there remained a greater proportion in the older health and social care labour force (31 per cent) than in the older general labour force (23.8 per cent) who worked part-time, the difference in these proportions

diminished. Among both labour forces, the largest percentage of men who worked part-time were aged 65 years and over (78.1 per cent in the older health and social care labour force and 63.6 per cent in the older general labour force); moreover, this represented the greatest proportional difference observed between the two labour forces for men working part-time.

Table 4.1 Percentage of economically active older men working full-time and part-time in the health and social care labour force and general labour force in England, by age group (2009-2013) (%)

Age Group (Years)	Health & Social Care Labour Force			General Labour Force		
	Full-time	Part-time	Total	Full-time	Part-time	Total
50-54	85.1%	14.9%	100%	92.3%	7.7%	100%
			N=518			N=35,260
55-59	76.3%	23.7%	100%	87.6%	12.4%	100%
			N=485			N=29,119
60-64	69%	31%	100%	76.2%	23.8%	100%
			N=287			N=22,973
65+	21.9%	78.1%	100%	36.4%	63.6%	100%
			N=146			N=13,093
Total	63.1%	36.9%	100%	73.1%	26.9%	100%
			N=1,436			N=100,445

Notes: Health & Social Care Labour Force $\chi^2=66703.4$ (df 3, $p<0.001$); General Labour Force $\chi^2=4796660.1$ (df 3, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

Among the women in both labour forces (Table 4.2), like observed with men, the propensity for working part-time increased with age. However, the difference in proportions between the two labour forces was smaller. For example, Table 4.2 shows that of women aged 55 to 59 within the older health and social care labour force, 44.4 per cent worked part-time; in comparison to 44.7 per cent within the older general labour force. The findings also showed that unlike the results for men, the proportion of women in the older health and social care labour force who worked part-time aged 50 to 54 (37.8 per cent), 55 to 59 (44.4 per cent) and 60 to 64 (62.7 per cent) was lower (albeit only marginally) than that observed with women in the older general labour force in the same age groups (41.9 per cent, 44.7 per cent and 62.8 per cent respectively). Nevertheless, in the age group 65 years and over, there was a greater proportion of women in the older health and social care labour force who worked part-time (80.8 per cent) than observed among women of the same age within the older general labour force (79.7 per cent).

Table 4.2 Percentage of economically active older women working full-time and part-time in the health and social care labour force and general labour force in England, by age group (2009-2013) (%)

Age Group (Years)	Health & Social Care Labour Force			General Labour Force		
	Full-time	Part-time	Total	Full-time	Part-time	Total
50-54	62.2%	37.8%	100%	58.1%	41.9%	100%
			N=3,714			N=31,538
55-59	55.6%	44.4%	100%	55.3%	44.7%	100%
			N=2,767			N=25,078
60-64	37.3%	62.7%	100%	37.2%	62.8%	100%
			N=1,461			N=14,412
65+	19.2%	80.8%	100%	20.3%	79.7%	100%
			N=745			N=7,801
Total	47%	53%	100%	42.7%	57.3%	100%
			N=8,687			N=78,829

Notes: Health & Social Care Labour Force $\chi^2=185791.6$ (df 3, $p<0.001$); General Labour Force $\chi^2=1068784.3$ (df 3, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

As causality cannot be determined within this research, due to its cross-sectional nature (Bryman, 2008), the reasons for differences among men in both labour forces can only be surmised. The larger proportion of men aged 65 years and over working part-time in the older health and social care labour force, may be because more flexible working opportunities are available in the health and social care sector than in the wider labour force; alternatively fewer full-time opportunities may be available to those working in health and social care who are aged at and beyond 65 years. Whereas, the similarities among women's work pattern between labour forces may reflect commonalities during the life course, such as disjointed work histories due to child care or domestic responsibilities as reported by Finch (2014). These results will be discussed further within the context of flexible working in later life in Chapter 7.

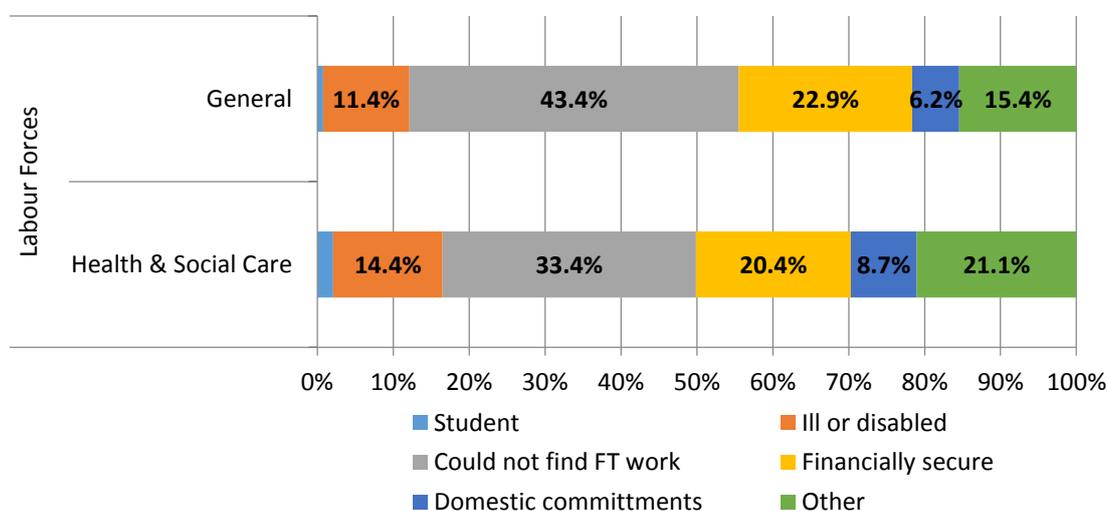
Having considered the overall work pattern of the older health and social care labour force, as Honig (1996) and Flynn (2010b) suggested that there were differences in the work patterns of individuals from differing ethnic groups, an analysis was completed to determine the findings in this respect in relation to the older health and social care labour force. The results of which are presented in Appendix C, Figure 8.3 and Table 8.13, and show that in comparison to White individuals in the older health and social care labour force, a smaller proportion of individuals in the BME groups worked part-time, and that the proportion of individuals working part-time increased with age in both ethnic groups in the older health and social care labour force and the older general labour force.

With the work patterns of the older health and social care labour force and the older general labour force having been established, the following section focuses on those that reported that they worked part-time, and considers the reasons for this decision.

4.4.5 The reasons for part-time work

As discussed, among the older health and social care labour force, 44.7 per cent worked on a part-time basis (Figure 4.14). Of these workers, over a third reported that this was because they could not find full-time work, and over 20 per cent reported that they did not want full-time work as they were financially secure or they earned enough working part-time (Figure 4.15). In comparison, in a similar result to that discussed by Cahill et al. (2013b), a greater proportion of the older general labour force worked part-time because they could not find full-time work (44.3 per cent), and nearly 23 per cent reported that they did not want full-time work due to being financially secure or because they earned enough as a part-time worker (Figure 4.15).

Figure 4.15 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by reason for working part-time (2009-2013) (%)



Notes: $\chi^2=24013.5$ (df 8, $p<0.001$); General Labour Force $N=21,362$, Health & Social Care Labour Force $N=1,666$; FT=Full-time

Source: Author's own analysis LFS 2009-2013

Having considered demographic and socioeconomic factors, the following section considers arguably the most important factor that may be associated with working patterns in later life; older workers' health (Lissenburgh and Smeaton, 2003; Gannon and Roberts, 2011).

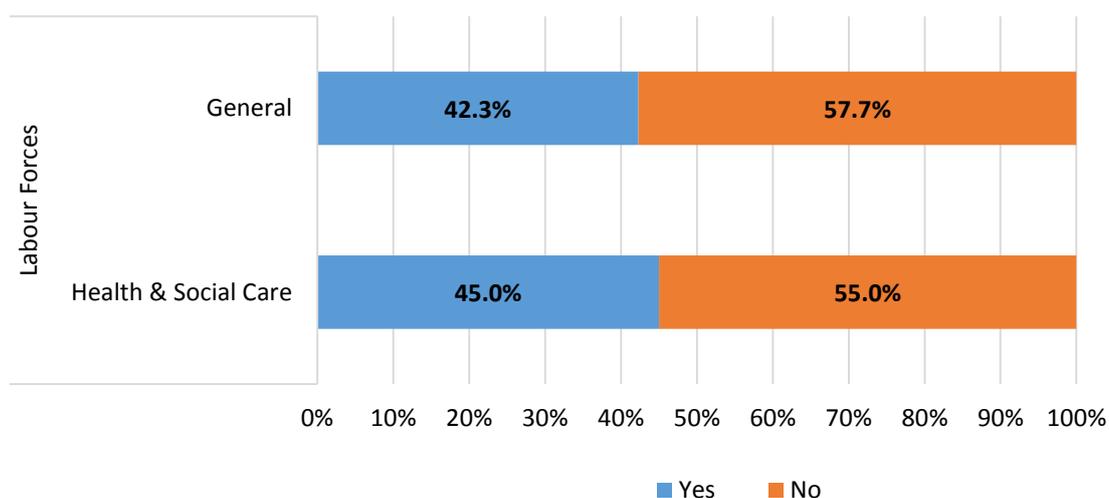
4.5 Health characteristics of the older health and social care labour force (2009-2013)

Among the older population, socioeconomic position, gender and ethnicity have an association with health, and as discussed in Chapter 2, overall, older workers are more likely to report work-related ill-health than younger workers (Loretto et al., 2007b; Victor, 2010). Results from the analysis of health characteristics of the older health and social care labour force are presented in this section with the aim of expanding our understanding of this labour force. Of those who reported having a long-term (over twelve months) health problem, the type of health problem experienced was established, and it was determined whether the health problem affected the amount of work that could be completed. With the EWL agenda in mind, the results were obtained to inform discussion about potential policy implications in relation to health promotion at work and the involvement of OH services.

4.5.1 The prevalence of a long-term health problem

Overall, within both labour forces, as can be seen in Figure 4.16, over half of the older workers reported that they did not have a health problem. However, it was apparent that within the older health and social care labour force, 45 per cent of individuals reported that a health problem did exist, and within the older general labour force, although a smaller proportion stated that they had a health problem, this proportion was still over 40 per cent.

Figure 4.16 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by whether a health problem exists (2009-2013) (%)



Notes: $\chi^2=8327.2$ ($df\ 1, P<0.0001$); General Labour Force $N=164,560$, Health & Social Care Labour Force $N=8,962$

Source: Author's own analysis LFS 2009-2013

Because men and women experience different health problems in later life, and as there are differences in the reporting of ill-health between genders, the results for the analysis of health characteristics in this research are presented by gender (Verbrugge, 1985; Crimmins et al., 2010). Additionally, as health problems can change or increase with age (APA, 1998; AIHW, 2012), the analysis also included age groups.

The overall findings are presented in Table 4.3, and show within the older health and social care labour force and the older general labour force, in all age categories, the largest proportion of staff reported that they did not have a health problem (54.4 per cent for the older health and social care labour force, and 55.1 per cent for the older general labour force). Moreover, of those who worked in the older health and social care labour force who had a health problem, over a third reported that it did not affect their work. Similarly among the older general labour force, of those who reported a health problem, over 34 per cent stated that it did not affect their work. Nevertheless, among those with a health problem, with the exception of those aged 50 to 54 in the older general labour force, in all age groups, 10 per cent or over reported that their health problem did affect the amount of work they were able to complete.

Table 4.3 Percentage of economically active older individuals reporting a health problem and whether it affects work, in the health and social care labour force and general labour force in England, by age group (2009-2013) (%)

Age Groups (Years)	Health & Social Care Labour Force				General Labour Force			
	No health problem	Health problem does not affect work	Health problem affects work	Total	No health problem	Health problem does not affect work	Health problem affects work	Total
50-54	60.6%	28.2%	11.2%	100%	65.3%	26.2%	8.5%	100%
				N=3,747				N=61,345
55-59	50.8%	35.4%	13.8%	100%	58.2%	31.8%	10%	100%
				N=2,870				N=49,761
60-64	48.6%	36.7%	14.7%	100%	50.4%	38.4%	11.2%	100%
				N=1,559				N=34,344
65+	57.5%	32.5%	10%	100%	46.5%	41.4%	12.1%	100%
				N=743				N=18,431
Total	54.4%	33.2%	12.4%	100%	55.1%	34.5%	10.5%	100%
				N=8,919				N=163,881

Notes: Health & Social Care Labour Force $\chi^2=32620.5$ (df 3, $p<0.001$); General Labour Force: $\chi^2=796063.6$ (df 3, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

Table 4.4 and Table 4.5 present the results, and describe men and women who reported whether they had a health problem in the older health and social care labour force and the older general labour force by age group. In addition, of those that reported they had a health problem, these tables also show whether this health problem affected the amount of work they were able to complete.

Among men in both labour forces (Table 4.4), the proportions who reported no health problems decreased with increasing age. For instance, among men aged 50 to 54 who worked in the older health and social care labour force, over 60 per cent reported no health problems, with a decrease in proportions noted in the subsequent two age groups, culminating with the oldest age group (65 years and over) where over 48 per cent reported no health problems. Among men who reported a health problem, which did not affect the amount of work they could complete, the pattern between the two labour forces differed.

Table 4.4 also shows that among men aged 50 to 54 in the older health and social care labour force, over 29 per cent reported that their health problem did not affect their work, and while the proportion increased for those in the next age group (55 to 59), it decreased in the age group 60 to 64 and increased again to over 39 per cent among those aged 65 years and over. Whereas among the men who worked in the older general labour force, the proportion increased with age,

from over 26 per cent in the youngest age group (50 to 54 years) to over 41 per cent in the oldest age group (65 years and over). The results also showed that within the older health and social care labour force, the proportion of men who reported that their health problem did not affect their work was higher at age 50 to 54 (29.2 per cent) and lower at age 65 years and over (39.2 per cent) than observed within the older general labour force. Among the men who reported that their health problem did affect their work, within the older health and social care labour force the lowest proportion was found in the age group 55 to 59 years (5.3 per cent), whereas within the older general labour force the smallest proportion was observed in the younger group; those men age 50 to 54 (8 per cent). A difference between the labour forces among those who reported that their health problem affected work was also noted. The largest proportion in this category reported by both labour forces was around 13 per cent, however these proportions were evident in different age groups (60 to 64 for the older health and social care labour force and 65 years and over for the older general labour force). These differences may reflect that men in the older health and social care labour force with a health problem that affects work may exit the labour force prior to the SPA, whereas within the older general labour force their counterparts remain in work for longer. This has implications for policy development under the auspices of the EWL agenda and will be discussed further in Chapter 7.

Table 4.4 Percentage of economically active older men reporting a health problem and whether it affects work, in the health and social care labour force and general labour force in England, by age group (2009-2013) (%)

Age Groups (Years)	Health & Social Care Labour Force				General Labour Force			
	No health problem	Health problem does not affect work	Health problem affects work	Total	No health problem	Health problem does not affect work	Health problem affects work	Total
50-54	60.8%	29.2%	10%	100%	65.4%	26.6%	8%	100%
				N=454				N=32,360
55-59	55.9%	38.8%	5.3%	100%	57.5%	32.4%	10.1%	100%
				N=429				N=26,659
60-64	51%	35.5%	13.5%	100%	48.2%	40.5%	11.3%	100%
				N=257				N=21,151
65+	48.2%	39.2%	12.6%	100%	45.4%	41.2%	13.3%	100%
				N=126				N=11,557
Total	54%	35.7%	10.4%	100%	54.2%	35.2%	10.7%	100%
				N=1,266				N=91,727

Notes: Health & Social Care Labour Force $\chi^2=8218.9$ (df 3, $p<0.001$); General Labour Force $\chi^2=576405.9$ (df 3, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

Table 4.5 shows that among the women in the older health and social care labour force who reported that they did not have a health problem, with over 60 per cent, the largest proportion was aged 50 to 54, a result that was comparable with that seen with men of the same age in the same labour force. Likewise, among women in the older general labour force, a similar result was found to that of men in the same categories; the largest proportion of women in this labour force who reported a health problem were also aged 50 to 54 with over 65 per cent. The proportion of women in the older general labour force who reported having a health problem decreased with age (from 65.1 per cent among those aged 50 to 54, to 48.3 per cent among those aged 65 years and over); however among women in the older health and social care labour force the pattern differed. From the youngest age group (50 to 54) through to age group 60 to 64, the proportions who reported that a health problem did not exist decreased from around 60 per cent to around 48 per cent, whereas in the oldest age group the proportion increased to over 59 per cent. This increase with age among women in the older health and social care labour force (that was not seen among women in the older general labour force), may reflect a greater tolerance from the health and social care sector in employing older workers with health problems. However, it may also represent that women in the older health and social care labour force who experience health

problems need to continue in work beyond the SPA; an issue that will be explored further within Chapter 7.

Table 4.5 Percentage of economically active older women reporting a health problem and whether it affects work, in the health and social care labour force and general labour force in England, by age group (2009-2013) (%)

Age Groups (Years)	Health & Social Care Labour Force				General Labour Force			
	No health problem	Health problem does not affect work	Health problem affects work	Total	No health problem	Health problem does not affect work	Health problem affects work	Total
50-54	60.5%	28.1%	11.4%	100%	65.1%	25.8%	9.1%	100%
				N=3,293				N=28,985
55-59	49.9%	34.8%	15.4%	100%	58.9%	31.2%	9.9%	100%
				N=2,441				N=23,102
60-64	48.1%	36.9%	15%	100%	54.1%	34.9%	11%	100%
				N=1,303				N=13,193
65+	59.2%	31.3%	9.5%	100%	48.3%	41.8%	9.9%	100%
				N=617				N=6,874
Total	54.4%	32.8%	12.8%	100%	56.6%	33.4%	10%	100%
				N=7,653				N=72,154

Notes: Health & Social Care Labour Force $\chi^2=33618.3$ (df 3, $p<0.001$); General Labour Force $\chi^2=239785.7$ (df 3, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

Table 4.5 also showed that of the women who reported that their health problem did not affect work, within the older health and social care labour force, with nearly 37 per cent, the largest proportion was found with those aged 60 to 64. In comparison, the largest proportion (41.8 per cent) of women in the older general labour force who reported that their health problem did not affect work, were found in the oldest age group. Of the women who reported that their health problem did affect work, the largest proportions (around 15 per cent) of women in the older health and social care labour force were aged 55 to 59 and 60 to 64. Similarly, although with a smaller proportion (11 per cent), the largest proportion of women in the older general labour force that reported their health problem affected work was found to be among those aged 60 to 64. In both labour forces the proportion of women who reported that their health problem affected their work decreased among those aged 65 years and over (Table 4.5). This result may be influenced by those women who have health problems that affect work choosing to leave the labour force prior to age 65, whereas those who remain in the labour force at age 65 and over do so because they do not have a health problem or that the health problem they experience is

manageable. In order to explore this further and to address research question 1 (Section 1.4), this notion is explored further in Chapter 7.

Having established the prevalence of long-term health problems among the older health and social care labour force and the older general labour force, the following section presents the main health problem experienced among those who reported having a long-term health problem.

4.5.2 The main health problem experienced

Table 4.6 through Table 4.9 present the findings of the analysis investigating the type of health problem reported among men and women in the older health and social care labour force and older general labour force by age group. The main health problem reported was divided into four types of conditions, in addition to the 'other' category which included problems with skin, eyesight, hearing or speech, mental health or learning disabilities as defined in Section 3.5.1. Overall, among men and women in both the research and comparative labour forces, a varied pattern of health problems was observed within the age groups. Only women with 'other' health problems had comparable similarities in proportions between the two labour forces throughout the four age groups (Table 4.8 and Table 4.9), and among the older general labour force, the proportion of men with heart or circulation difficulties increased with age (Table 4.7).

Table 4.6 shows that among the older health and social care labour force, overall the largest proportion (37.1 per cent) of men reported that their main health issue was within the 'other' category. Whereas, in contrast, in the same labour force, the largest proportion (33.4 per cent) of women reported that skeletal or joint problems were their main health problem (Table 4.8). Comparison with the older general labour force showed that for men the results differed; here, with a proportion of over 30 per cent, heart and circulation issues were found to be the most prevalent (Table 4.7). For women in the older general labour force (Table 4.9), the result was the same as for women in the older health and social care labour force (Table 4.8), in that overall, issues with skeletal or joints were reported to be the main health problem; although with 33 per cent, the proportion was marginally smaller. Of men within the older health and social care labour force aged 50 to 54 (Table 4.6), almost 30 per cent reported skeletal or joint problems, compared to around 27 per cent of their counterparts in the older general labour force (Table 4.7). Moreover, these results represented the health problem with the greatest prevalence at this age for men in both labour forces. The least common health problem for men within this age group, in both the older health and social care labour force and the older general labour force, was chest or breathing problems (with 9.8 per cent and 9.7 per cent respectively). A different health problem was observed to be the most frequent for men in both labour forces within the second age group;

here 43 per cent of men aged 55 to 59 in the older health and social care labour force (Table 4.6) reported heart or circulation difficulties compared to almost 31 per cent of men of the same age in the older general labour force (Table 4.7). The health problem that was least common within this age group for men in both labour forces was chest or breathing; however the proportion observed in the older general labour force (8.7 per cent) (Table 4.7) was almost twice the proportion observed for their counterparts in the older health and social care labour force (4.6 per cent) (Table 4.6).

Table 4.6 and Table 4.7 show that in the next age group (60 to 64), around 38 per cent of men in the older health and social care labour force and 32 per cent of men within the older general labour force had heart or circulatory problems. However, it was noted in this age group that the least prevalent health problem differed between the labour forces; with around 13 per cent of men in the older health and social care labour force who described themselves as having an 'other' health problem, while the least reported health problem by men in the older general labour force was chest or breathing (with around 8 per cent). In the oldest age group examined (65 years and over), over 84 per cent of men who worked in the older health and social care labour force reported their health problems in the 'other' category, while the largest proportion of men aged 65 and over (26.2 per cent) who worked in the older general labour force had skeletal or joints problems.

Table 4.6 Percentage of economically active older men reporting a health problem in the health and social care labour force in England, by age group and main health problem (2009-2013) (%)

Age Groups (Years)	Health & Social Care Labour Force					Total
	Main health problem (% with condition)					
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	29.9%	9.8%	17.2%	19.1%	24%	100% N=187
55-59	13.3%	4.6%	43%	12.9%	26.2%	100% N=228
60-64	16.4%	13.8%	38.1%	18.4%	13.3%	100% N=116
65+	10.1%	*	*	5.1%	84.8%	100% N=67
Total	17.4%	7.1%	24.6%	13.9%	37.1%	100% N=598

Notes: $\chi^2=53665.9$ (df 3, $p<0.001$); * cell counts were too low to produce percentage within SPSS

Source: Author's own analysis LFS 2009-2013

Table 4.7 Percentage of economically active older men reporting a health problem in the general labour force in England, by age group and main health problem (2009-2013) (%)

General Labour Force						
Age Groups (Years)	Main health problem (% with condition)					Total
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	27.1%	9.7%	26.8%	12.6%	23.8%	100% N=10,920
55-59	24.9%	8.7%	30.8%	12.4%	23.2%	100% N=11,222
60-64	26.3%	7.9%	32%	10.6%	23.2%	100% N=10,519
65+	26.2%	8.1%	33.4%	9.5%	22.8%	100% N=6,327
Total	26.1%	8.6%	30.8%	11.3%	23.3%	100% N=38,988

Notes: $\chi^2=42650.1$ (df 3, $p<0.001$); * cell counts were too low to produce percentage within SPSS

Source: Author's own analysis LFS 2009-2013

Table 4.8 shows that among women aged 50 to 54, in the older health and social care labour force, with 35 per cent, the largest proportion reported health problems within the 'other' category, and 32.1 per cent reported skeletal or joints as their main health problem. Unlike men in this labour force (Table 4.6), among women in this age group, diabetes was the health problem which had the smallest proportion reported (6.1 per cent). The results reported by women in the older general labour force (Table 4.9) were similar to the pattern observed for women who worked in the older health and social care labour force, i.e. comparable proportions were found within the health problem categories.

Although the proportions differed, in both labour forces, among women aged 55 to 59, the largest proportion of staff reported skeletal or joint problems as their main health problem; again showing differences with their male counterparts. Like seen with women of the same age in the older health and social care labour force (Table 4.8), in the older general labour force the smallest proportion found was for women who reported diabetes as their main health concern (6.2 per cent) (Table 4.9). Women in the older health and social care labour force aged 60 to 64 reported that their main health problem was similar to those aged 55 to 59 (Table 4.8). However, in the oldest age group, the proportions found with skeletal and joint problems (41.1 per cent) and diabetes (8.5 per cent) were larger. In the older general labour force, women aged 60 to 64 showed a similar pattern to their health and social care counterparts, nevertheless, the proportions observed were smaller; for example, those with skeletal or joint problems (33.5 per

cent) (Table 4.9). The pattern for women in both labour forces in this age group differed to that seen with men of the same age; while for women the main health problem observed was with skeletal or joint problems, for men in both the older health and social care labour force (Table 4.6) and older general labour force (Table 4.7) their main health concern was with heart or circulation problems. The pattern changed among women in the older health and social care labour force aged 65 years and over (Table 4.8). In this group the main health problem, with almost 27 per cent, was with heart or circulation problems. However, for women of this age who worked in the older general labour force, the main health problem remained skeletal or joints (33.1 per cent) (Table 4.9).

Table 4.8 Percentage of economically active older women reporting a health problem in the health and social care labour force in England, by age group and main health problem (2009-2013) (%)

Health & Social Care Labour Force						
Age Groups (Years)	Main health problem (% with condition)					Total
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	32.1%	11.5%	15.4%	6.1%	34.9%	100% N=1,253
55-59	38.8%	8.4%	19.3%	7.3%	26.2%	100% N=1,164
60-64	41.4%	7%	15.3%	8.5%	27.8%	100% N=640
65+	21.1%	16.8%	26.8%	12.7%	22.6%	100% N=307
Total	33.4%	10.9%	19.2%	8.7%	27.9%	100% N=3,364

Notes: $\chi^2=38284.9$ (df 3, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

Table 4.9 Percentage of economically active older women reporting a health problem in the general labour force in England, by age group and main health problem (2009-2013) (%)

General Labour Force						
Age Groups (Years)	Main health problem (% with condition)					Total
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	32.4%	9.6%	16.9%	6.2%	34.9%	100% N=9,921
55-59	32.9%	9.8%	21.5%	6.9%	28.9%	100% N=9,400
60-64	33.5%	9.2%	22.4%	5.7%	29.2%	100% N=5,880
65+	33.1%	7.5%	26.5%	5.7%	27.2%	100% N=3,530
Total	33%	9%	21.8%	6.1%	30.1%	100% N=28,731

Notes: $\chi^2=61449.7$ (df 3, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

From the findings, it was evident that the main health problem experienced among men and women differed, both between the labour forces and within the age groups. To address research question 1 fully, these results will be discussed in Chapter 7, in relation to the literature and the EWL agenda.

4.6 Summary

Informed by the literature review in Chapter 2, this chapter reported the results of the analysis of key characteristics pertaining to the older health and social care labour force in England, using the older general labour force within the same age range as a comparator.

The findings suggested that, on average, the older health and social care labour force comprised a greater proportion of staff aged 50 to 59 than observed in the older general labour force, and that both labour forces had a similar proportion of staff that worked at the age of 80 and over.

Women formed the majority (86 per cent) of the older health and social care labour force, whereas within the older general labour force the majority of staff was men (57.5 per cent). The job sector divide was clear; the majority of staff in the older health and social care labour force were employed by the public sector, and the majority of the older general labour force were employed by the private sector. Less than half of the staff in the older health and social care labour force worked part-time (a similar pattern to the older general labour force). Among those

who worked part-time in the older health and social care labour force, the largest proportion was aged 50 to 59 and over a third reported that they worked part-time because they could not find full-time work. Overall, the majority of older health and social care workers were married, although when the analysis was controlled for men, a larger proportion than seen in the older general labour force, were found to be single. Although the older health and social care labour force were predominantly White, the proportion of staff from the BME group was almost double that observed in the older general labour force; a similar phenomenon to that commented upon in the literature (Bach, 2010; Skills for Care, 2011c).

From a socioeconomic perspective, the older health and social care labour force appeared more highly educated than the older general labour force; however, similar proportions had mortgages remaining on their properties. In regard to earnings, a smaller proportion of the older health and social care labour force earned in the highest earnings level, but more earned in the middle earnings level than workers in the older general labour force. Over half of individuals in labour forces reported that they did not have a health problem. Nevertheless, of those that did have a health problem, over a third of the older health and social care labour force reported that it did not affect their work, while over 12 per cent reported that their health problem did affect their work. A similar pattern was noted among the older general labour force, although the proportion that reported that their health problem affected their work was smaller (10.5 per cent). Of those that reported that they experienced a health problem, among the older health and social care labour force, the largest proportion of men reported problems in the 'other' category (that included sight, hearing and speech problems), and the largest proportion of women reported problems in the skeletal or joints category. Different results were noted in the older general labour force, where for men the health problem with the highest proportion was heart or circulation, and for women it was problems with skeletal or joints.

The results from this chapter enable discussion to formulate answers to research question 1 (Section 1.4), and in so doing considered the demographic, socioeconomic, health and employment characteristics of the older health and social care labour force. To facilitate answers to research question 2 (Section 1.4), the following chapter will focus on the analysis of the characteristics of the two selected occupation groups that are present within this labour force; the older health and care professionals and the older health and care support staff.

Chapter 5: Results 2

A comparison between selected occupation groups aged 50 years and over in England (2009-2013): the older health and care professionals compared to the older health and care support staff.

5.1 Introduction

The older health and social care labour force in England is comprised of a variety of occupations, all of which have particular physical, mental and educational requirements (HSCIC, 2013c, 2014b). Within large organisations such as the NHS and social care services, organisational policy may not reflect the distinctive nature of these individual occupations or the needs of specific groups, such as those aged 50 years and over. This chapter compares the characteristics of the two selected occupation groups, and seeks to aid discussion to address research question 2 (Section 1.4). In addition, with regard to the EWL agenda, the results support the debate as to whether overarching policy is sufficient to address the differing needs of the individuals within the two selected occupation groups. For example, a more nuanced policy approach to eradicating the gender pay-gap may provide women who work in the health and care support staff group with more opportunities in later working life to have choice in decisions around extending their working life.

In order to address the thesis' research questions, and to establish a platform for discussion around the policy implications of the research and future workforce planning, this chapter presents the results of the analysis in five distinct sections that relate to the review of the literature and subsequent conceptual framework (Section 2.7). The first section summarises the sample populations used in the analyses. The second section provides an overview of the characteristics that were apparent within the two selected occupation groups, such as age and gender distribution, and thirdly, analyses of key demographic characteristics are reported comprising characteristics such as marital status and ethnicity. Fourthly, socioeconomic characteristics are presented, which include earnings and educational attainment. Finally, health characteristics are shown in the form of whether a health problem exists, whether an existent health problem affects work and if so, what type of health problem was evident.

5.2 The sample population (2009-2013)

As discussed in the methods chapter, to enable effective interpretation and comparison of results, the older health and social care labour force in England (2009-2013) (N=10,123) was divided into two selected occupation groups. These selected occupation groups form the sample population for analysis in this chapter. First, the older health and care professionals group was identified (N=4,835), comprising those occupations that required a professional qualification; AHPs (N=1,071), nurses (N=3,091) and social workers (N=673). Secondly, occupations that provide direct care under the supervision of occupations in the health and care professional group were identified. Thus, the older health and care support staff group (N=5,288) was formed and included nursing auxiliaries (N=1,500) and care workers (N=3,788) (for details see Section 3.4.1 and Table 3.1).

The subsequent sections present the results of the analysis of the demographic, socioeconomic, health and employment characteristics relating to both selected occupation groups (Galobardes et al., 2006a; Loretto et al., 2007b; Victor, 2010). The aim of which was to highlight differences that may have implications for the EWL agenda, and provide answers to research question 2.

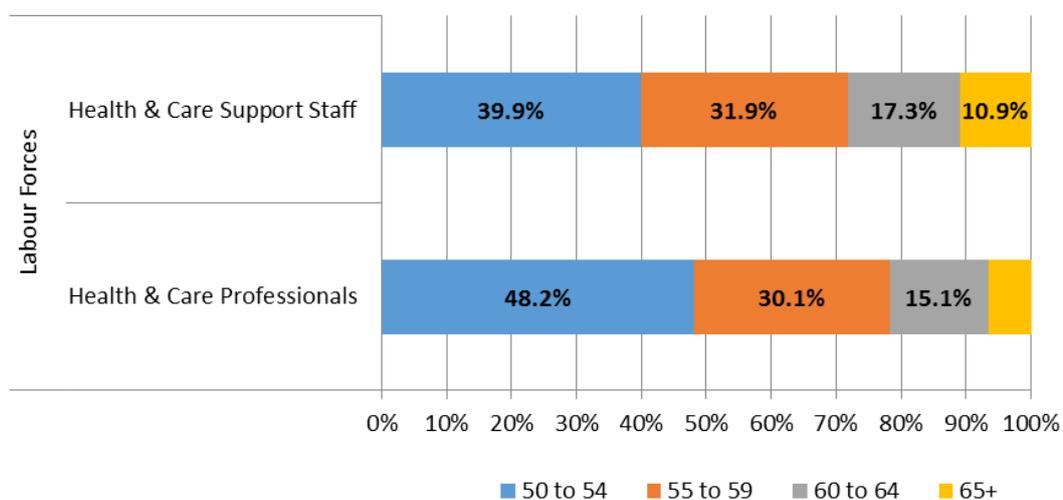
5.3 Demographic characteristics of older health and care professionals and older health and care support staff

5.3.1 The age profile

The age of the older health and care professionals ranged from 50 to 89 years, while in contrast, the age range of the older health and care support staff was 50 to 84 years (Appendix D, Table 8.16). However, although the age range of the professionals was wider, a greater percentage of support staff (10.9 per cent) than professionals (6.6 per cent) worked at or beyond the age of 65 (Figure 5.1). This is an interesting result, as although support staff tend to have less responsibility than professionals, their roles are generally more physical in nature; implying the need to cease work at an earlier age (Harris et al., 2010).

Within both selected occupation groups, the largest proportion of staff was aged 50 to 54; although among the older health and care professionals, with 48.2 per cent, the proportion was greater in comparison to the older health and care support staff (40 per cent). In addition, both selected occupation groups had similar proportions of staff aged 55 to 59 and 60 to 64 years (Figure 5.1).

Figure 5.1 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by age group (2009-2013) (%)



Notes: Health & Care Professionals N=4,835, Health & Care Support Staff N=5,288; All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

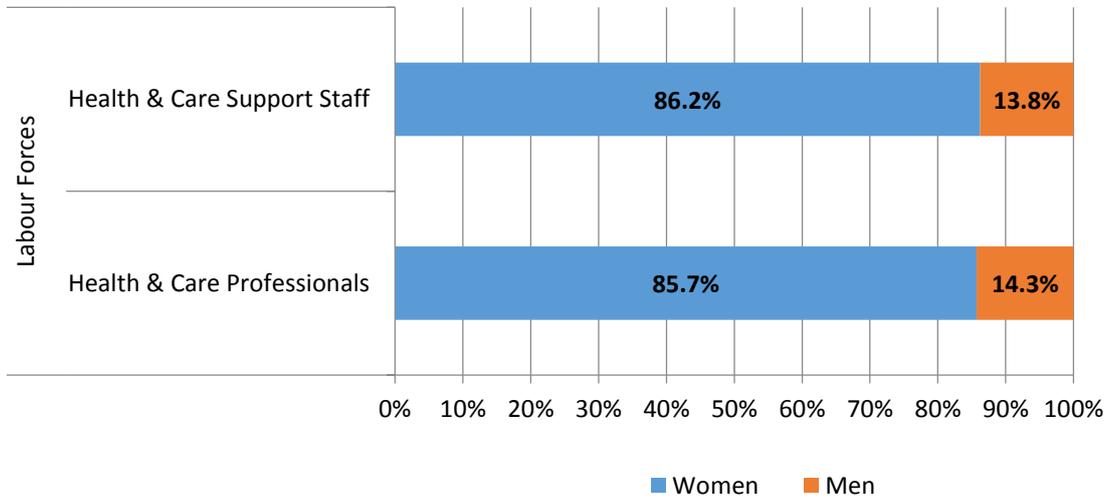
Source: Author's own analysis LFS 2009-2013

To increase our understanding of the demographic profile, the following section considers gender patterns among and between the selected occupation groups.

5.3.2 The gender distribution

As was evident from the results in Chapter 4, the older health and social care labour force was a predominantly female workforce (Table 4.2). This was also illustrated when distinguishing between the older professionals and the older support staff. As can be seen in Figure 5.2, over 85 per cent of both occupation groups were women.

Figure 5.2 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by gender (2009-2013) (%)

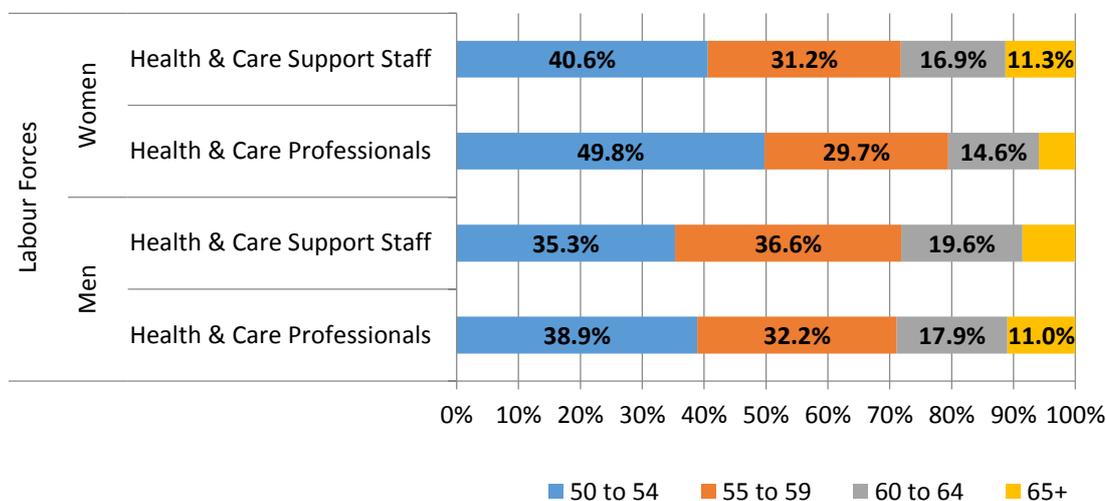


Notes: Health & Care Professionals N=4,835; Health & Care Support Staff N=5,288; All associations in this figure were statistically significant p<0.001. For details Appendix D, Table 8.18

Source: Author’s own analysis LFS 2009-2013

When the age distribution of the older professionals and older support staff was considered by gender, among men, the distribution pattern was similar in both selected occupation groups (Figure 5.3). The age distribution of women who worked in the support staff occupations was also similar to that observed among men; however, a notable difference emerged among women who worked as health and care professionals. Here, almost 50 per cent of staff were aged 50 to 54, and with the addition of those aged 55 to 59, 79.5 per cent of female staff that worked as health and care professionals were aged below 60. With the EWL agenda and workforce planning in mind, with fewer female professionals aged 60 years and over, as the labour force ages, implications such as skill-mix and the availability of staff may become evident (Buchan and Secombe, 2010; CfWI, 2011a).

Figure 5.3 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by age group and gender (2009-2013) (%)



Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

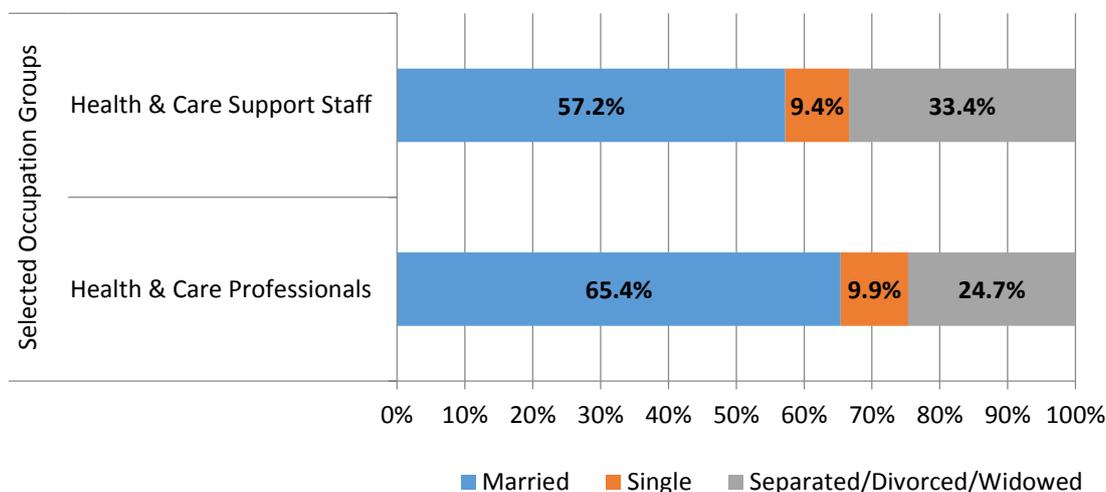
Source: Author's own analysis LFS 2009-2013

5.3.3 The marital status composition

Radl and Himmelreicher (2015: 4) reported that 'spouses often share a preference for joint retirement', and married women often have a reduced work history compared to married men, due to child- or family-care responsibilities during the life course (Szinovacz, 2013a). As marital status can have an impact on decision-making with regard to employment choices in later working life, such as the affect that divorce can have on the need to remain in work (Chipperfield and Havens, 2001), it was important to establish the marital status and in particular, differences in the marital status, of the older health and care professionals and older health and care support staff.

Overall, among both selected occupation groups, the largest proportion of staff were married (Figure 5.4), however, the support staff included a greater proportion of workers who were separated, divorced or widowed (33.4 per cent). Both selected occupation groups had a similar proportion of single workers. Nevertheless, these differences may relate to the age structure of each group. For example, as can be seen in Appendix D, Table 8.17, the percentage of married older health and care professionals decreases with age, and the proportion of separated, divorced or widowed older support workers increases with age.

Figure 5.4 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by marital status (2009-2013) (%)

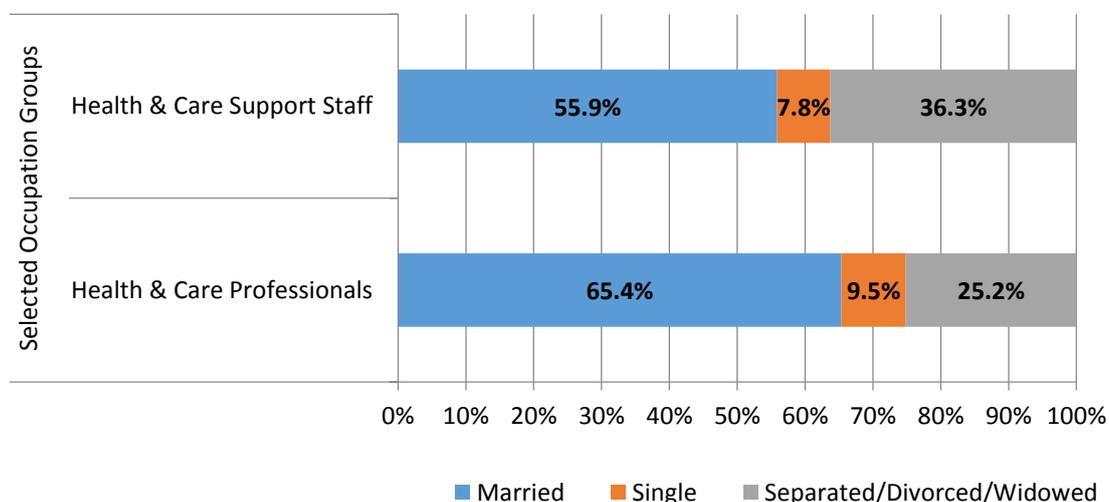


Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

With the analysis focused on women (Figure 5.5), it was evident that within the professionals group, the proportions were similar to the overall pattern. However, among the female support staff, there was a lower proportion of married and single workers and a greater proportion of separated, divorced or widowed workers than observed overall (Figure 5.4).

Figure 5.5 Percentage of economically active older women in the health and care professionals group and the health and care support staff group in England, by marital status (2009-2013) (%)

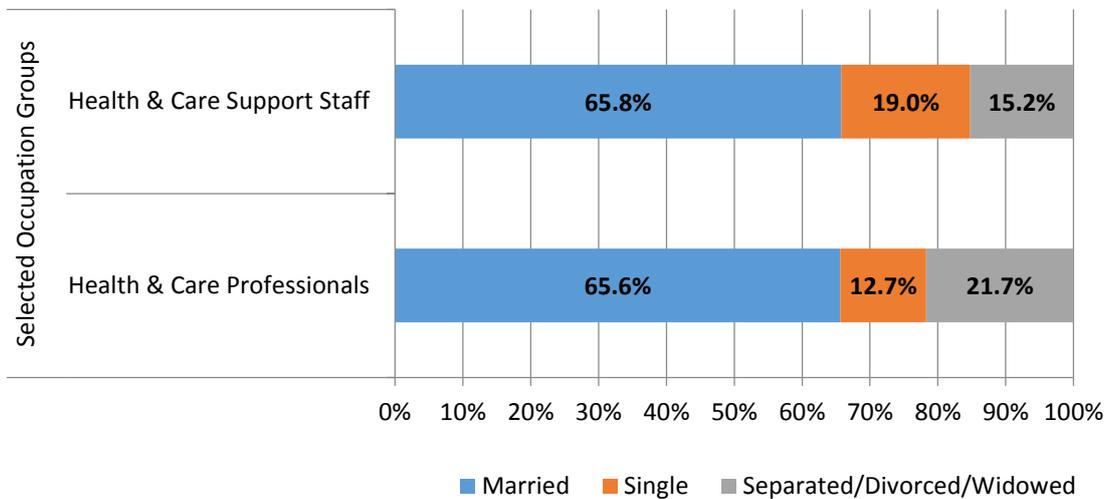


Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

When the analysis was focused on men (Figure 5.6), the proportions differed from those in the overall results (Figure 5.4), and to the findings observed for women (Figure 5.5). Among the male support staff, the majority (65.8 per cent) were married. A larger proportion were single (19 per cent), and less than half of those in the total group were separated, divorced or widowed (15.2 per cent). Conversely, the proportion of married male health and care professionals was similar (65.6 per cent) to that seen in the overall results, however, a greater proportion were single and a smaller proportion were separated, divorced or widowed. The results found may relate to the 'gendered nature [...] of relationships with advancing age', where 'older men's masculinity is reinforced and maintained by marriage or partnership' (Arber et al., 2003: 6), and also to the difference in LE that observes, on a general level, that women live longer than men (ONS, 2014f).

Figure 5.6 Percentage of economically active older men in the health and care professionals group and the health and care support staff group in England, by marital status (2009-2013) (%)



Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

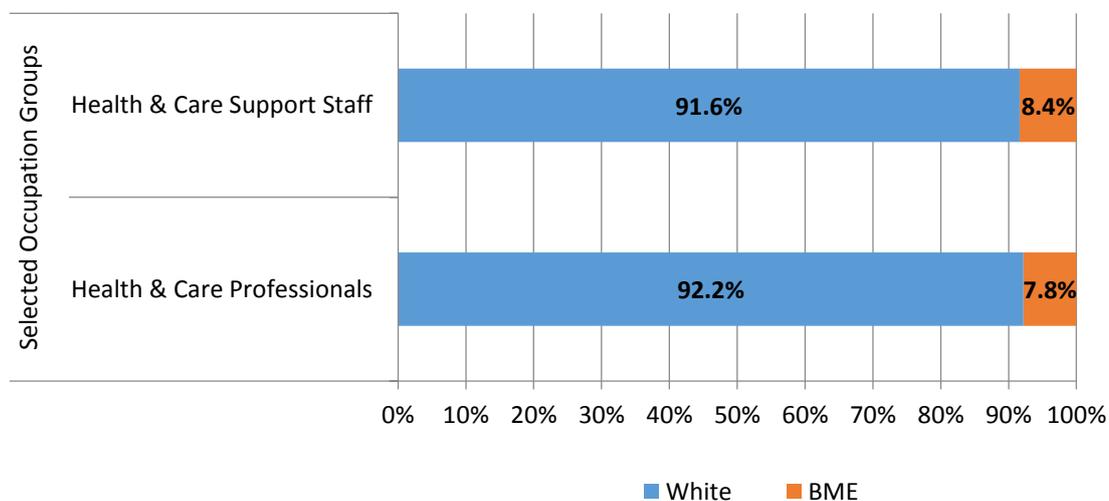
To add to the richness of the demographic profile of the older health and care professionals and the older health and care support staff, the ethnic composition of the selected occupation groups was examined, and the following section presents the findings.

5.3.4 The ethnic composition

The meaning and experience of ageing are linked to diverse cultural codes, and the workforce is not only growing older, but more culturally diverse (Phillips et al., 2010; Field et al., 2013). Understanding the ethnic composition within the selected occupation groups provides a basis for discussion about whether the EWL agenda has relevance to all ethnic groups, and to what extent ethnic diversity is considered among policy initiatives, with for example, the impact of the rise of the SPA on BME elders.

As described in the Methodology (Section 3.5.1), the analysis of ethnicity was divided into two groups; White and BME. In Chapter 4 (Figure 4.7), the results established that 91.9 per cent of the older health and social care labour force were White, while the remaining 8.1 per cent comprised individuals in the BME group. Figure 5.7 depicts the results of the analysis where among both selected occupation groups, over 90 per cent of staff were White, and a greater proportion of support staff (8.4 per cent) than professionals (7.8 per cent) belonged to the BME group.

Figure 5.7 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by ethnicity (2009-2013) (%)

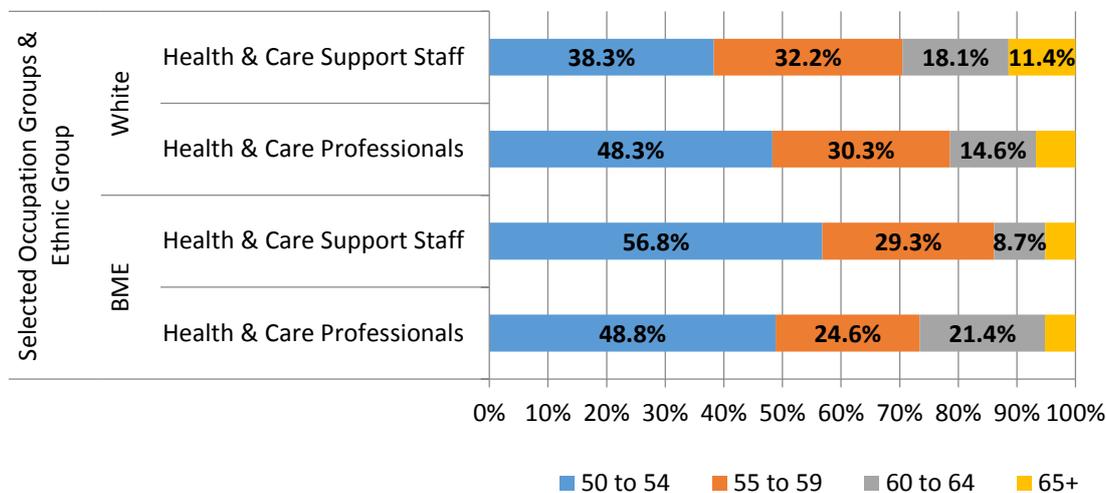


Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

Figure 5.8 shows that among the White older health and care support staff, 70.5 per cent were aged 50 to 59 and 29.5 per cent were aged 60 and over. In contrast, among the White older professionals, a greater proportion (78.6 per cent) was aged 50 to 59, and 21.4 per cent were aged 60 and over. In comparison, among the BME older support staff, 86.1 per cent were aged 50 to 59 and 13.9 were aged 60 and over. This contrasted with the BME older professionals, where a smaller proportion (73.4 per cent) were aged 50 to 59 and a larger proportion (26.6 per cent) were aged 60 years and over.

Figure 5.8 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by age group and ethnicity (2009-2013) (%)



Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

Within this analysis it was not possible to determine whether ethnicity was associated with the working pattern of the older health and social care labour force. Therefore, this will be explored in Chapter 6, where the multivariate (regression) analysis results are presented.

5.4 Socioeconomic characteristics of older health and care professionals and older health and care support staff

The following section discusses the results from the analysis of the socioeconomic characteristics of the selected occupation groups, namely the highest educational attainment achieved, earnings and housing tenure status (Lynch and Kaplan, 2000; Grundy and Holt, 2001; Galobardes et al., 2006a).

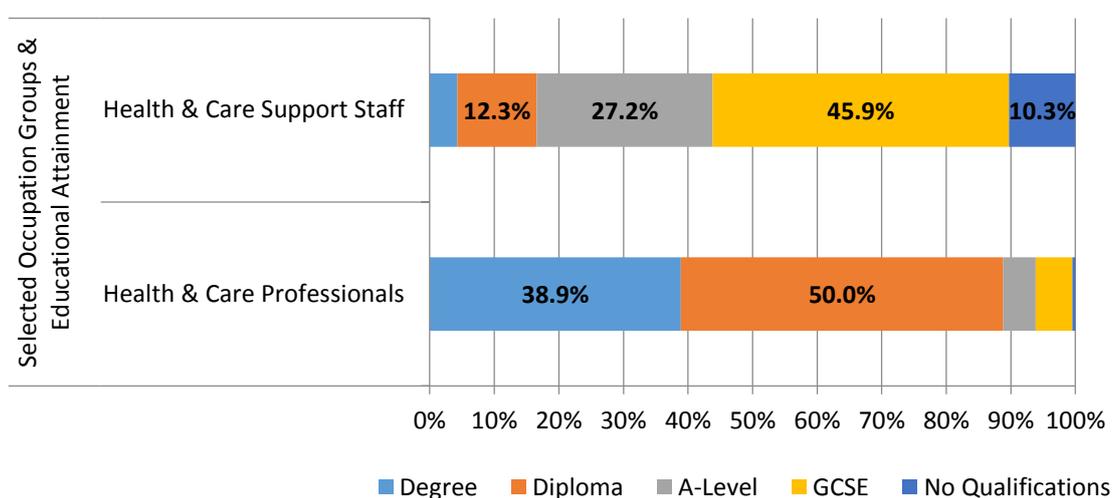
5.4.1 The educational attainment distribution

As reported in Section 2.3.2 educational achievement can be seen as a measure of one's socioeconomic position (Grundy and Holt, 2001). It is suggested that the knowledge and skills gained through education enables an individual to have a greater understanding of health-related issues, such as diet and exercise requirements, thus improving lifestyle choices, which lead to improved HLE (Galobardes et al., 2006a).

With this in mind, given that the older health and social care labour force was divided into two selected groups (professionals and non-professionals), whose occupation-related educational requirements differed (see Section 3.4.1), it was anticipated that there would be clear differences between the educational attainments achieved within each group.

As Figure 5.9 shows, among the older health and care professionals, almost 89 per cent had attained qualifications within the highest two grades (diploma and degree). In comparison, within the older health and care support staff a more diverse distribution was observed. The largest proportion of support staff (45.9 per cent) had attained GCSE (or equivalent), and 27.2 per cent had attained A-Level (or equivalent). The highest educational attainment category had been achieved by 4.3 per cent of support staff, and in contrast, 10.3 per cent had no qualifications. These results reflect the type of jobs included in the selected occupation groups as described in Section 3.4.2, but also highlight the potential differences in socioeconomic status that may be found in subsequent results. These findings are particularly interesting within the context of the EWL agenda, as ‘better qualified’ older workers have a tendency to enjoy their jobs more and want to continue working into later life (Loretto et al., 2005b: v). The implication of this will be drawn on in Chapter 7.

Figure 5.9 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by highest educational attainment (2009-2013) (%)



Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

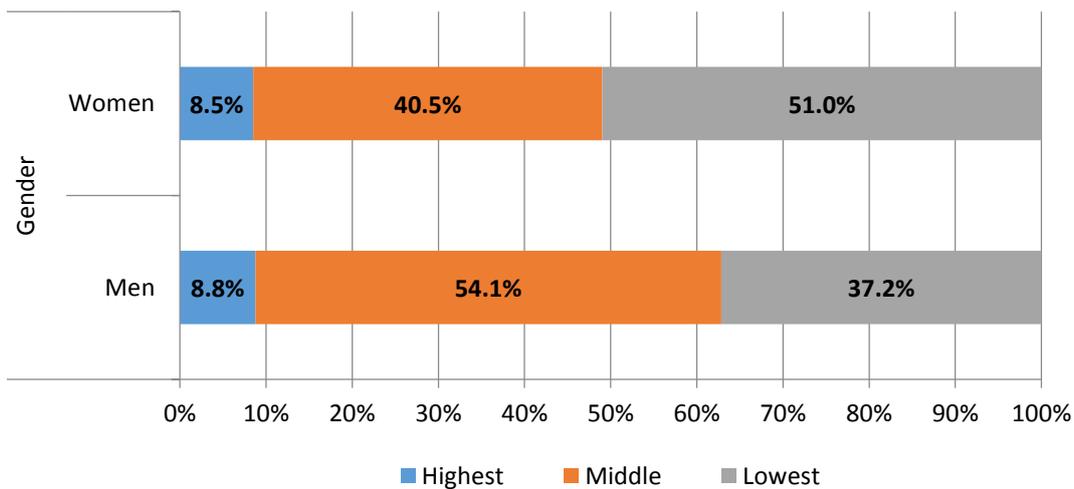
5.4.2 The earnings distribution

Earnings have a cumulative effect over the life course, and are the indicator of socioeconomic position that most directly measures the material resources of an individual (Galobardes 2006a). As this chapter compares older health and care professionals and older health and care support staff, understanding the earnings characteristics of these two selected occupation groups is vital in determining factors that may be associated with employment decisions and working patterns in later working life.

Before examining individual earnings of the selected occupation groups, focus is placed on earnings between genders. As Chapter 2 confirmed, earnings inequality between the genders remains common, even between workers in the same occupations (Hills et al., 2010). Therefore, establishing the earnings-by-gender profile of the research population is crucial in order to understand how this may be associated with patterns of work in later working life.

Figure 5.10 shows that among the older health and care professionals and the older health and care support staff, over 50 per cent of females earned in the lowest earnings category, whereas among men, under 38 per cent earned within the lowest level. The largest proportion of men earned in the middle earnings category, whereas for women, the largest proportion earned in the lowest category.

Figure 5.10 Percentage of economically active older individuals in the health and social care labour force in England, by gender and earnings level (2009-2013) (%)



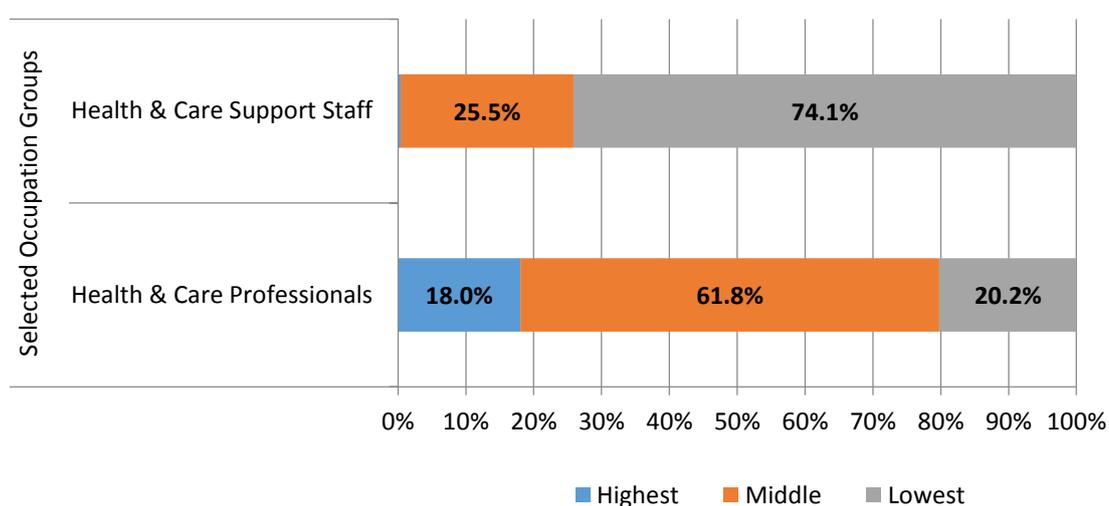
Notes: $\chi^2=10232.6$ (df 4, $p<0.001$); Women N=3,981, Men N=650; Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

Source: Author's own analysis LFS 2009-2013

When the focus was turned to the selected occupational groups, in both the professionals (Appendix D, Figure 8.4) and the support staff groups (Appendix D, Figure 8.5), more women than men earned in the lowest earnings level. These earnings inequalities between the genders within the professionals and support staff groups, and the subsequent policy implications will be discussed further in Chapter 7.

Returning to the focus of this analysis, as presented in Figure 5.11, among the older health and care support staff, the majority (99.6 per cent) earned in the middle or lowest earnings category. In contrast, among the older health and care professionals, the distribution of earnings spanned the three levels, with 18 per cent of professional staff earning in the highest category.

Figure 5.11 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by earnings level (2009-2013) (%)

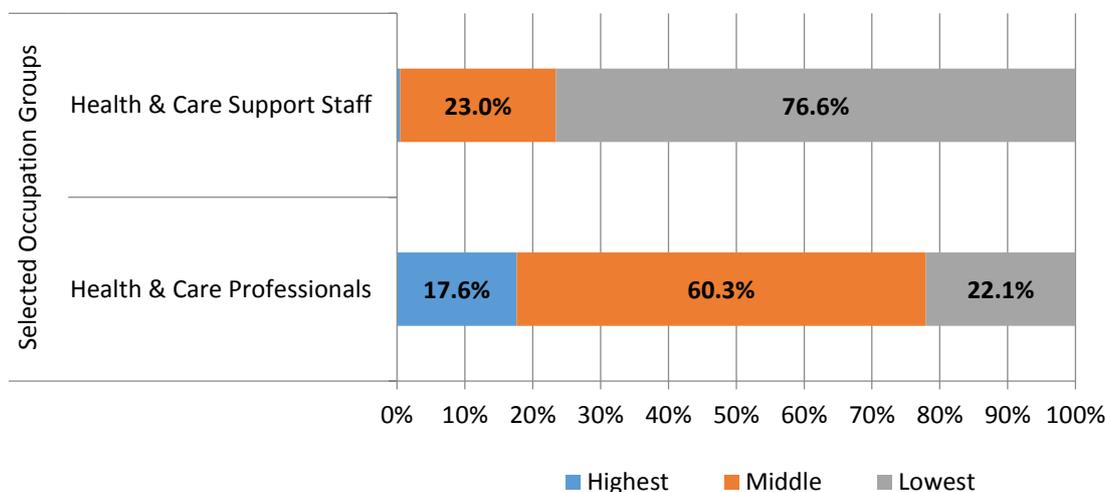


Notes: Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week; All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

The (gross) weekly earnings for the two selected occupation groups are presented in Figure 5.12 (for women) and Figure 5.13 (for men). Figure 5.12 shows that, among women in the older health and care support staff group, around three-quarters earned within the lowest earnings level and around a quarter earned within the middle level. However, women in the older professionals group earned across the three levels; the largest proportion (60.3 per cent) of which was observed within the middle level, and a proportion of 17.6 per cent were observed within the highest category.

Figure 5.12 Percentage of economically active older women in the health and care professional group and the health and care support group in England, by earnings level (2009-2013) (%)

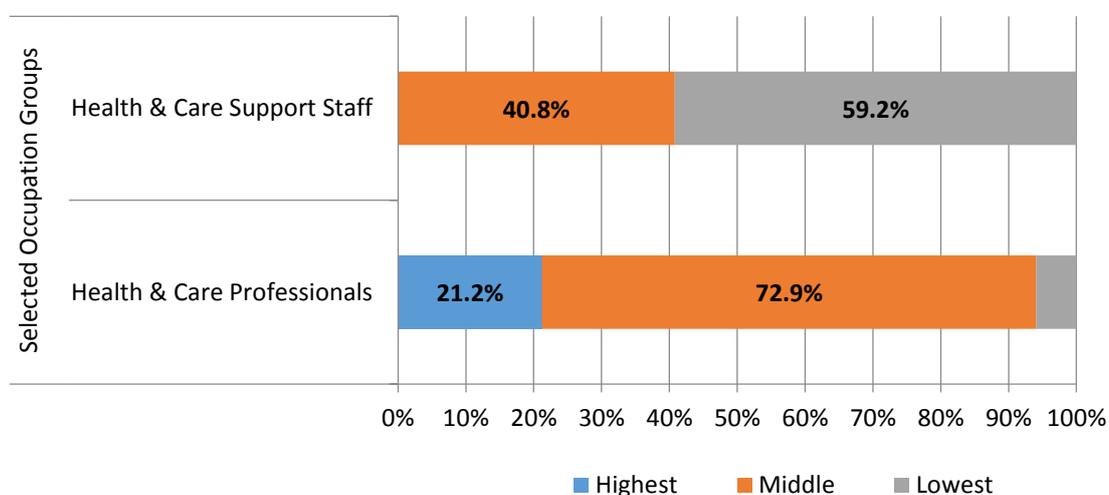


Notes: Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week; All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

In comparison to the results found for women, Figure 5.13 shows that the earnings characteristics for older male health and care professionals and older male health and care support staff verify the documented evidence that men in the same occupations as women earn more (Hills et al., 2010). Among older male support staff, 59.2 per cent earned in the lowest category, and almost double the proportion seen in the women's results earned in the middle level (40.8 per cent). Among older male professionals, greater proportions earned in the highest (21.2 per cent) and middle (72.9 per cent) levels, and only 5.9 per cent (compared to 22.1 per cent of women) earned in the lowest level.

Figure 5.13 Percentage of economically active older men in the health and care professional group and the health and care support group in England, by earnings level (2009-2013) (%)

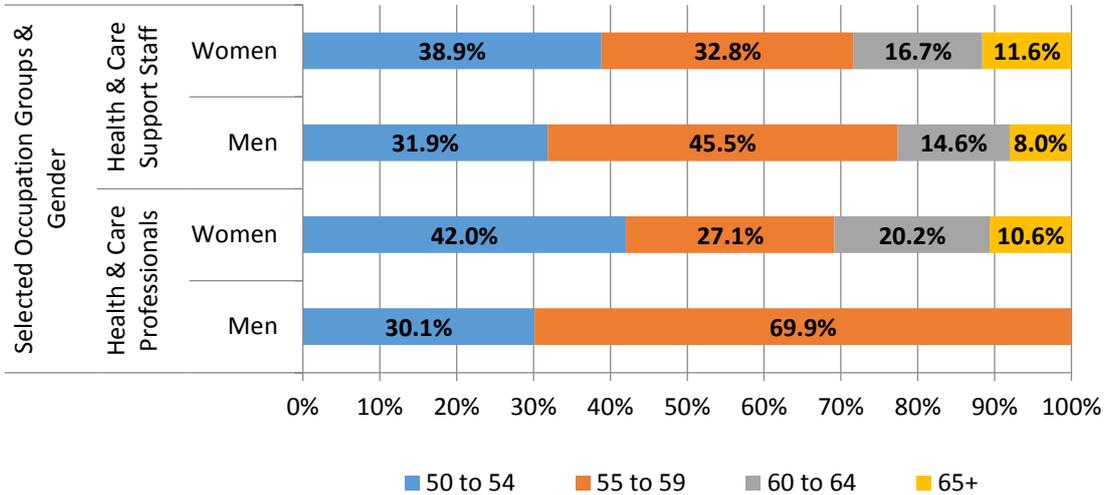


Notes: Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week; All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

When the analysis was controlled for age and gender (Appendix D, Figure 8.6 and Figure 8.7), thought provoking results were noted for the lowest earnings category. These have been summarised into Figure 5.14, which shows that among the older female health and care support staff, 71.7 per cent aged 50 to 59 earned in the lowest level compared to 77.4 per cent of their male counterparts. Of the older health and care professionals who earned in the lowest level, 30 per cent of women were aged 60 and over. Additionally, within the professionals group, no men aged 60 years and over were represented. This may be an empirical artefact, or may reflect sufficient earnings achieved throughout the life course (Arber and Evandrou, 1988), negating the need for work in later life, or it may indicate the association of health factors as outlined in Section 4.5. The health characteristics of the selected occupation groups will be presented later in this chapter, and association between earnings and one's work pattern in later working life will be examined in Chapter 6.

Figure 5.14 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England in the lowest earnings category, by professional group, gender and age group (2009-2013) (%)



Notes: Earnings categories: Lowest level- £0 to £324 per week; All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

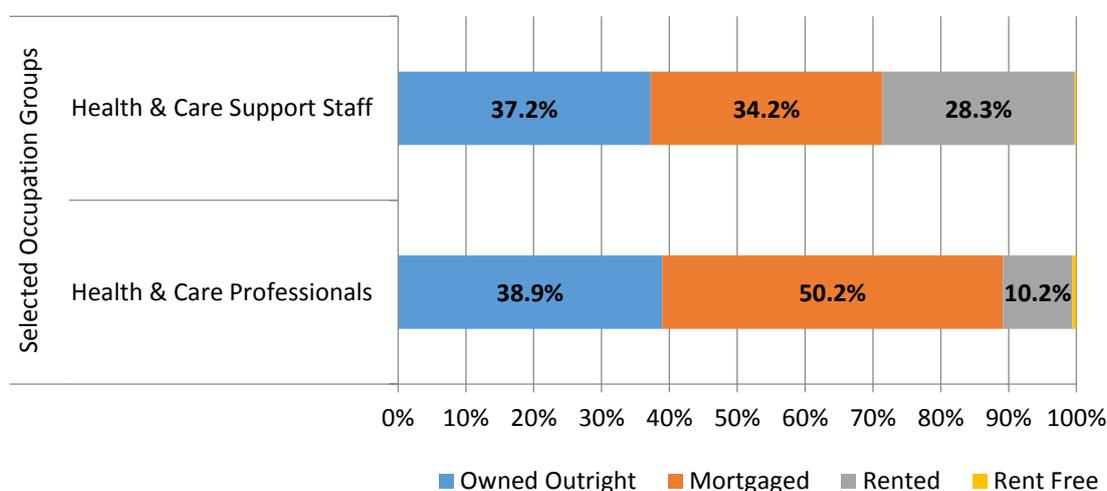
Source: Author’s own analysis LFS 2009-2013

In addition to educational attainment and earnings, housing tenure can also be used to examine one’s socioeconomic position (Galobardes et al., 2006a; Coulson and Fisher, 2009). The following section therefore presents the results of the analysis of housing tenure characteristics found among the two selected occupation groups.

5.4.3 The housing tenure composition

Among the older health and care support staff, in total, over 37 per cent either owned their property outright or lived rent-free, and almost two-thirds continued to pay for their accommodation either by mortgage (34.2 per cent) or by rent (28.3 per cent). In comparison, among the older health and care professionals, a larger proportion (39.6 per cent) owned their property outright or lived rent-free. However, in contrast to the support staff, with 50.2 per cent, the proportion of professionals that had a mortgage was greater (Figure 5.15).

Figure 5.15 Percentage of economically active older individuals in the health and care professional group and the health and care support group in England, by housing tenure (2009-2013) (%)



Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

Given that the need to pay for accommodation may be associated with the need to remain in work (Connolly, 2012; JRF, 2014), the implications of these results in relation to the EWL agenda will be discussed further in Chapter 7.

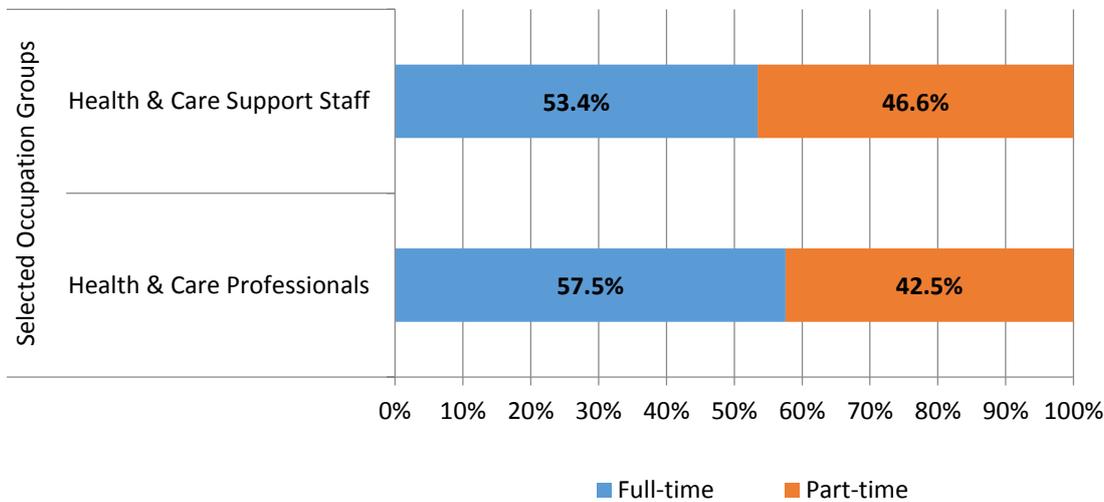
In addition to earnings, educational attainment and housing tenure, to complete our understanding of the older health and care professionals and older health and care support staffs' socioeconomic characteristics, their work patterns were also investigated.

5.4.4 The work pattern distribution

Within the literature, the opportunity to work on a part-time basis was noted to be associated with decision-making around employment in later life (Lissenburgh and Smeaton, 2003; Shacklock and Brunetto, 2011; DH, 2012a; Timms et al., 2015). With this in mind, the older health and care professionals and the older health and care support staff were analysed to determine the pattern of full- and part-time work. In addition, among those who did work part-time, the reasons for this decision were investigated.

Figure 5.16 shows that in both selected occupation groups, overall, the majority of staff worked on a full-time basis, but that a greater proportion of support staff (46.6 per cent) than professionals (42.5 per cent) worked part-time.

Figure 5.16 Percentage of economically active older individuals in the health and care professionals group and the health and care support staff group in England, by work pattern (2009-2013) (%)



Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

Table 5.1 shows that in regard to age, within both selected occupation groups, the proportion of individuals working full-time decreased with age, and the proportion of individuals who worked part-time increased with age. Table 5.1 also shows that among the professionals aged 50 to 54, 64 per cent worked full-time and 36 per cent worked part-time. In comparison, similar proportions were found for individuals of this age who worked in the support staff group. However, in contrast, of those aged 65 and over, among the professionals, almost 23 per cent worked full-time, and just over 77 per cent worked part-time. Although in this oldest age group a similar pattern was observed among the older health and care support staff, the proportion of staff who worked on a part-time basis was larger (82.1 per cent) than observed in the professionals group. Indeed, among those aged 50 to 54, a smaller proportion (34.1 per cent) of support staff worked part-time in comparison to their professional counterparts (36 per cent). Additionally, the percentage increase in the proportions of support staff who worked part-time at ages 55 to 59, and 60 to 64, was greater than that found among the professionals group. At 65 years and over, although the older health and care support staff group had a greater proportion (82.1 per cent) of individuals working part-time than observed among the professionals (77.1 per cent), there was a greater percentage increase found among the professionals between age groups 60 to 64 and 65 and over (25.6 per cent) than found among the support staff (20 per cent).

Table 5.1 Percentage of economically active older individuals working full-time and part-time in the health and care professionals group and the health and care support staff group in England, by age group (2009-2013) (%)

Age Groups (Years)	Health & Care Professionals			Health & Care Support Staff		
	Full-time	Part-time	Total	Full-time	Part-time	Total
50-54	64%	36%	100% N=2,217	65.9%	34.1%	100% N=2,015
55-59	59.3%	40.7%	100% N=1,572	58.4%	41.6%	100% N=1,680
60-64	48.5%	51.5%	100% N=730	37.9%	62.1%	100% N=1,018
65+	22.9%	77.1%	100% N=316	17.9%	82.1%	100% N=575
Total	57.5%	42.5%	100% N=4,835	53.4%	46.6%	100% N=5,288

Notes: Health & Care Professionals $\chi^2=63773.8$ (df 3, $p<0.001$); Health & Care Support Staff $\chi^2=161970.7$ (df 3, $p<0.001$); Total $\chi^2=224735.9$ (df 3, $p<0.001$)

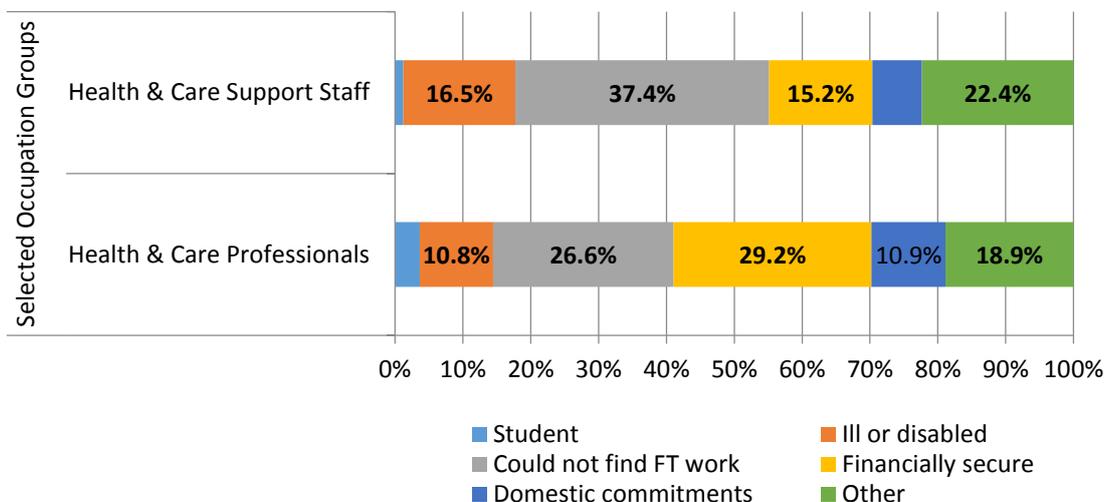
Source: Author's own analysis LFS 2009-2013

5.4.5 The reasons for part-time work

Having considered the working patterns of the older health and care professionals and the older health and care support staff, focus is turned to those who worked on a part-time basis. In light of the evidence that suggests access to flexible work promotes retention of staff in later working life (Lissenburgh and Smeaton, 2003; Loretto, 2010), it was important to understand the reasons given by individuals within the selected occupation groups for working part-time. In understanding the main motives for part-time work, among older health and social care workers, policy can be developed to increase opportunities for part-time work.

As Figure 5.17 shows, among the older health and care support staff, the largest proportion (37.4 per cent) worked part-time because they could not find full-time work, and 16.5 per cent worked part-time because of ill-health or disability. In comparison, among the older professionals, the inability to find full-time work was also the most common reason given for working part-time, although the proportion (26.6 per cent) was smaller than observed in the support staff group. A greater proportion of professionals (29.2 per cent) than support staff (15.2 per cent) reported that they worked part-time as they were financially secure, and there was a notable difference between the selected occupation groups in the proportions that worked part-time because of domestic commitments (professionals 10.9 per cent and support staff 9.3 per cent).

Figure 5.17 Percentage of part-time economically active older individuals in the health and social care labour force in England, by reason for part-time work (2009-2013) (%)



Notes: All associations in this figure were statistically significant $p < 0.001$. For details see Appendix D, Table 8.18

Source: Author's own analysis LFS 2009-2013

Although the decision to work part-time is rarely made based on one factor (Loretto et al., 2005b; Gannon and Roberts, 2011), these results suggested that among the selected occupation groups, the most common reason for part-time work was because of the inability to find full-time work. This links to evidence from the literature that highlights that finding work after the age of 50 is difficult (Loretto et al., 2005b; Danson, 2007), and may present challenges for the EWL agenda. In order to ensure successful future workforce planning, it is therefore essential that such issues be recognised in relation to the older individuals within the health and care professionals and health and care support staff groups, and as such this will be discussed in Chapter 7.

In addition to the demographic and socioeconomic characteristics that have been presented, Lissenburgh and Smeaton (2003), Vickerstaff et al. (2008), Frieze et al. (2011) and Gannon and Roberts (2011) reported that a key indicator when considering employment patterns in later life is health status. The following section therefore presents the results of the analysis in this respect.

5.5 Health characteristics of the older health and care professionals and older health and care support staff (2009-2013)

As age has an impact on health (OECD, 2014; Mitnitski et al., 2015; Santoni et al., 2015; WHO, 2015a), and following analysis of the health characteristics of the older health and care professionals and older health and care support staff, the findings presented in this section

continue to add to the richness of the evidence to support discussion in relation to research question 2 (Section 1.4).

5.5.1 The prevalence of a long-term health problem

Table 5.2 presents the findings for the analysis of the older health and care professionals and the older health and care support staff by age group, as to whether they experienced a long-term (12 months and over) health problem, and if so, whether the health problem influenced the amount of work they could complete. The results showed that a greater proportion of older professionals (57.5 per cent) than older support staff (53.4 per cent) reported that they did not experience a health problem. However, of those who did report a health problem, the results found that a larger proportion of support staff (14.1 per cent), than professionals (10.5 per cent), reported that their health problem affected the amount of work they could complete. With age, in both selected occupation groups, no consistent pattern was found to suggest that experiencing a health problem increased with age. Although due to the cross-sectional nature of this analysis, causality cannot be confirmed (Bryman, 2008; Field, 2009), the results may be indicative of individuals who experience health problems exiting the labour market, rather than remaining in work.

Table 5.2 Percentage of economically active older individuals reporting a health problem and whether it affects work, in the health and care professionals group and the health and care support staff group in England, by age group (2009-2013) (%)

Age Groups (Years)	Health & Care Professionals				Health & Care Support Staff			
	No health problem	Health problem does not affect work	Health problem affects work	Total	No health problem	Health problem does not affect work	Health problem affects work	Total
50-54	62.9%	28%	9.1%	100%	58.2%	28.5%	13.4%	100%
				N=1,956				N=1,791
55-59	51%	37%	12%	100%	50.6%	34.1%	15.3%	100%
				N=1,390				N=1,480
60-64	55.7%	32.3%	12%	100%	43.3%	39.9%	16.8%	100%
				N=654				N=905
65+	52.6%	36.2%	11.2%	100%	60.1%	30.6%	9.4%	100%
				N=241				N=502
Total	57.5%	31.9%	10.5%	100%	53.4%	32.5%	14.1%	100%
				N=4,241				N=4,678

Notes: Health & Care Professionals $\chi^2=16411.3$ (df 6, $p<0.001$), Health & Care Support Staff $\chi^2=23575.6$ (df 6, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

Chapter 5

When the analysis focused on men (Table 5.3), of those working in the older health and care professionals group, the largest proportions within all age groups (excluding the oldest, aged 65 and over) reported that they did not experience a health problem. Moreover, the results showed that the proportion of men aged 65 and over (7.3 per cent) in this selected occupation group was substantially lower than observed in the age group 60 to 64 (55.8 per cent). When first observed this may suggest that older male health and care professionals have better health than their younger counterparts; however the results also show that nearly three-quarters of male professionals aged 65 and over reported that although they do have a health problem it does not affect their work.

Nonetheless, 18.7 per cent of male professionals (Table 5.3) within the oldest age group, reported not only that they do have a health problem, but that it also affects their work. In comparison, among the men in the support staff group, in the first three age groups (50 to 54, 55 to 59 and 60 to 64) larger proportions reported having a health problem that affected their work. For example, of the men aged 50 to 54 in the support staff group, 13.8 per cent reported that they had a health problem and that it affected their work, whereas in contrast, among their equivalents in the professionals group, 6.2 per cent reported the same.

Table 5.3 also shows that among males in the support staff group aged 65 and over, 94.4 per cent reported that they did not have a health problem. In comparison, among their colleagues aged 60 to 64, around 47 per cent of men reported no health problems, and 37.1 per cent reported that they had a health problem, but that it did not affect their work. Due to the high proportion of male support staff aged 65 and over who did not experience health problems (94.4 per cent), together with the decrease in proportions observed among those who had a health problem, it is suggested that older male support staff who remain in work at and beyond the age of 65 generally have good health, and that those who do not, exit the labour force.

In contrast, among the male professionals aged 65 and over, a lower proportion (7.3 per cent) than observed among the male support staff of the same age, reported no health problems. This suggests that male professionals who remain in work at 65 years and over, generally experience more health problems than their counterparts within the support staff group, but remain in work whether or not the problem affects work. The disparities found suggest that health has a different association with the decision to remain in work aged 65 and over between men in the two selected occupation groups. With the EWL agenda in mind, it is posited that to encourage older male health and care support staff to remain in work for longer, as suggested by McDermott et al. (2010) and Maertens et al. (2012), improved OH services are required; a notion that will be discussed further in Chapter 7.

Table 5.3 Percentage of economically active older men reporting a health problem and whether it affects work, in the health and care professionals group and the health and care support staff group in England, by gender and age group (2009-2013) (%)

Age Groups (Years)	Health & Care Professionals				Health & Care Support Staff			
	No health problem	Health problem does not affect work	Health problem affects work	Total	No health problem	Health problem does not affect work	Health problem affects work	Total
50-54	65.7%	28.2%	6.2%	100% N=246	5%	30.2%	13.8%	100% N=208
55-59	54%	42.3%	3.6%	100% N=224	57.2%	36.2%	6.6%	100% N=205
60-64	55.8%	33.5%	10.8%	100% N=88	47.3%	37.1%	15.6%	100% N=169
65+	7.3%	74%	18.7%	100% N=31	94.4%	*	5.6%	100% N=95
Total	53.7%	38.7%	7.5%	100% N=589	58%	31.1%	10.8%	100% N=677

Notes: Health & Care Professionals $\chi^2=25829.5$ (df 6, $p<0.001$), Health and Care Support Staff $\chi^2=15797.7$ (df 6, $p<0.001$); * cell counts were too low to produce percentage within SPSS

Source: Author's own analysis LFS 2009-2013

Table 5.4 shows that among female older health and care professionals, those aged 55 to 59 had the lowest proportion (50.5 per cent) of individuals that reported no health problems, the largest proportion who reported a health problem which did not affect their work (36.1 per cent), and the largest proportion who experienced a health problem that did affect their work (13.5 per cent). In comparison, female professionals in the older age groups (60 to 64 and 65 and over), greater proportions (55.7 per cent and 66.9 per cent respectively) reported no health problems, and lower proportions (12.2 per cent and 8.8 per cent respectively) reported that the health problem experienced affected their work. The differences found between the female professionals aged 55 to 59 and the two older age groups, may demonstrate a self-selection effect (Bryman, 2008), where the healthiest women aged 60 and over remain in work, while those with poorer health exit the labour force. The findings for female professionals aged 65 and over also contrast with those found among their male counterparts. A much larger proportion of professional women (66.9 per cent) than professional men (7.3 per cent) in this age group reported no health problems, which again may be a result of self-selection of the healthiest, but may also reflect the differences in the way men and women report their health status (Verbrugge, 1985).

Table 5.4 also shows that in comparison to women in the health and care professionals group, among women in the health and care support staff group, fewer overall reported no health problems (52.6 per cent). Also in contrast to older female professionals, overall, a greater proportion of older female support staff reported that they experienced a health problem but that it did not affect their work, with the largest proportion of female support staff in this category aged 60 to 64 (40.4 per cent). Moreover, greater proportions of women in the support staff group who experienced a health problem that did affect their work, were found in each of the four age groups, with the largest proportion observed among those aged 60 to 64 (17 per cent).

Table 5.4 Percentage of economically active older women reporting a health problem and whether it affects work, in the health and care professionals group and the health and care support staff group in England, by gender and age group (2009-2013) (%)

Age Groups (Years)	Health & Care Professionals				Health & Care Support Staff			
	No health problem	Health problem does not affect work	Health problem affects work	Total	No health problem	Health problem does not affect work	Health problem affects work	Total
50-54	62.5%	28%	9.5%	100%	58.5%	28.2%	13.3%	100%
				N=1,710				N=1,583
55-59	50.5%	36.1%	13.5%	100%	49.4%	33.7%	16.9%	100%
				N=1,166				N=1,275
60-64	55.7%	32.1%	12.2%	100%	42.6%	40.4%	17%	100%
				N=566				N=736
65+	66.9%	24.3%	8.8%	100%	55.8%	34.3%	9.8%	100%
				N=210				N=407
Total	58.2%	30.8%	11.1%	100%	52.6%	32.7%	14.7%	100%
				N=3,652				N=4,001

Notes: Health & Care Professionals $\chi^2=15853.3$ (df 6, $p<0.001$), Health & Care Support Staff $\chi^2=22712.3$ (df 6, $p<0.001$); * cell counts were too low to produce percentage within SPSS

Source: Author's own analysis LFS 2009-2013

The findings show that overall, older health and care support staff are more likely to be affected in their work by a health problem regardless of gender or age group (although the result for those aged 65 years and over is surprising, and may reflect self-selection in that the healthiest individuals in this age group remain in the labour market) (Tables 5.2, 5.3 and 5.4). In the context of the EWL agenda, this result may have implications for retaining staff, such as support staff aged 65 and over being unable to work due to ill-health. As such, in the process of encouraging staff to work for longer in later life, provision of adequate organisational OH is required to support

healthy working practice and the management of existing health problems (Ilmarinen, 2006; McDermott et al., 2010; Maertens et al., 2012).

To expand our understanding of the two selected occupation groups, having ascertained whether older health and care professionals and older health and care support staff experience a long-term health problem, the following section presents the findings by gender of the main health problem reported.

5.5.2 The main health problem experienced

Table 5.5 shows that among older men in the health and care professionals group, the largest proportion (35.9 per cent) of individuals experienced a health problem in the 'other' category, which included problems with eyesight, hearing and mental health (Section 3.5.1). Concurring with evidence from the British Heart Foundation (BHF) (2014), the proportion of older men in the professionals group experiencing heart or circulation problems increased with age; from approximately 4 per cent aged 50 to 54, to over 46 per cent aged 60 to 64. However, the cell count for male professionals aged 65 years and over was insufficient to report via SPSS. This may reflect the low cell count within the dataset, or it may suggest that male health and social care professionals with heart or circulation problems leave the labour force prior to age 65. Additionally, as the incidence of death related to diseases of the circulatory system in men more than double between the age groups 55 to 64 and 65 to 74 (*ibid.*), it may show that men in this selected occupation group over the age of 65 succumb to their heart or circulation problem.

Table 5.5 also shows that within the professionals group, the proportions of men reporting diabetes as their main health problem also increased with age (with a similar absence of sufficient data available for age group 65 and over). Similar to men with heart or circulation problems, evidence from Diabetes UK (2014) showed that in adulthood the incidence of diabetes increases with age, and that of those with type 2 diabetes, the mortality level could be linked to problems with circulatory problems.

Table 5.5 Percentage of economically active older men reporting a health problem in the health and care professionals group in England, by age group, gender and main health problem (2009-2013) (%)

Health & Care Professionals (men)						
Age Groups (Years)	Main health problem (% with condition)					Total
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	44.3%	17.6%	4.2%	7.5%	26.5%	100% N=90
55-59	25.7%	3.5%	31.9%	11.3%	27.6%	100% N=119
60-64	22.9%	15.2%	46.1%	15.9%	*	100% N=39
65+	10.7%	*	*	*	89.3%	100% N=28
Total	25.9%	9.1%	20.6%	8.7%	35.9%	100% N=276

Notes: $\chi^2=51700.4$ (df 12, $p<0.001$); * cell counts were too low to produce percentage within SPSS

Source: Author's own analysis LFS 2009-2013

Unlike older male health and care professionals, in the three oldest age groups, the largest proportion of female health and care professionals reported that their main health problem was related to skeletal and joints (Table 5.6). For discussion purposes this is pertinent, as within the literature authors such as Buchan (1999) and Brooke et al. (2012), suggested that among nurses, neck and back pain were common and affected older workers employment decisions. A decrease in the proportion of older female professionals that reported chest or breathing problems was noted between age groups 50 to 54 and 60 to 64; while insufficient cell counts were available to provide results for those aged 65 and over. These findings may suggest that with age, fewer female health and care professionals with chest or breathing problems remain in work. While the overall incidence of reported heart and circulation problems was similar between professional men (20.6 per cent) (Table 5.5) and professional women (19.6 per cent) (Table 5.6), of those aged 50 to 54 a greater proportion (17.7 per cent) of women than men (4.2 per cent) was observed.

Table 5.6 Percentage of economically active older women reporting a health problem in the health and care professionals group in England, by age group, gender and main health problem (2009-2013) (%)

Health & Care Professionals (women)						
Age Groups (Years)	Main health problem (% with condition)					Total
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	33.5%	10.7%	17.7%	2.4%	35.7%	100% N=599
55-59	38.8%	9.2%	21%	8.1%	23%	100% N=538
60-64	35.6%	3.8%	17.9%	8.3%	34.3%	100% N=258
65+	39.3%	*	31.2%	8.2%	21.2%	100% N=88
Total	36%	8.6%	19.6%	5.6%	30.3%	100% N=1,483

Notes: $\chi^2=21744.2$ (df 12, $p<0.001$); * cell counts were too low to produce percentage within SPSS

Source: Author's own analysis LFS 2009-2013

Table 5.7 and Table 5.8 present the findings for the older health and care support staff. In comparison with the men in the health and care professionals group, the results for the male health and care support staff show a different overall pattern. For example, the largest proportion (37.8 per cent) of male support staff reported heart and circulation concerns as their main health problem (Table 5.7), whereas in the professionals group, the largest proportion of men were found in the 'other' category (Table 5.5). However among the women in the support staff group, the overall pattern was similar to that observed by Clayton (2010) and with the female professionals (Table 5.6), where the largest proportion (34.7 per cent) of female support staff reported skeletal or joint issues as their main health problem (Table 5.8).

Of men in the support staff group aged 50 to 54, a proportion of over 55 per cent were to be found distributed between the categories for heart and circulation (27.4 per cent) and diabetes (28.2 per cent) (Table 5.7); whereas their colleagues in the professionals group, showed a combined proportion of around 12 per cent in these categories (Table 5.5). Table 5.7 also shows that within the support staff group, over half (52.2 per cent) of men aged 55 to 59 reported having heart or circulation problems, whereas, in the older age group (60 to 64) those with a heart or circulation problem comprised closer to one-third (32.6 per cent). Additionally, in a similar finding to Diabetes UK (2014), a proportion of over 20 per cent of male support staff aged 60 to 64 reported diabetes as their main health problem. While the results show that 100 per cent of male support staff reported diabetes as their main health problem, as insufficient cell counts

were observed in the other health categories for this age group, this result should be taken with caution.

In comparison to men in the older health and care professionals group (Table 5.5), among men within the older support staff group (Table 5.7), greater proportions overall reported problems with heart and circulation or diabetes. It is reiterated that, for men, the incidence of these conditions increases with age (BHF, 2014; Diabetes UK, 2014). Nevertheless, the differences noted in the proportions between older male professionals and older male support staff may also reflect disparities in socioeconomic status, as differences in educational attainment and earnings have been associated with poorer health outcomes (Macintyre et al., 2003; Galobardes et al., 2006b; RCN, 2012).

Table 5.7 Percentage of economically active older men reporting a health problem in the health and care support staff group in England, by age group, gender and main health problem (2009-2013) (%)

Health & Care Support Staff (men)						
Age Groups (Years)	Main health problem (% with condition)					Total
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	18.5%	3.6%	27.4%	28.2%	22.2%	100% N=97
55-59	3.1%	5.4%	52.2%	14.2%	25.2%	100% N=109
60-64	11.7%	12.8%	32.6%	20.2%	22.6%	100% N=77
65+	*	*	*	100%	*	100% N=39
Total	10.8%	6.5%	37.8%	21.7%	23.2%	100% N=322

Notes: $\chi^2=14214.4$ (df 12, $p<0.001$); * cell counts were too low to produce percentage within SPSS

Source: Author's own analysis LFS 2009-2013

Similar to that seen among the female older health and care professionals (Table 5.6), overall among the women in the older health and care support staff group (Table 5.8), the largest proportion (34.7 per cent) reported that their main health problem was skeletal or joints. However, of the female support staff aged 50 to 54, a similar pattern to that observed with the female professionals of the same age was found, with the largest proportion citing 'other' as their main health problem (Table 5.8). Table 5.8 also shows that within this lowest age group, a lower proportion of female support staff reported heart or circulation problems (13.2 per cent) than in

the professionals group (17.7 per cent) (Table 5.4); while a larger proportion of support staff reported diabetes (9.4 per cent).

Although, overall the proportion of female support staff with diabetes increased with age, it is interesting to note (though not possible to prove causality, Field (2009)), that among those aged 55 to 59, the lowest proportion with diabetes was observed (6.6 per cent) (Table 5.8). Moreover, these results were generally higher than those observed among professional women in the same age groups (Table 5.6). Among women in the support staff group aged 60 to 64, with almost 45 per cent, the largest proportion reported skeletal or joint problems as their main health issue. This represents a greater proportion than seen with their professional counterparts, and demonstrates the largest proportion with this health issue seen overall among men and women in both selected occupation groups. Over a quarter of female support staff aged 65 and over reported heart or circulation problems as their main health issue (Table 5.8), again highlighting the prevalence of these problems among the population at this age (BHF, 2014; Diabetes UK, 2014).

Table 5.8 Percentage of economically active older women reporting a health problem in the health and care support staff group in England, by age group, gender and main health problem (2009-2013) (%)

Health & Care Support Staff (women)						
Age Groups (Years)	Main health problem (% with condition)					Total
	Skeletal or joints	Chest or breathing	Heart or circulation	Diabetes	Other	
50-54	30.8%	12.2%	13.2%	9.6%	34.3%	100% N=654
55-59	38.9%	7.8%	18%	6.6%	28.6%	100% N=626
60-64	44.6%	8.7%	13.9%	8.5%	24.2%	100% N=382
65+	15.1%	22.4%	25.3%	14.1%	23%	100% N=219
Total	34.7%	11.1%	16.3%	8.9%	29.1%	100% N=1,881

Notes: $\chi^2=38858.0$ (df 12, $p<0.001$)

Source: Author's own analysis LFS 2009-2013

Although the literature suggests that skeletal or joint problems are prolific in relation to nurses (Buchan, 1999; Bennett et al., 2007; Blakeley and Ribeiro, 2008), the results from this research suggest that other health problems are also experienced by older health and care professionals and older health and care support staff, and are worthy of note. While overall, greater

proportions of women in the older professionals group (Table 5.6) and the older support staff group (Table 5.8) reported skeletal and joint issues, they accounted for only around one-third of the health problems reported. Moreover, among men in both selected occupation groups, the 'other' category observed greater proportions than the skeletal and joint category. Furthermore, among both selected occupation groups, the observations made regarding problems with heart and circulation, and diabetes, were also important in highlighting other health problems experienced by these older workers. The way in which men and women report health status may account for some of the differences noted (Verbrugge, 1985), nevertheless, in regard to the EWL agenda it is important to encourage longer working lives regardless of gender. To encourage older men and women in both selected occupation groups who have a long-term health problem to remain in work beyond the age of 65, as recommended by Maertens et al. (2012), Ilmarinen (2010) and McDermott et al. (2010), the development of OH services that focus on health promotion are required. The debate regarding the EWL agenda and involvement of occupational services is further discussed in Chapter 7.

5.6 Summary

This chapter presented results of the analysis of the demographic, socioeconomic, employment and health characteristics of the older health and care professionals and the older health and care support staff. Moreover, the results found may have implications for workforce planning policy and the EWL agenda.

As established in Chapter 4 (Figure 4.2), the older health and social care labour force is predominantly female, and the results within this chapter confirmed that women comprised 85.7 per cent of the older health and care professional group, and 86.2 per cent of the older health and care support staff group (Figure 5.2). As access to flexible working opportunities is a key factor in decision-making in later working life (Loretto, 2010), it was encouraging to show that 46 per cent of support staff and around 42 percent of professionals worked on a part-time basis. However, it was less encouraging to find that both selected occupation groups reported that, in agreement with Loretto et al. (2005b), the main reason for working part-time was because they could not find full-time work.

A larger proportion of professionals than support staff were married, although more support staff were separated, divorced or widowed, and when the analysis was controlled for gender, a greater proportion of male support staff, than male professionals, were single. Although the ethnic composition of the selected occupation groups was similar, among the older health and care

support staff there was a larger proportion of BME individuals (8.4 per cent) than was observed within the older health and care professionals group (7.8 per cent).

Almost all of the older health and care professionals (89 per cent) had achieved a diploma or a degree, whereas the older support staff had a more diverse attainment profile, ranging from no qualifications through to degree level education. Though, as the selected occupation groups had been deliberately divided, largely on the basis of qualifications (Section 3.4.1), the differences found were unsurprising. From an earnings perspective, three-quarters of older health and care support workers earned in the lowest earnings level, whereas, among the older health and care professionals the largest proportion earned in the middle level. The variation in earnings may be reflective of responsibility levels held by the different occupations (HSCIC, 2014a), and was further illustrated by the difference seen between proportions of staff that earned in the highest category; 18 per cent of professionals versus 0.4 per cent of support staff.

Within the selected occupation groups, overall, over 55 per cent of the professionals and over 53 per cent of the support staff reported that they did not have a health problem. However, long-term health problems were reported by both selected occupation groups, and a greater proportion of support staff than professionals reported that their health problem affected their work. The findings for the main problem experienced by the professionals and the support staff demonstrated the complexity of determining clear results in this topic (Robroek et al., 2013). Additionally, it was shown that while skeletal and joint problems are a concern for women in both selected occupation groups, conditions around cardiovascular deficits, such as heart and circulation and diabetes were also prevalent, with proportions experiencing these issues increasing with age.

By dividing the older health and social care labour force into two selected occupation groups, results have been established that inform answers for research question 2 (Section 1.4). In addition, implications for the EWL agenda have been raised, and an additional layer has been added to the emerging overall picture of this under-researched labour force.

Together with the results from Chapter 4, the results from this chapter inform the multivariate (binary regression) analysis reported in Chapter 6, and the subsequent discussion in Chapter 7.

Chapter 6: Results 3

The association between demographic, socioeconomic, health and employment characteristics of the older health and social care labour force and working part-time at or beyond the SPA.

6.1 Introduction

Findings from the descriptive analyses in Chapter 4 illustrated that among the older health and social care labour force, the majority of staff were aged between 50 and 59 years (Figure 4.1), and that overall, the largest proportion of staff were women (Figure 4.2). In Chapter 5, it was found that among the selected occupation groups, on average the older health and care professionals had attained a higher level of education than the older health and care support staff (Figure 5.9), and that overall, among both the professionals and the support staff, over half reported no health problems (Table 5.2). Thus, along with the other findings presented in Chapters 4 and 5, these results contribute to the currently limited body of literature in this field. This Chapter builds on these results to address research question 3 (Section 1.4), and uses selected demographic, socioeconomic, health and employment characteristics to examine their association with working part-time at or beyond the SPA.

Given that flexible working opportunities in later working life are a key factor in the decision by older workers to remain in work for longer (Harris et al., 2010; Joyce et al., 2010; Vickerstaff, 2010; Atkinson and Hall, 2011; Timms et al., 2015), this question enables factors associated with the older health and social care labour force work patterns at and beyond the SPA to be determined. This has relevance to the EWL agenda, as establishing such factors may inform policy development that aims to encourage older health and social care staff to remain in work for longer.

As discussed in the literature review (Section 2.4), working patterns in later life are a factor in determining whether an individual works for longer i.e. beyond the SPA (Cebulla et al., 2007; EHRC, 2010; Sykes et al., 2010). Thus, logistic regression models were systematically built by adding sets of characteristics to test their statistical significance and association with working part-time at and beyond the SPA (Section 3.6.4). Before completing the regression analysis, in order to avoid instances of multicollinearity between highly correlated variables, a correlation analysis was performed, which showed that none of the variables were highly correlated (Appendix B, Table 8.10).

The analytical sample used in the modelling comprised those individuals aged at and beyond the SPA who worked in the health and social care labour force (2009-2013) (N=2,352). The chapter is structured as follows: Section 6.2 presents the regression analysis that included all health and social care workers aged at the SPA and over, that is women aged at 60 and over (N=2,206) and men aged 65 and over (N=146). Section 6.3 reports the results of the analysis when separated by gender, and compares the two sets of results. To build on the analysis completed in Chapter 5, Section 6.4 compares the factors associated with working part-time among the older health and social care labour force when divided between health and care professionals (N=948), and health and care support staff (N=1,404), and compares differences found. Finally Section 6.5 provides a chapter summary.

Throughout, the results are presented with significance at the $p < 0.01$ (*) level, $p < 0.005$ (**) level and $p < 0.001$ (***) level.

6.2 Factors associated with whether the health and social care labour force in England aged at the SPA and over work part-time (2009-2013)

Model 1 controlled for a range of demographic characteristics of individuals working in the health and social care labour force in England aged at the SPA and over. The adjusted Models 2, 3 and 4 adopt a sequential modelling approach, which tested the sensitivity of the Models to additional health, socioeconomic and employment characteristics in explaining the likelihood of working part-time at and beyond the SPA.

Table 6.1 shows the results of the regression Models, with improvement noted in the R^2 as each set of factors was introduced, thus demonstrating an improvement in the Models ability to explain the variance in the factors that are associated with whether the health and social care labour force aged at SPA and over worked part-time. For example, Model 1 explained 11 per cent of the differences in working part-time ($R^2=0.110$), while Model 4 explained 31 per cent of the differences ($R^2=0.307$). Therefore, Model 4 can be considered to be the Model with the *best-fit* (Field, 2009).

Model 1 included the demographic characteristics of age, gender, ethnicity and marital status as explanatory (independent) variables, and confirmed, like found in the literature (Cebulla et al., 2007; Clayton, 2010; Pagán, 2011), that the likelihood of working part-time increased with age. With the addition of further explanatory variables in subsequent Models, these results were found to be consistent. Although in Model 4 (the best fit Model) the coefficients had reduced to

show that among the health and social care labour force aged 65 to 69, and 70 and over, the odds of working part-time were 2.26 and 3.34 times respectively the odds among those aged 60 to 64. Throughout the four Models, the results showed that health and social care staff from BME groups were less likely to work part-time than those in the White ethnic group, although 17.8 per cent of the sample population in this category were Missing, which may have affected this result. As reported in the wider literature, marital status appeared to be important to whether older individuals worked on a part-time basis at the SPA and over (Panisoara and Serban, 2012; Szinovacz, 2013a; Radl and Himmelreicher, 2015). As can be seen in Table 6.1, in Model 1 those in the single group, and those in the separated, divorced or widowed group were 51 and 50 per cent respectively less likely than individuals in the married group to be working part-time. However, in Model 4 (the best-fit Model), the single category had become not significant, while among the separated, divorced or widowed group, the odds of working part-time were 0.60 times the odds among the married group.

With the introduction of health characteristics in Model 2, an overall improvement ($R^2=0.119$) was seen, the variables of age and ethnicity remained statistically significant at the $p<0.001$ level and changes to the odds ratio (OR) were minimal. Overall, marital status remained significant, although the ORs among the single group decreased from being significant at the $p<0.001$ in Model 1 to significant at the $p<0.01$ level in Model 2. Among those with a health problem which affected the amount of work carried out, the odds of working part-time work were 1.74 times the odds among those with no health problem.

As socioeconomic characteristics such as earnings, educational attainment and housing tenure were shown in the literature to have a bearing on one's work patterns after the SPA (Lissenburgh and Smeaton, 2003; Smeaton and McKay, 2003; Loretto et al., 2005b; Flynn, 2010), these factors were added to the analysis in Model 3 (Table 6.1). The findings showed that among individuals with the lowest level of earnings, the odds of working part-time at the SPA and over were 24.01 times the odds among those in the highest level of earnings. The literature also suggested that those with a higher level of education are more likely to work for longer (Piha et al., 2010; Burtless, 2013a), and the results from this analysis showed that the odds of working part-time among individuals whose highest educational attainment was a diploma were 2.40 times the odds among those whose highest educational attainment was a degree. Among those with GCSEs or no qualifications, the odds of working part-time were 1.50 and 1.87 times respectively the odds among those with degree level education, implying that those with lower levels of educational attainment were more likely to work part-time than those with a degree. In regard to housing tenure, the results suggested that individuals within the health and social care labour force were less likely to work part-time at and beyond the SPA while continuing to pay for their

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accommodation; the odds of working part-time for those paying for their accommodation via a mortgage or rent were 0.52 and 0.31 times respectively the odds among those who owned their property outright. In adding the socioeconomic characteristics to the model, the odds of working part-time among those aged 65 to 69 and of those aged 70 years and over decreased to 2.04 and 2.63 times respectively the odds among the reference group (64 to 69 year olds) and being single became not statistically significant.

With the addition of the employment variables in Model 4 (Table 6.1), the best-fit Model ($R^2=0.307$) was identified. One's job sector was statistically significant at the $p<0.001$ level, and the results showed that those working in the private sector were 53 per cent less likely to work part-time than those working in the public sector. As the literature reported its importance in decision making around the SPA, the length of time an individual has worked for an organisation was included in the employment characteristics (Lissenburgh and Smeaton, 2003; Flynn, 2010; Oakman and Wells, 2012). In this regard, the results showed that among health and social care staff aged at the SPA and over who had worked for 20-years and over for their employer, or for between 10 to 19 years, the odds of working part-time were 0.28 and 0.31 times respectively the odds among those who had worked for less than 1 year. Additionally, among those who had worked 5 to 9 years the odds were 0.36 times the odds among those who had worked for less than 1 year. It therefore appears, as Oakman and Wells (2012) proposed for the wider labour force, that the length of time that a health and social care worker spends with an employer is associated with whether they work part-time at the SPA and over. With the addition of the employment characteristics, an increase in the statistical significance level (to $p<0.005$) was noted for those who had a health problem that affected work, and the middle earnings level remained statistically significant. However, the addition of employment characteristics caused results for individuals who live rent free, to become not significant.

Table 6.1 Odds ratios of working part-time among the health and social care labour force in England aged at the SPA and over (2009-2013)

	N	%	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)	Model 4 OR (95% CI)
Age						
60 to 64 (ref.)	1,461	62.1	1	1	1	1
65 to 69	649	27.6	2.47*** (1.97-3.10)	2.44*** (1.94-3.10)	2.04*** (1.59-2.61)	2.26*** (1.76-2.91)
70+	242	10.3	4.11*** (2.80-6.05)	4.09*** (2.78-6.10)	2.63*** (1.74-3.99)	3.34*** (2.18-5.12)
Gender						
Women (ref.)	2,206	93.8	1	1	1	1
Men	146	6.2	0.64 (0.42-0.99)	0.67 (0.44-1.03)	0.96 (0.60-1.52)	0.87 (0.54-1.41)
Ethnicity						
White (ref.)	1,787	76	1	1	1	1
BME	147	6.3	0.35*** (0.24-0.50)	0.34*** (0.24-0.49)	0.44*** (0.29-0.66)	0.50*** (0.30-0.67)
Missing	418	17.8	1.26 (0.98-1.60)	1.34 (1.04-1.72)	1.33 (1.02-1.74)	1.26 (0.96-1.65)
Marital Status						
Married (ref.)	1,357	57.7	1	1	1	1
Single	147	6.3	0.51*** (0.36-0.74)	0.53* (0.37-0.77)	0.65 (0.44-0.96)	0.66 (0.45-0.97)
Separated/ Divorced/Widowed	848	36.1	0.50*** (0.42-0.61)	0.50*** (0.41-0.60)	0.62*** (0.50-0.77)	0.60*** (0.48-0.74)
Health problem affects work						
No health problem (ref.)	1,049	44.6		1	1	1
Health problem NOT affecting work	726	30.9		0.95 (0.77-1.17)	0.89 (0.71-1.12)	0.97 (0.77-1.22)
Health problem affecting work	270	11.5		1.79*** (1.30-2.47)	1.74* (1.23-2.45)	1.84** (1.30-2.61)
Missing	307	13.1		1.26 (0.94-1.69)	1.09 (0.79-1.51)	1.18 (0.85-1.64)
Earnings						
Highest Level (ref.)	45	1.9			1	1
Middle Level	277	11.8			2.94 (1.23-7.06)	3.09 (1.28-7.46)
Lowest Level	645	27.4			24.01*** (10.08-57.17)	27.93*** (11.60-67.25)
Missing	1,385	58.9			10.73*** (4.62-24.93)	12.85*** (5.48-30.09)

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Educational Attainment									
Degree (ref.)	405	17.2				1		1	
Diploma	661	28.1				2.40***	(1.77-3.25)	2.36***	(1.73-3.21)
A Level	338	14.4				1.11	(0.79-1.56)	1.26	(0.85-1.88)
GCSE	741	31.5				1.50**	(1.12-2.00)	1.76**	(1.23-2.51)
No Qualifications	207	8.8				1.87**	(1.23-2.85)	2.13**	(1.32-3.46)
Housing Tenure									
Owned Outright (ref.)	1,390	59.1				1		1	
Mortgaged	595	25.3				0.52***	(0.41-0.65)	0.51***	(0.40-0.65)
Rented	351	14.9				0.31***	(0.23-0.41)	0.29***	(0.22-0.39)
Rent Free	16	0.7				0.19**	(0.06-0.58)	0.22	(0.07-0.70)
Job Sector									
Public Sector (ref.)	1,334	56.7						1	
Private Sector	1,018	43.3						0.53***	(0.43-0.66)
Occupation Group									
Health and Care Professionals (ref.)	948	40.3						1	
Health and Care Support Staff	1,404	59.7						0.78	(0.58-1.05)
Length of time with current employer									
<1 years (ref.)	135	5.7						1	
1 to 4 years	474	20.2						0.53	(0.31-0.90)
5 to 9 years	413	17.6						0.36***	(0.21-0.61)
10 to 19 years	619	26.3						0.31***	(0.19-0.52)
20+ years	711	30.2						0.28***	(0.17-0.47)
-2 LLR			2774.771	2757.602	2442.016			2382.773	
% Change -2 LLR			-	0.61	11.99			14.13	
R Square			0.110	0.119	0.279			0.307	

Notes: N = 2,352; Significance levels: 95% CI * p<0.01; ** p<0.005; *** p<0.001; Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

Source: Author's analysis LFS 2009-2013

Table 6.2 provides a summary of the best-fit model (Model 4) and shows the variables that were statistically significant in their association with working part-time at the SPA and over.

Table 6.2 Summary of statistical significance in factors associated with part-time work among the health and social care labour force in England, aged at the SPA and over (2009-2013) (Model 4)

Characteristic	Statistical Significance Summary
Age	✓
Gender	✗
Ethnicity	✓
Marital status	✓
Health problem affects work	✓
Earnings	✓
Educational attainment	✓
Housing tenure	✓
Job sector	✓
Selected occupational group	✗
Length of time with current employer	✓

Notes: ✓ = statistically significant; ✗ = not statistically significant

Source: Author's analysis LFS 2009-2013

Throughout the regressions presented in Table 6.1, the odds of working part-time increased as individuals aged. In comparison to the White ethnic group, being in the BME group was negatively associated with working part-time, and health and social care staff who were separated, divorced or widowed were also less likely to be working part-time at or beyond the SPA compared to those who were married. Those whose health problem affected the amount of work that could be completed, were more likely to work part-time than those whose health problem did not affect the amount of work, a finding that concurred with the results reported by Gannon and Roberts (2011). Low earnings were associated with working part-time, and individuals still paying for accommodation, be it via a mortgage or rent, were less likely to be working part-time than those who were owner-occupiers. Working on a part-time basis was less likely for those in the private sector than for those who worked in the public sector, and the longer a health and social care worker had worked for an employer, the less likely they were to work part-time in later life. This is particularly important in relation to the EWL agenda and will be debated further in Chapter 7.

In this analysis gender was found to be not statistically significant. However, as presented in the literature review (Section 2.3.1), in general gender is important when considering factors that are associated with work patterns at and around the SPA (Flynn, 2010b; Finch, 2011). For example, in the UK women are more likely to work beyond the SPA than men (Finch, 2014), and in comparison

to men, married women are less likely to consider working beyond the SPA (Szinovacz, 2013b). With this in mind, and as women comprised around 90 per cent of the health and social care labour force in England (Section 4.3.2), in the following section, the regression models investigate whether the factors associated with working part-time at and beyond the SPA for the health and social care labour force are different for men and women.

6.3 Factors associated with whether the health and social care labour force in England aged at the SPA and over work part-time (Women 2009-2013) (Men 2009-2013)

Evidence from the literature suggested that factors associated with the decision to work beyond the SPA differ for men and women. Frieze et al. (2011) and Szinovacz (2013a), reported that marital status influenced the decision, where for both men and women, having a spouse in employment encouraged them to remain in work. While Finch (2014) reported that as (in general) women provide caring responsibilities throughout the life course, they subsequently spend less time in paid employment than men; leading to a financial need to remain in work for longer. In order to understand the gender effect on the working pattern of the health and social care labour force, models were run separately for women and men, introducing demographic, health, socioeconomic and employment characteristics in a sequential manner. The following section presents the results obtained for women, and compares the results with those obtained for men.

6.3.1 Factors associated with whether the health and social care labour force in England aged at the SPA and over work part-time (Women 2009-2013)

As in Section 6.2, a series of logistic regression analyses were completed using sets of demographic, health, socioeconomic and employment characteristics to build sequential models, and the ORs in each model represented the likelihood of women working part-time. Table 6.3 presents the results of this analysis and shows the improvement in the R^2 as each set of characteristics were introduced. For instance, Model 1 explained 11 per cent of the differences in working part-time ($R^2=0.113$), while the best-fit model, Model 4, explained 32 per cent ($R^2=0.320$).

**Table 6.3 Odds ratios of working part-time among the health and social care labour force in England aged at the SPA and over (2009-2013)
(Women)**

	N	%	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)	Model 4 OR (95% CI)
Age						
60 to 64 (ref.)	1,461	66.2	1	1	1	1
65 to 69	564	25.6	2.24*** (1.78-2.81)	2.22*** (1.76-2.78)	1.86*** (1.45-2.38)	2.08*** (1.61-2.68)
70+	181	8.2	6.46*** (3.93-10.61)	6.43*** (3.91-10.57)	4.08*** (2.42-6.88)	5.12*** (3.00-8.73)
Ethnicity						
White (ref.)	1,666	75.5	1	1	1	1
BME	132	6	0.37*** (0.25-0.54)	0.36*** (0.25-0.53)	0.49** (0.32-0.75)	0.49** (0.32-0.75)
Missing	408	18.5	1.29 (1.00-1.65)	1.37 (1.06-1.76)	1.38 (1.05-1.81)	1.29 (0.98-1.70)
Marital Status						
Married (ref.)	1,258	57	1	1	1	1
Single	135	6.1	0.53** (0.36-0.77)	0.55* (0.38-0.80)	0.64 (0.43-0.95)	0.63 (0.42-0.98)
Separated/ Divorced/Widowed	813	36.9	0.52*** (0.42-0.63)	0.51*** (0.42-0.62)	0.63*** (0.50-0.78)	0.59*** (0.47-0.74)
Health problem affects work						
No health problem (ref.)	986	44.7		1	1	1
Health problem NOT affecting work	673	30.5		0.92 (0.75-1.15)	0.89 (0.70-1.13)	0.96 (0.79-1.23)
Health problem affecting work	260	11.8		1.69* (1.22-2.32)	1.62* (1.14-2.30)	1.68** (1.18-2.40)
Missing	287	13		1.17 (0.87-1.59)	1.00 (0.72-1.40)	1.07 (0.78-1.51)
Earnings						
Highest Level (ref.)	45	2			1	1
Middle Level	260	11.8			2.94 (1.22-7.07)	3.08 (1.27-7.45)
Lowest Level	603	27.3			25.03*** (10.46-59.90)	28.78*** (11.90-69.61)
Missing	1,298	58.8			10.86*** (4.66-25.28)	12.91*** (5.50-30.31)
Educational Attainment						
Degree (ref.)	355	16.1			1	1

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Diploma	626	28.4			2.61***	(1.90-3.57)	2.53***	(1.83-3.49)
A Level	325	14.7			1.12	(0.79-1.60)	1.25	(0.82-1.89)
GCSE	709	32.1			1.48	(1.09-2.00)	1.66	(1.13-2.43)
No Qualifications	191	8.7			2.12**	(1.35-3.31)	2.29	(1.36-3.85)
Housing Tenure								
Owned Outright (ref.)	1,317	59.7			1		1	
Mortgaged	549	24.9			0.51***	(0.40-0.64)	0.51***	(0.39-0.65)
Rented	324	14.7			0.28***	(0.21-0.37)	0.26***	(0.19-0.35)
Rent Free	16	0.7			0.16**	(0.05-0.52)	0.19	(0.58-0.64)
Job Sector								
Public Sector (ref.)	1,261	57.2					1	
Private Sector	945	42.8					0.53***	(0.42-0.67)
Occupation Group								
Health and Care Professionals (ref.)	905	41					1	
Health and Care Support Staff	1,305	59.2					0.82	(0.60-1.12)
Length of time with current employer								
<1 years (ref.)	121	5.5					1	
1 to 4 years	440	19.9					0.52	(0.30-0.92)
5 to 9 years	389	17.6					0.35***	(0.20-0.61)
10 to 19 years	581	26.3					0.30***	(0.17-0.52)
20+ years	675	30.6					0.28***	(0.16-0.47)
-2 LLR			2609.443	2595.687	2275.527		2219.325	
% Change -2 LLR			-	0.53	12.08		14.95	
R Square			0.113	0.121	0.293		0.320	

Notes: N = 2,206; Significance levels: 95% CI * p<0.01; ** p<0.005; *** p<0.001; Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

Source: Author's analysis LFS 2009-2013

Table 6.3 shows that in all four Models, women aged 65 to 69 and 70 and over who worked in the health and social care labour force, were more likely to work part-time at the SPA and beyond than women aged 60 to 64, implying that the older the women, the more likely they were to work part-time. In Model 4, women in the BME group were 49 per cent less likely to work part-time than those in the White ethnic group, a notable increase from the results observed in Models 1 and 2. The best-fit model (Model 4) showed that in terms of marital status, the odds of working part-time in the separated, divorced or widowed group was 0.59 times the odds among those in the married group. While in the first two Models the single category produced significant results, with the addition of socioeconomic and employment characteristics in Models 3 and 4, this category became not significant. Model 4 showed that among women whose health affected their work, the odds of working part-time were 1.68 times the odds among those who had no health problem. In terms of earnings, Model 4 also showed that among women earning in the lowest earnings level, the odds of working part-time were 25.03 times the odds of women who earned in the highest earnings level. However, it is acknowledged that these women may earn in the lowest earnings level because they work part-time. Additionally, while educational attainment is considered relevant to later life employment choices (Burtless, 2013a), the results in Model 4 showed that among women aged at the SPA and beyond who worked in the health and social care labour force, attaining A-Levels or GCSEs were not significant. Nevertheless, women who attained a diploma were 2.53 times the odds of working part-time than those who had achieved degree level qualification. This result concurs with evidence from the literature that suggested individuals with higher educational attainment were more likely to remain in work for longer, and were more likely to work part-time after the SPA (Clayton, 2010; Post et al., 2013; Leeves and Herbert, 2014). Furthermore, the findings regarding housing tenure proved similar to those evidenced in the literature; women with outstanding payments for accommodation (either mortgage or rent), were less likely to work part-time (Blake, 2004). Of the additional variables introduced in Model 4, among women who worked in the private sector, the odds of working part-time were 0.53 times the odds among those working in the public sector, and the length of time that a woman had worked for their employer (5 year and over) was negatively associated with working part-time at the SPA and beyond.

Having presented the analyses for women in the health and social care labour force at the SPA and over, the following section focuses on the analysis of men of the same age employed in the health and social care labour force.

6.3.2 Factors associated with whether the health and social care labour force in England aged at the SPA and over work part-time (Men 2009-2013)

Table 6.4 presents the results obtained from the regression analysis that controlled for men in the health and social care labour force aged at the SPA and over. The small number of men in the sample population (N=146) had a likely influence on the results obtained. Nevertheless, as the proportion of men working in the health and social care labour force overall is low in comparison to that of women (Section 3.4), it was important to present the findings. As in the previous regression analyses, Model 4 proved to be the best-fit, where it explained 52 per cent of the differences in working part-time ($R^2=0.519$).

All four Models showed that for men, age was not a significant factor in working part-time at or beyond the SPA, a result that differed from the analysis of women in the health and social care labour force. In regard to ethnicity, all four Models provided significant results, and the best-fit Model (Model 4) showed that the odds of a BME man working part-time were 0.10 times the odds of a White man working part-time. In relation to marital status, unlike the findings for women, the single category was not significant in any of the Models. Nevertheless, in Model 4 among the separated, divorced or widowed men, the odds of working part-time were 0.03 times the odds of the married men. However, with the introduction of the health characteristics in Model 2, the results for this and the subsequent Models proved to be not significant. Additionally further analyses within this variable was not possible as the cell count for men was insufficient (N=10).

Model 3 introduced socioeconomic factors, but the results remained largely unchanged, with insufficient data to produce results for the health characteristic. The variables introduced within Model 4 (job sector, selected occupation group and length of time with current employer) all showed results that were not significant, and demonstrated a difference between the results found for women, where job sector and length of service were found to be statistically significant.

Overall, for the analyses of men aged at the SPA and over in the health and social care labour force, due to the small sample size (N=146), it was difficult to extrapolate results that were comparable to those found among the women of the same age in the same labour force. Nevertheless, this sample size represented the population of men aged at the SPA and over who work in the health and social care labour force. Thus, the results presented in Table 6.4 highlight the difficulty in obtaining empirical data for labour forces with small sub-populations, and may impact policy development to encourage these niche populations to remain in work for longer.

Table 6.4 Odds ratios of working part-time among the health and social care labour force in England aged at the SPA and over (2009-2013) (Men)

	N	%	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)	Model 4 OR (95% CI)
Age						
65 to 69 (ref.)	85	58.2	1	1	1	1
70+	81	55.5	0.30 (0.12-0.74)	0.31 (0.12-0.79)	0.57 (0.18-1.78)	0.51 (0.13-1.97)
Ethnicity						
White (ref.)	121	82.9	1	1	1	1
BME	15	10.3	0.78*** (0.20-0.30)	0.17*** (0.03-0.11)	0.19** (0.02-0.20)	0.10** (0.01-0.16)
Missing	10	6.8	0.46 (0.11-1.99)	0.65 (0.14-3.07)	0.95 (0.17-5.39)	0.93 (0.15-5.86)
Marital Status						
Married (ref.)	99	67.8	1	1	1	1
Single	12	8.2	0.27 (0.67-1.11)	0.28 (0.06-1.25)	0.35 (0.06-2.07)	0.56 (0.06-5.13)
Separated/ Divorced/ Widowed	35	24	0.23** (0.89-0.58)	0.11*** (0.04-0.35)	0.04*** (0.01-0.19)	0.03*** (0.01-0.20)
Health problem affects work						
No health problem (ref.)	63	43.2		1	1	1
Health problem NOT affecting work	53	36.3		0.94 (0.33-2.72)	1.82 (0.50-6.58)	1.20 (0.29-12.56)
Health problem affecting work	10	6.8		\$	\$	\$
Missing	20	13.7		\$	\$	\$
Earnings						
Middle Level (ref.)	17	11.6			1	1
Lowest Level	42	28.8			5.71 (0.76-42.99)	4.28 (0.47-38.99)
Missing	87	59.6			1.25 (0.19-8.37)	0.78 (0.09-6.63)
Educational Attainment						
Degree (ref.)	50	34.2			1	1
Diploma	35	24			0.62 (0.16-2.35)	0.49 (0.11-2.01)
A Level	13	8.9			2.85 (0.22-36.76)	5.08 (0.22-11.12)
GCSE	32	21.9			5.40 (0.86-33.89)	3.47 (0.42-29.03)
No Qualifications	16	11			0.75 (0.13-4.25)	0.49 (0.05-50.17)

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Housing Tenure							
Owned Outright (ref.)	73	50			1		1
Mortgaged	46	31.5			1.30	(0.32-5.29)	0.88 (0.18-4.27)
Rented	27	18.5			1.82	(0.34-9.59)	1.57 (0.24-10.38)
Job Sector							
Public Sector (ref.)	73	50					1
Private Sector	73	50					1.99 (0.33-11.94)
Occupation Group							
Health and Care	43	29.5					1
Professionals (ref.)							
Health and Care Support Staff	103	70.5					0.66 (0.10-4.27)
Length of time with current employer							
<1 years (ref.)	14	9.6					1
1 to 4 years	34	23.3					0.45 (0.02-11.63)
5 to 9 years	24	16.4					0.16 (0.01-6.25)
10 to 19 years	38	26					0.45 (0.01-15.52)
20+ years	36	24.7					0.24 (0.01-8.67)
-2 LLR			138.736	119.802	106.943		103.628
% Change -2 LLR			-	13.6	22.9		25.30
R Square			0.261	0.408	0.339		0.519

Notes: N = 146; Significance levels: 95% CI * p<0.01; ** p<0.005; *** p<0.001; \$ = cell count too low for SPSS to produce results; Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

Source: Author's analysis LFS 2009-2013

The R^2 in both analyses suggested that the regression was improved with each additional Model. Therefore, Table 6.5 provides a summary of the comparison between the regression analyses for women and men using the best-fit model (Model 4).

Table 6.5 Summary of the statistical significance of working part-time among the health and social care labour force in England, aged at SPA and over (Women & Men 2009-2013) (Model 4)

Characteristic	Women	Men
Age	✓	✗
Ethnicity	✓	✓
Marital status	✓	✓
Health problem affects work	✓	✗
Earnings	✓	✗
Educational attainment	✓	✗
Housing tenure	✓	✗
Job sector	✓	✗
Selected occupation group	✗	✗
Length of time with current employer	✓	✗

Notes : ✓ = statistically significant; ✗ = not statistically significant

Source: Author's analysis LFS 2009-2013

Although the results for the men were limited, as Table 6.5 shows, the findings from the two analyses revealed different pictures.

Model 4 for women (Table 6.3) showed that with the exception of occupational group, each category had significant variables that were associated with the decision to work part-time aged at the SPA and beyond. Conversely, in Model 4 for men (Table 6.4), only variables within the ethnicity and marital status categories proved significant. Thus, with regard to the health and social care labour force aged at the SPA and beyond, the only factors that were associated with working part-time for both men and women were being from the BME group, and being separated, divorced or widowed. In terms of the EWL agenda, these results are important, as they suggest that the factors associated with work patterns beyond the SPA are influenced by gender. Therefore, policy that differentiates between the needs of men and women in later working life may be more effective in encouraging older staff to remain in work for longer.

Having considered whether gender was associated with the odds of working part-time among the health and social care labour force aged at the SPA and over, the following section reports the odds of working part-time among the selected occupation groups aged at the SPA and over.

6.4 Odds ratios of working part-time among the health and care professionals and health and care support staff in England aged at the SPA and over (2009-2013)

Chapter 5 highlighted differences between the older health and care professionals and the older health and care support staff, and Section 6.3 suggested that all-encompassing generic policy may not be an effective way of encouraging men and women in the health and social care labour force aged at the SPA and beyond to extend their working lives. Therefore, with regard to health and care professionals and health and care support staff, it was important to establish whether factors associated with their decisions to work part-time at and beyond the SPA differ. The results will inform debate around the importance of flexible working opportunities in later working life (Atkinson and Hall, 2011; Lain and Vickerstaff, 2014), and determine whether there are implications for the policies under the umbrella of the EWL agenda.

The following regression analyses use sequential modelling, inputting demographic, health, socioeconomic and employment characteristics as seen in the previous three regression analyses.

6.4.1 Odds ratios of working part-time among the health and social care labour force in England aged at the SPA and over (Health and Care Professionals 2009-2013)

Table 6.6 presents the results of the regression analysis for the health and care professionals aged at the SPA and over, with improvement in the R^2 noted as each group of characteristics was added. For instance, Model 1 explained 11 per cent of the differences in reporting part-time ($R^2=0.112$), whereas Model 4 explained 46 per cent ($R^2=0.459$) of the differences in reporting part-time work at or beyond the SPA. Thus, Model 4 was deemed to provide the best-fit, and as such will be the focus for the reporting the findings pertaining to the health and care professionals.

Model 4 controlled for the demographic, health and socioeconomic characteristics that were introduced in the first three Models. Additionally, employment characteristics (job sector and length of time working with current employer) were included. The introduction of this set of characteristics did not improve the statistical significance of the results found for both age groups, and they remained as found in Model 3. However, among those aged 70 and over, the odds of working part-time increased from that seen in Model 3, with 5.36 times the odds of working part-time than the odds among the reference group. Among the ethnicity category, the odds of a BME professional working part-time were 0.36 times the odds of a White professional working part-time, and the result for the separated, divorced or widowed category returned to being statistically significant with odds similar to those observed in Models 1 and 2.

The findings in Model 4 showed an increase in the odds of working part-time at and beyond the SPA for those professionals whose health problem affected their work, with odds of 6.32 times the odds among those who reported no health problem. These results are perhaps not surprising, as within the literature, poor health has an influence on work patterns in later life (van den Berg et al., 2010; Schofield et al., 2013). The earnings categories produced similarly high odds to those seen in Model 3 (middle level 3.50 and lowest level 4.89 times respectively the odds of the highest level), and remained statistically significant at the $p < 0.001$ level.

In a similar vein to Model 3, in Model 4 among health and care professionals with a diploma, the odds of working part-time at and beyond the SPA were 2.23 times the odds among the reference category. Yet the results for the other educational attainment categories, the job sector categories and the length of time with their current employer were not significantly associated with working part-time in the best-fit Model. This suggests that health and care professionals with a tertiary educational attainment are more likely to work part-time at the SPA and beyond.

Table 6.6 Odds ratios of working part-time among the health and social care labour force in England aged at the SPA and over (Health & Social Care Professionals 2009-2013)

	N	%	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)	Model 4 OR (95% CI)
Age						
60 to 64 (ref.)	632	66.7	1	1	1	1
65 to 69	249	26.3	2.58*** (1.81-3.66)	2.46*** (1.72-3.53)	1.74 (1.14-2.65)	2.01 (1.29-3.13)
70+	67	7.1	6.68*** (2.99-14.95)	6.37*** (2.83-14.34)	4.02* (1.53-10.58)	5.36* (1.94-14.82)
Gender						
Women (ref.)	905	95.5	1	1	1	1
Men	43	4.5	0.62 (0.27-1.39)	0.56 (0.25-1.28)	0.57 (0.23-1.40)	0.54 (0.21-1.41)
Ethnicity						
White (ref.)	709	74.8	1	1	1	1
BME	85	9	0.35*** (0.22-0.58)	0.38*** (0.23-0.63)	0.38** (0.21-0.69)	0.36** (0.20-0.67)
Missing	154	16.2	1.15 (0.78-1.71)	1.29 (0.86-1.94)	1.16 (0.73-1.86)	1.15 (0.71-1.85)
Marital Status						
Married (ref.)	567	59.8	1	1	1	1
Single	63	6.6	0.52 (0.30-0.91)	0.54 (0.30-0.95)	0.70 (0.36-1.36)	0.65 (0.33-1.28)
Separated/ Divorced/ Widowed	318	33.5	0.60*** (0.44-0.81)	0.59** (0.44-0.81)	0.64 (0.44-0.93)	0.57* (0.39-0.84)
Health problem affects work						
No health problem (ref.)	439	46.3		1	1	1
Health problem NOT affecting work	286	30.2		1.07 (0.77-1.47)	1.14 (0.77-1.67)	1.25 (0.84-1.86)
Health problem affecting work	82	8.6		4.63*** (2.30-9.33)	5.37*** (2.39-12.04)	6.32*** (2.74-14.60)
Missing	141	14.9		1.95* (1.23-3.09)	2.06 (1.19-3.55)	2.15 (1.24-3.75)
Earnings						
Highest Level (ref.)	45	4.7			1	1
Middle Level	163	17.2			3.42 (1.38-8.51)	3.54 (1.41-8.89)
Lowest Level	164	17.3			3.89*** (6.14-7.57)	3.50*** (7.36-10.75)
Missing	576	60.8			4.73*** (4.10-23.07)	4.89*** (4.51-12.28)

Educational Attainment									
Degree (ref.)	323	34.1				1		1	
Diploma	502	53				2.35***	(1.63-3.41)	2.23***	(1.52-3.27)
A Level	47	5				3.77*	(0.67-8.50)	3.06	(1.35-6.98)
GCSE	70	7.4				1.52	(0.78-2.97)	1.41	(0.72-2.74)
No Qualifications	6	0.6				0.89	(1.55-5.14)	1.02	(0.17-6.04)
Housing Tenure									
Owned Outright (ref.)	592	62.4				1		1	
Mortgaged	276	8.2				0.31***	(0.21-0.45)	0.30***	(0.21-0.44)
Rented	78	0.2				0.36*	(0.19-0.66)	0.30***	(0.16-0.57)
Rent Free	2	65.8				\$	\$	\$	\$
Job Sector									
Public Sector (ref.)	624	65.8						1	
Private Sector	324	34.2						0.58	(0.40-0.87)
Length of time with current employer									
<1 years (ref.)	36	3.8						1	
1 to 4 years	129	13.6						0.23	(0.63-0.86)
5 to 9 years	142	15						0.26	(0.07-0.97)
10 to 19 years	246	25.9						0.18	(0.50-0.64)
20+ years	395	41.7						0.15	(0.04-0.52)
-2 LLR			1148.592		1118.186		865.746		844.778
% Change -2 LLR			-		2.65		24.63		26.45
R Square			0.112		0.152		0.438		0.459

Notes: N = 948; Significance levels: 95% CI * p<0.01; ** p<0.005; *** p<0.001; \$ = cell count too low for SPSS to produce results; Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

Source: Author's analysis LFS 2009-2013

To enable comparison of the factors associated with working part-time at and beyond the SPA between the health and care professionals and the health and care support staff, the following section focuses on the support staff, and emulates the analysis completed for the health and care professionals.

6.4.2 Odds ratios of working part-time among the health and social care labour force in England aged at the SPA and over (Health and Care Support Staff 2009 -2013)

Table 6.7 demonstrates, as with the previous regression analyses, with the addition of each set of characteristics, that the models are strengthened in their ability to explain the factors associated with working part-time. Model 1 explained 11 per cent of the difference in working part-time ($R^2=0.110$), whereas Model 4 explained 27 per cent of the differences ($R^2=0.268$). Therefore, like the previous section, this section will focus on the Model with the best fit, Model 4.

Like the analyses for the professionals, a sequential modelling approach was adopted to analyse the older health and care support staff; however, it was acknowledged that as none of the support staff earned within the highest earnings level, this category was not required.

As in previous analyses, in Model 4, two employment characteristics were added to the demographic, health and socioeconomic variables; job sector and length of time with current employer. This had the effect of increasing the odds seen in the two age groups to a similar ratio as observed in Models 1 and 2, suggesting that the older the member of staff, the more likely they were to work part-time. In Model 4, gender, ethnicity and health remained not significant, while in the separated, divorced or widowed category, health and care support staff were 54 per cent less likely to work part-time than those who were married. Earnings remained significantly (at the $p<0.001$ level) associated with working part-time, where support staff that earned in the lowest earnings level were 8.61 times the odds of working part-time at and beyond the SPA than among support staff that earned in the middle earnings level. With the addition of the employment characteristics, no change was noted within the housing tenure variable, where as seen in Model 3, only the rented category was significant and demonstrated that support staff were less likely to work part-time if they rented their accommodation. While the job sector variable was found to be not significant, the results showed that health and care support staff who had worked for their employer for 5 to 9 years were 0.36 times the odds of working part-time than support staff who had worked less than 1 year, and those who had worked for their employer for 10 to 19 years were 0.38 times the odds of working part-time at the SPA and beyond than the reference group.

Table 6.7 Odds ratios of working part-time among the health and social care labour force in England aged at the SPA and over (Health & Social Care Support Staff 2009-2013)

	N	%	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)	Model 4 OR (95% CI)
Age						
60 to 64 (ref.)	829	59	1	1	1	1
65 to 69	400	28.5	2.38*** (1.76-3.20)	2.39*** (1.77-3.22)	2.20*** (1.60-3.01)	2.37*** (1.72-3.28)
70+	175	12.5	3.43*** (2.20-5.36)	3.44*** (2.20-5.38)	2.55*** (1.59-4.10)	3.34*** (2.04-5.47)
Gender						
Women (ref.)	1,301	92.7	1	1	1	1
Men	103	7.3	0.64 (0.38-1.06)	0.64 (0.38-1.07)	0.90 (0.50-1.60)	0.69 (0.38-1.26)
Ethnicity						
White (ref.)	1,078	76.8	1	1	1	1
BME	62	4.4	0.37*** (0.22-0.64)	0.36*** (0.21-0.62)	0.47 (0.26-0.86)	0.52 (0.28-0.96)
Missing	264	18.8	1.34 (0.98-1.84)	1.37 (0.99-1.90)	1.39 (0.98-1.96)	1.24 (0.87-1.76)
Marital Status						
Married (ref.)	790	56.3	1	1	1	1
Single	84	6	0.52 (0.32-0.84)	0.52 (0.32-0.84)	0.69 (0.41-1.13)	0.69 (0.41-1.16)
Separated/Divorced /Widowed	530	37.7	0.44*** (0.35-0.57)	0.44** (0.34-0.56)	0.58*** (0.44-0.76)	0.54*** (0.41-0.72)
Health problem affects work						
No health problem (ref.)	610	43.4		1	1	1
Health problem NOT affecting work	440	31.3		0.86 (0.65-1.13)	0.79 (0.60-1.07)	0.87 (0.64-1.18)
Health problem affecting work	188	13.4		1.19 (0.81-1.73)	1.18 (0.79-1.77)	1.23 (0.82-1.86)
Missing	166	11.8		0.89 (0.60-1.31)	0.73 (0.48-1.12)	0.76 (0.49-1.19)
Earnings						
Middle Level (ref.)	114	8.1			1	1
Lowest Level	481	34.3			8.22*** (4.94-13.68)	8.61*** (5.10-14.54)
Missing	809	57.6			5.17*** (3.21-8.33)	5.67*** (3.45-9.31)
Educational Attainment						

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Degree (ref.)	82	5.8			1		1	
Diploma	159	11.3			2.12	(1.09-4.10)	1.97	(0.99-3.89)
A Level	291	20.7			0.97	(0.54-1.76)	1.02	(0.55-1.87)
GCSE	671	47.8			1.46	(0.84-2.54)	1.55	(0.87-2.75)
No Qualifications	201	14.3			1.91	(1.01-3.58)	1.85	(0.96-3.53)
Housing Tenure								
Owned Outright (ref.)	798	56.8			1		1	
Mortgaged	319	22.7			0.76	(0.55-1.05)	0.79	(0.56-1.10)
Rented	273	19.4			0.32***	(0.23-0.44)	0.32***	(0.23-0.45)
Rent Free	14	1			0.31	(0.09-1.03)	0.46	(0.13-1.59)
Job Sector								
Public Sector (ref.)	710	50.6					1	
Private Sector	694	49.4					0.50	(0.37-0.67)
Length of time with current employer								
<1 years (ref.)	99	7.1					1	
1 to 4 years	3,445	24.4					0.71	(0.39-1.27)
5 to 9 years	271	19.3					0.36**	(0.20-0.66)
10 to 19 years	373	26.6					0.38**	(0.21-0.69)
20+ years	316	22.5					0.32	(0.17-0.58)
-2 LLR			1619.226	1616.106	1478.099		1437.930	
% Change -2 LLR			-	0.19	8.72		11.20	
R Square			0.110	0.113	0.234		0.268	

Notes: N = 1,404; Significance levels: 95% CI * p<0.01; ** p<0.005; *** p<0.001; Earnings categories: Highest level- £700 + per week; Middle level- £325 to £699 per week; Lowest level- £0 to £324 per week

Source: Author's analysis LFS 2009-2013

Using the best-fit model (Model 4), Table 6.8 provides a comparative summary of the statistically significant characteristics of the health and care professionals and the health and care support staff aged at the SPA and over as presented in Table 6.6 and Table 6.7.

Table 6.8 Summary of the statistical significance of working part-time among the health and care professionals group and the health and care support staff group in England, aged at the SPA and over (2009-2013) (Model 4)

Characteristic	Health & Care Professionals	Health & Care Support Staff
Age	✓	✓
Gender	✗	✗
Ethnicity	✓	✗
Marital status	✓	✓
Health problem affects work	✓	✗
Earnings	✓	✓
Educational attainment	✓	✗
Housing tenure	✓	✓
Job sector	✗	✗
Length of time with current employer	✗	✓

Notes: ✓ = statistically significant; ✗ = not statistically significant

Source: Author's analysis LFS 2009-2013

As summarised in Table 6.8, the demographic, health, socioeconomic and employment characteristics that were associated with working part-time at and beyond the SPA were different for health and care professionals and health and care support staff.

While ethnicity, health problems that affect work, and educational attainment were significant factors associated with working part-time at the SPA and beyond for the health and care professionals, they were not for the health and care support staff. And, while the length of time served with an employer was significantly associated with part-time work at the SPA and beyond for the health and care support staff, it was not for the professionals. However, there were some similarities between the two selected occupation groups. Age, marital status, earnings and housing tenure had categories that were significant for both selected occupation groups, and gender and job sector were found to be not significant for both groups.

Like the analyses of the health and social care labour force aged at the SPA and over by gender, it is evident that all-encompassing generic policies to encourage older workers to remain in work for longer may not be effective. To encourage older health and care professionals and older health and care support staff occupations to work for longer, policies within the EWL agenda need to

recognise the distinctive influences that shape different occupations decision to work part-time at and beyond the SPA.

6.5 Chapter summary

This chapter has explored the factors associated with working part-time among the health and social care labour force aged at the SPA and over. In the first instance, conclusions were drawn about the total sample population, secondly about differences relating to gender, and finally, from the division of the health and social care labour force between the two selected occupation groups, the health and care professionals and the health and care support staff. For the results from the total sample population (Table 6.1), the variables of age, ethnicity, marital status, whether a health problem affects work, earnings, educational attainment, housing tenure, job sector and the length of time that the individual had worked for their employer were all found to be statistically significant. In contrast, conclusions drawn from the separate analysis of gender (Table 6.3 and Table 6.4), suggested that the results for women were very similar to those of the total sample population, and that the findings from the analysis of men, due to the small sample size, were difficult to determine with certainty. That said, Model 4 for men suggested that working part-time at the SPA and over was associated with ethnicity (BME group) and marital status (separated, divorced or widowed category). Moreover, the results of the regression analyses for the health and care professionals and the health and care support staff showed differences and similarities. Overall, the effectiveness of all-encompassing generic policies in relation to the EWL agenda are questioned, as the results show that factors associated with later life employment decisions differ between sub-populations.

These regression analyses provide further evidence to increase our understanding of the older health and social care labour force, and establish factors that are associated with working part-time aged at the SPA and over. Furthermore, they prompt discussion in relation to research question 3.

The following discussion chapter (Chapter 7) addresses key findings from Chapters 4, 5 and 6, and together with the available evidence as summarised in the conceptual framework (Section 2.7), provides discussion with the aim of answering the three research questions posed in Section 1.4.

Chapter 7: Discussion

7.1 Introduction

Life expectancy (LE) at the average retirement age is longer by about a third than it was at the beginning of the 1970s (Leibfritz, 2002). Although Bloom and Canning (2004: 4) suggested that increases in LE was one of the ‘most remarkable demographic changes of the past century’, they emphasised that potential benefits of this change are dependent on state and organisational policy. While the economic and political challenges of increasing LE are apparent, with increased costs leading to widespread reform of health and social care, pension systems and retirement ages, there are opportunities to be sought from increased longevity (Burtless and Quinn, 2002; Leibfritz, 2002; Zaidi et al., 2006; DWP, 2014c; DH, 2014b). Longer LE, together with improved health, enables extended working years (Bloom et al., 2011). Furthermore, ‘a dynamic, experienced, highly educated, and older workforce’ benefits the employer by enabling effective and efficient productivity, and provides older workers with opportunities, such as role recognition, and the ability to increase their savings and pension contributions (Maestas and Zissimopoulos, 2010: 12).

Mirroring EU guidance, the Government of the UK introduced a series of measures to encourage older workers to remain in work for longer. These measures, such as the abolition of the DRA, improved equality legislation, and increases to the SPA, collectively known as the EWL agenda, all serve to reduce barriers to remaining in work for longer, rather than being pushed into retirement (Hedges and Sykes, 2009; Weyman et al., 2012; Strudwick and Kirkpatrick, 2013).

With this in mind, workers in later life are demanding alternate patterns of work that meet with their needs and expectations (Vickerstaff, 2006b; Clayton, 2010; Maestas and Zissimopoulos, 2010; Atkinson and Hall, 2011). Older workers want to extend their working lives by working on a part-time basis (Topping, 2006; Maestas and Zissimopoulos, 2010; Gannon and Roberts, 2011; Pagán, 2011), however many cannot find such opportunities or are not enabled to do so by their employer (Loretto et al., 2005b; Maestas and Zissimopoulos, 2010; BIS, 2014). With limited evidence relating to the older health and social care labour force, and a paucity of information about their working patterns in later life, it is difficult to address the needs of this population when decision-making is being undertaken during the so called ‘retirement zone’ (Vickerstaff, 2006a: 508), or to ensure sufficient workforce planning policies are in place.

The aim of this thesis was therefore to address some of the gaps in the literature; in the first instance, to establish the characteristics of the older health and social care labour force in light of

the lack of current evidence, and secondly, as the literature shows that this is an important consideration for older workers, to determine factors that are associated with the likelihood of working on a part-time basis at and beyond the SPA (Clayton, 2010; Weyman et al., 2012; Lain and Vickerstaff, 2014). To understand the context of the characteristics of the older health and social care labour force, as the majority of evidence available related to older workers *per se*, such as work by Armstrong-Stassen and Cattaneo (2010), Porcellato et al. (2010) and Conen et al. (2011: 5), comparisons were made with older workers employed in the general labour force.

The research questions for this thesis were:

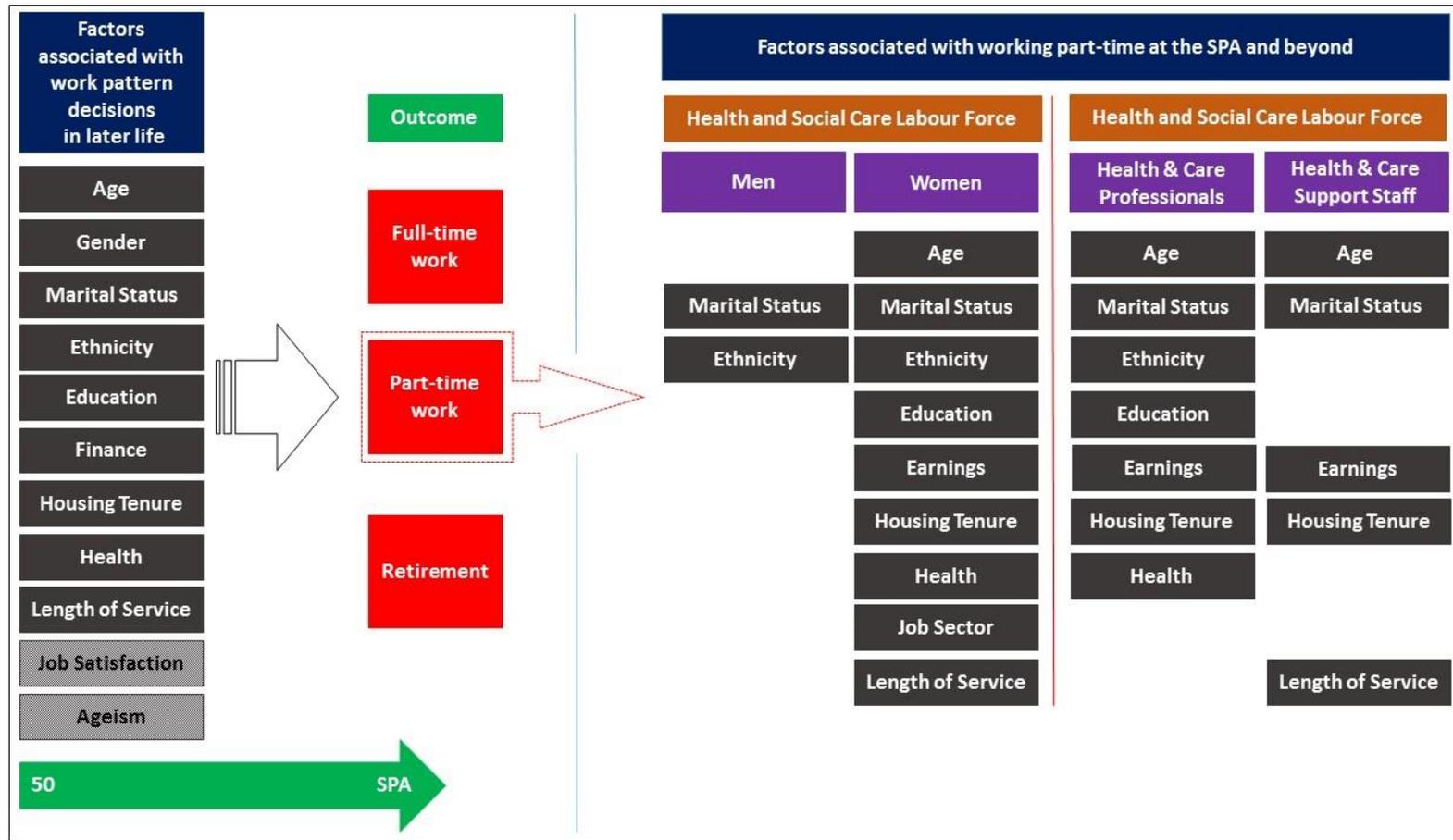
1. What are the characteristics of the older health and social care labour force in England that are associated with later working life employment decisions and how do these compare to the general labour force of the same age?
2. To what extent do the demographic, socioeconomic, health and employment characteristics of the older health and care professionals and the older health and care support staff differ?
3. Among the health and social care labour force aged at the SPA and over, what factors are associated with working part-time and what are the differences between the genders?

This discussion chapter will address each research question in turn, and will draw on the evidence obtained from the bivariate and multivariate analysis. The findings will be contextualised in relation to the literature and will consider policy implications in light of the EWL agenda and workforce planning. The following section (Section 7.2), examines the findings from the analysis of the older health and social care labour force and the older general labour force, and discusses them critically in the context of existing literature. Section 7.3 focuses on the older health and social care labour force when divided into professional and support staff, and considers how differences observed may affect policy. Section 7.4 uses the results from the regression analyses of the older health and social care labour force, to address research question 3, and considers the relevance of the factors found to be associated with working part-time at and beyond the SPA in relation to current literature and the EWL agenda. Finally, by summarising the debate, Section 7.5 highlights the key implications pertinent to future policy development and workforce planning.

Figure 7.1 re-evaluates the conceptual framework of the thesis, and by considering gender and occupational groups separately, increases our understanding of the older health and social care labour force. Overall, the analysis found that demographic, socioeconomic, health and employment characteristics were associated with working part-time at and beyond the SPA. More specifically, Figure 7.1 shows that the association of such characteristics varied depending on

one's gender and occupation group; for example, the variables for health and length of service behaved differently for the two genders and the two selected occupation groups. Moreover, marital status was the only significant factor associated with working part-time at the SPA and beyond across both gender- and selected occupation groups.

Figure 7.1 Conceptualising factors associated with employment decisions in later working life: outcome of research



Notes: Job satisfaction and ageism are shaded grey to acknowledge that although they were identified as relevant within the literature, due to limitations in the LFS they were not considered within this research
 Information on the left side of the blue line denotes the pre-research conceptual framework; Information on the right side of the blue line denotes the post-research conceptual framework

Source: Author's own analysis

7.2 The characteristics of the older health and social care labour force and the older general labour force

This section provides discussion of the results obtained in relation to research question one:

What are the characteristics of the older health and social care labour force in England that are associated with later working life employment decisions and how do these compare to the general labour force of the same age?

7.2.1 The demographic characteristics of the older health and social care labour force

The analysis of the age distribution between the older health and social care labour force and its comparator, the older general labour force, showed that there were both similarities and differences. Although the age range of the older general labour force was broader by ten years, a similar proportion in both labour forces were found to be aged 80 years and over (Appendix C, Table 8.11 and Table 8.12). While only a small proportion were in employment at this age, this result demonstrates that within the labour market, consideration is not only required for older workers within close range of the SPA, but should encompass those who wish to remain in work into the 'oldest old' age category (ONS, 2013e: 1). However, while the DWP's (2014b: 5) *Fuller Working Lives* initiative champions working longer to enable a 'healthier future with adequate income in retirement', and in some part encourages older workers to remain in work for longer, it falls short on providing guidance for those aged beyond 65.

In comparison to the proportion of health and social care staff aged 50 to 59, there was a dramatic reduction in the proportion of those working past the age of 60 years, with similar results found for the older general labour force (Figure 4.1). These results affirm concerns raised by Vickerstaff et al. (2008) that the majority of older workers leave the labour market prior to the SPA. Moreover, these findings have implications for the EWL agenda, as it appears that even with the abolition of the DRA and the gradual introduction of the increased SPA, older workers in the health and social care sector are still choosing to leave employment before the SPA (Carr, 2010; Sykes et al., 2010; Weyman et al., 2012). In light of the ageing population, where increased demand is placed on health and care provision, understanding the older health and social care labour force is becoming progressively important (Loretto et al., 2005b). It is apparent that for the EWL agenda to be considered successful, further strategies are required to encourage older workers to remain in work for longer. Thus, based on the results found within this research, over the course of this discussion, further strategies will be proposed.

Perhaps the most striking finding within the first analysis was that of the difference in the gender distribution between the two labour forces. The older health and social care labour force was by far predominated by female workers (86 per cent), whereas within the older general labour force, although the largest proportion were men (57.5 per cent), there was a more even distribution between the sexes (Figure 4.2). While conspicuous, the results confirm those found by the HSCIC (2015a), where 85 per cent of the professionally qualified staff (all ages) were female. Moreover, the results concur with evidence from the literature, where for instance, Eborall et al. (2010) reported the high proportion of women in the social care labour force, and Leeves and Herbert (2014) suggested that the over-representation of women is commonly found in care-giving occupations. While employment in the health and social care sector may traditionally be more attractive to women, there is a tendency for female health and social care workers to leave the labour force before men (Figure 4.3). This result counters the arguments presented by Finch (2014), where it was reported that, in general, women are more likely than men to remain in work for longer. However, Loretto and Vickerstaff (2013) suggested that the notion of retirement is viewed differently between the genders, and as such applies differently to men and women. The results presented in Figure 4.3 suggest that older women in the health and social care labour force may not conform to the wider pattern described by Finch (2014), which may imply that general policies aimed at encouraging older workers to extend their working lives may not be relevant to this group of staff.

Although the DH promotes equality and diversity within the health and care sector, and the Equality Act 2010 outlaws gender discrimination within recruitment, training and the workplace (DH, 2001; HM Government, 2010), the results of this research suggest that although both sexes have presence in the workforce, gender balance within the older health and social care labour force remains limited. This lack of diversity is considered by Bogg et al. (2007: 137) to be 'a barrier to both clinical practice and service provision'. Moreover, to sustain a labour force that is capable of providing effective care and support for the ageing population, while women form the majority of the health and social care labour force, there is a need for policy to target both genders to remain in work. Thus, under the umbrella of the EWL agenda, policy development is required that encourages gender diversity by removing barriers to health and care work for men, such as sub-cultures of discrimination that assume health and social care should be completed by women (McLaughlin et al., 2010; Kouta and Kaite, 2011; Acker, 2012).

In agreement with data from the ONS (2014g), the findings showed that the majority of staff in both the older health and social care labour force and the older general labour force were married (Figure 4.4). Being part of a married couple provides advantages such as joint income, the opportunity to maximise pension provision, enhanced retirement savings, and increased

opportunities for care and social interaction (Cebulla et al., 2007; Morrell and Tennant, 2010; Lancee and Radl, 2012). Yet, the findings from this research also established that among older workers in the health and social care labour force, almost 40 per cent of women and around 34 per cent of men were either single, or separated, divorced or widowed (Figure 4.5 and Appendix C, Figure 8.1). This is important to note, as in contrast to being part of a married or co-habiting couple, if single older men choose to exit the labour market prior to the SPA, they run the risk of losing, not only financial security, but a sense of social connectedness that being in work can provide (Lancee and Radl, 2012; Radl and Himmelreicher, 2015). Additionally, it has been shown that single, separated, divorced or widowed older individuals are more likely to experience pensioner poverty and material deprivation (Kotecha et al., 2013). However, by remaining in work for longer, older single, separated, divorced or widowed health and social care workers may benefit from the opportunity to increase savings and pension contributions (Thane, 2006; Cribb et al., 2014c; HM Government, 2014b; Thurley, 2014). Nevertheless, although extending the working life may benefit single older health and social care workers financially, Panisoara and Serban (2012) recognised that current policy does not respond to issues of social isolation and financial inequality in older age, and as such further policy development within the realm of the EWL agenda is required to address these potential problems for older workers in health and social care.

In addition to the influence of marital status, the literature also suggested that an individual's ethnicity can have a bearing on the ageing experience, as it can be associated with factors such as finance, health and social participation in later life (Jamieson et al., 1997; Phillips et al., 2010). The findings from the analysis of the older health and social care labour force, and older general labour force demonstrated that while both labour forces showed a prevalence of individuals who described themselves as White, among the older health and social care labour force the proportion of individuals from the BME group was almost twice that observed among the older general labour force (Figure 4.7). This result may in part be due to previous workforce planning policies, where, faced with staff shortages within key occupation groups such as nurses, overseas recruitment was encouraged (Buchan, 2006a; b; Bach, 2010; Skills for Care, 2011c). Additionally, in the mid-2000s the DH recognised that the NHS lacked ethnic diversity within its workforce, and stated as part of their drive to improve health across the nation, that a 'greater prominence' of race equality within the NHS was required (DH, 2004: 1). Along with a focus on improving services to the BME population, to improve representation of BME staff within the health and care workforce, the *Race Equality Action Plan* (DH, 2004) posited that targeted recruitment, directed towards members of the BME community was required. However, as Kline (2014: 66) noted, ten years after the recommendations cited in the *Race Equality Action Plan*, the culture within the

health sector still ‘fails to value staff’ and that ‘widespread, deep-rooted, systematic and largely unchanging discrimination’ against BME staff remains. Furthermore, with initiatives such as *Positively Diverse*, the *Improving Working Lives* agenda and the *Equality Delivery System* failing to improve recruitment and retention of BME staff, it is clear that in order to encourage older BME health and social care staff to remain in work for longer, the EWL agenda needs to encompass further anti-discriminatory legislation in line with the *Equality Act 2010*, to create a culture where *all* staff feel valued (DH, 2000b; 2001; HM Government, 2010; Kline, 2013; NHS England, 2013).

The demographic characteristics of the older health and social care labour force add an important element to our understanding of this labour force; however, other factors play a role in choices made in later working life. The following section therefore discusses the socioeconomic characteristics that enhance our perception of this research population.

7.2.2 The key socioeconomic characteristics of the older health and social care labour force

Guided by the research findings, the key socioeconomic characteristics of educational attainment, earnings and housing tenure are discussed in relation to evidence from the literature. Educational attainment is a strong determinant of future employment and earnings capacity as it reflects material and intellectual resources (Galobardes et al., 2006a). In addition, for particular occupations, such as those within the health and social care labour force, a level of educational attainment is required, which in itself can contribute to the level of achievable earnings (Piha et al., 2010; Burtless, 2013a). Earnings measure material resources in the most direct way, and as they have a cumulative effect over the working life, they are a useful measurement for one’s socioeconomic position in later life (Galobardes et al., 2006a). Additionally, earnings can effect a range of factors, such as health and financial security in older age, which in turn can influence employment choices in later life (Galobardes et al., 2006a; Flynn, 2010b; Bukodi and Goldthorpe, 2013; Mackenbach, 2015). Moreover, the debate around earnings inequality provides an added dimension to using earnings as a socioeconomic indicator (Fiscella and Franks, 2000; Rözer and Kraaykamp, 2013; Leeves and Herbert, 2014). Furthermore, it has been suggested by authors such as Coulson and Fisher (2009), Morescalchi (2011) and Connolly (2012) that housing tenure can directly and indirectly influence an older individuals’ labour market participation in later life.

The findings revealed that there were distinct differences between the older health and social care labour force and the older general labour force in relation to their educational achievements (Figure 4.9). A greater proportion of older health and social care workers had obtained higher level education, such as a diploma or a degree, than their peers in the older general labour force.

Additionally, there was a greater proportion of older individuals in the general labour force with no qualifications (Figure 4.9). With the expansion of the higher education system (i.e. access to degree-level education via universities), in the latter half of the twentieth century, it has been argued that older workers attained an educational advantage in comparison to their younger colleagues (Devereux and Fan, 2011; Ofqual, 2012; Burtless, 2013a). Improved educational attainment has enhanced the job market position for older workers (Burtless, 2013b); moreover, by increasing their participation in higher education, women have increased their opportunities to seek higher level employment opportunities (Devereux and Fan, 2011). While the employment prospects for older workers have improved over recent years, with a higher level of education increasing the likelihood of remaining in work for longer, higher education expansion has not been beneficial to all (Blanden and Machin, 2004; Järnefelt, 2010). Individuals with poorer socioeconomic backgrounds remain disadvantaged in achieving higher level education, and the expansion has only 'acted to widen participation gaps' between the rich and the poor (Blanden and Machin, 2004: 1). While almost half of the older health and social care labour force had achieved education at either diploma or degree level, only around a third of the older general labour force had done so (Figure 4.9). This may suggest that the older health and social care labour force are more likely to remain in work for longer than individuals in the older general labour force.

Regarding educational attainment, the discrepancy in the findings from this research may relate to the differentiation between the labour forces. Within the older health and social care labour force qualifications are required to complete the role of nurse, social worker or AHP, whereas within the whole of the older general labour force, fewer occupations overall may make such demands (HSCIC, 2013a; b; c). However, the results may also reflect the wider economic issue of access to higher education. As educational attainment can impact the type of job an individual can secure, those without sufficient education, such as that seen in the results for the older general labour force (no qualifications) (Table 4.8), may not be in a position to enhance their prospects of remaining in work for longer (Lynch and Kaplan, 2000; Burtless, 2013a). Similar to evidence from the literature, this suggests that with a (generally) higher level of education, older workers among the health and social care labour force may have improved prospects for establishing adequate savings and pension contributions over their working life, thus creating greater choice in later life, and increasing the likelihood of remaining in work for longer (Morisset and Revoredo, 1995; Chanda, 2008; Clark et al., 2010; Gallery et al., 2011).

While it is known that within the wider labour force there are disparities in earnings between genders (Loretto et al., 2007b; Cann and Dean, 2009), to aid our understanding of the older health and social care labour force, it was important to establish whether such disparities were evident.

With regard to the older general labour force, the results confirmed findings from the literature, and importantly, it was shown that among the older health and social care labour force the largest proportion of women earned in the lowest earnings category, whereas the largest proportion of men earned in the middle earnings category (Figure 4.10). It was also apparent from the findings that among the older health and social care labour force, a greater proportion of men than women earned in the high earnings level, and fewer men than women earned in the lowest earnings level (Figure 4.10 and Figure 4.11). Thus, as observed within the literature relating to older workers *per se*, the results confirmed evidence of earnings disparity between the genders in the older health and social care labour force (Gray, 2013; Leeves and Herbert, 2014). Although it has not been possible (due to dataset restrictions) to explore the factors which may explain the discrepancies found, such as well-being and consumption patterns (Blundell and Etheridge, 2010; Rözer and Kraaykamp, 2013), the findings are consistent with the *National Equality Panel* report (Hills et al., 2010), which cited earnings inequality between genders in the UK to be of concern.

Earnings in later working life play an important role in decisions around work patterns and retirement. Although the gender wage-gap across industries, for both full- and part-time workers, has narrowed and is now at its lowest since 1997, on average women still earn around twenty per cent less than men (Antonczyk et al., 2010; ONS, 2014b; Wild, 2014). The results from this study suggest a similar pattern, where a greater proportion of women than men in both labour forces were found in the lowest earnings level (Figure 4.10 and Figure 4.11). Within the literature, causes for earnings inequality between the genders have been posited that range from interrupted work careers, women's preference for work-life balance, discrimination and diminished experience (Kunze, 2005; Booth, 2009; Antonczyk et al., 2010; Leeves and Herbert, 2014). While literature relating specifically to older workers in the health and social care labour force is limited, Thornley (2006) reported that within the NHS, with a predominantly female labour force, the gender wage-gap is clearly evident. It was suggested that women are over-represented in lower level occupations, such as support staff, and that even within the same occupation, like the findings from this research show, gender-wage differences are apparent (Thornley, 2006). Gray (2013) also confirmed that within the NHS, a wage-gap between men and women was evident, and suggested that this may in part, be due to the institutional culture. Moreover, in a similar report, The Princess Alexandra Hospital NHS Trust (2012), showed that based on actual earnings (including those working on a part-time basis), among AHPs and nurses, men earned above the median salary, while women earned below the median salary. By ensuring earnings equality during the whole working life, women could enjoy the opportunity to build personal savings, to contribute more to pensions and to have greater choice around working patterns toward the end of their working life. As evidence from the literature and findings from this study suggest that there is

inequality in earnings among men and women within the health and social care labour force, there is the need for Government policy to address fundamental and ongoing issues around the recognition of skills and gendered assumptions within the culture of health and social care (Booth, 2009; Järnefelt, 2010; Andrew, 2012; Gray, 2013; Finch, 2014; Leeves and Herbert, 2014). As part of the EWL agenda, these policies could encourage older health and social care workers, particularly women, to remain in work for longer.

With regard to housing tenure, in agreement with the general pattern observed in the UK, owner-occupation (i.e. owning a property outright or with a mortgage) was the principal tenure status among the older health and social care labour force (Figure 4.12) (Diaz, 2009; Connolly, 2012; Department for Communities and Local Government, 2013; ONS, 2013a). Without the cost of paying for accommodation, older workers are advantaged in their choice of work pattern in older age, which may be an incentive to work part-time at and beyond the SPA (Bardasi and Jenkins, 2002; Smeaton et al., 2009; Clayton, 2010; Weyman et al., 2012). For older workers with a mortgage to pay, remaining in work may be a necessity; however as it is likely that the mortgage is small, part-time work beyond the SPA may provide sufficient income (Coulson and Fisher, 2009; Morescalchi, 2011). Nevertheless, owner-occupation has also been shown to inhibit labour force participation. Oswald (1996; 1997, 1999) posited that the constraints imposed by owner-occupation can hamper employment, as the costs (emotional and financial) of selling and moving house prevent geographical mobility in search of employment.

7.2.3 The work pattern characteristics of the older health and social care labour force

As there is limited information available pertaining to the older health and social care labour force, determining their working patterns increases our understanding of their characteristics.

In England, there are two sectors that provide employment within the health and social care; the public sector that comprises the NHS and Local Authorities, and the private sector that includes independent organisations such as Bupa and Age UK (ONS, 2012i, 2013d). While the public sector has traditionally been the dominant employer of health and social care staff, due to Government measures to reduce public sector spending and the increased demand for health and social care from the ageing population, the balance between public and private sector employment for health and social care staff is now changing (Sibieta, 2014; Office for Budget Responsibility, 2015; ONS, 2015c). Furthermore, Cribb et al. (2014a), reported that the proportion of care sector workers in the public sector has remained relatively constant since the mid-1980s, while in the private sector the numbers of care workers has increased substantially and now accounts for almost three-quarters of care workers employed in the UK.

From the analysis of the older health and social care labour force, the findings demonstrated that despite the changing balance between public and private sector employment, the majority of staff were employed by the public sector (Figure 4.13); perhaps not surprising given that the NHS remains the largest public sector employer in England (NHS Choices, 2013). In comparison, within the older general labour force, the majority of staff were employed by private sector organisations (Figure 4.13). The discrepancy in job sector employment between the two labour forces may suggest that separate policy initiatives could be useful in addressing issues related to specific sectors. For example, while the gender wage-gap is evident in both public-and private sector organisations (Barón and Cobb-Clark, 2010), the different pay structures, such as the band system within the NHS (ONS, 2012e), and the less 'uniformly distributed' pay in the private sector (Cribb et al., 2014b: 1), may require separate legislative approaches to improve the situation for older health and social care workers. A common approach to pay, where earnings are based on qualifications, skills and experience (and not gendered assumptions), may in the first instance, provide some level of consistency. As for the long-term prospects for the older health and social care labour force, given that the private sector is being increasingly relied upon to provide personal care services previously delivered by the public sector (Sibieta 2014; Cribb et al., 2014), it has been argued that the labour market participation of these individuals may largely depend on the ability of the private sector to accommodate their skills, and the 'ease' at which former public sector employees can make the transition to private sector work (Cribb et al., 2014: 4).

Among the older health and social care labour force 40 per cent of men, and 50 per cent of women (overall, 45 per cent) worked part-time (Table 4.1 and Table 4.2 and Figure 4.14). However, data from the HSCIC does not differentiate part-time staff, instead information is presented as full-time equivalent (HSCIC, 2015a). Additionally, while the research found that among the older general labour force, 27 per cent of men and 57 per cent of women worked part-time, the ONS (2013d) presented different findings; 43.7 per cent of women and 13.5 per cent of men worked part-time. However, the ONS data included only individuals aged 16 to 64 years old. Thus, the limitations with the HSCIC and ONS data prevent direct comparison with the research findings, and as highlighted by Buchan and Secombe (2010), demonstrate the need for more in-depth data collection.

As Atkinson and Hall (2011) and Leeves and Herbert (2014) reported, flexible working opportunities are positively associated with employment patterns and choices around remaining in work in later life. According to Timms et al. (2015: 13), although organisations may formally offer flexible working arrangements, in reality through 'organisational culture', workers may not consider that flexible working is a real option. Moreover, McNair et al. (2004) suggested that older workers do want to work for longer, as long as opportunities such as flexible working are

available. In regard to the older health and social care labour force, the results from this study suggest that flexible working opportunities in the form of part-time work are not only available, but undertaken by almost 45 per cent of individuals (Figure 4.14). However, Conen et al. (2011: 142) reported that to encourage older workers to remain in work for longer they require 'active support' from their employer. While negative attitudes about older workers is evident, such as the assumption of reduced productivity (van Dalen et al., 2010), Worman, in McNair et al. (2012: 2) reported that if organisations do not 'respond appropriately' to the changing needs of older workers, they will be at a competitive disadvantage. Although part-time work is available and undertaken by a large proportion of the older health and social care labour force, it does not appear that working part-time is for many a genuine choice, as over a third of individuals worked part-time due to not being unable to find full-time work (Figure 4.14). This suggests that health and social care organisations, although responding to the need for flexible working patterns, are not responding adequately to the demands from older workers for *full-time* work.

Authors such as Kanfer et al. (2001), Karpinska et al. (2013) and Heidemeier and Staudinger (2015) reported that negative attitudes from employers regarding flexible working opportunities influence older workers' employment choices in later working life. However, the findings from this research suggest that older workers in the health and social care labour force not only have flexible working opportunities available through part-time work, but that these opportunities are accessed by older workers. These results imply that by actively supporting flexible work, the health and social care sector may have responded appropriately to the needs of older workers. Moreover, the positive organisational culture towards flexible working opportunities seen within health and social care (Atkinson and Hall, 2011), may account for differences noted between the older health and social care labour force and the older general labour force, where fewer staff in the latter described their work pattern as part-time. Nevertheless, additional research into the organisational culture of the health and care sector would provide further understanding as to the opportunities and accessibility of part-time work in later working life.

The inability to find full-time work was the main reason given for working part-time by both the older health and social care labour force and the older general labour force (Figure 4.15). The International Labour Office (ILO) (1998: 2) defined underemployment as 'when the hours of work of an employed person are insufficient in relation to an alternative employment situation in which the person is willing and available to engage'. Using this definition, Li et al. (2013) reported that underemployment causes individuals to become disengaged with the labour market, resulting in fewer opportunities to accrue adequate financial and personal benefits. Additionally, Beiser et al. (1993) and Wilkins (2006) suggested that underemployment can lead to mental health issues such as depression. While Li et al. (2013) reported that, overall, the proportion of men (in all age

groups) who were underemployed was higher than that of women (in all age groups), they also acknowledged that with age, both genders experienced higher underemployment. Although the results from this research differed from Li et al. (2013), in that a greater proportion of women than men in the older health and social care labour force worked on a part-time basis (Table 4.1 and Table 4.2), the findings did suggest that underemployment may be evident. Furthermore, as recommended by Vegeris et al. (2010), the government needs to consider further policy initiatives that will enable older workers to remain in work by increasing access to employment choice in later life for those aged 50 years and over.

7.2.4 The health characteristics of the older health and social care labour force

From the review of literature it is known that among older individuals working in the health and social care sector and in the general labour force, a poor health status is a determinant for choosing retirement, rather than remaining in work (Watson et al., 2003b; Andrews et al., 2005; Blakeley and Ribeiro, 2008; Berry, 2010; EHRC, 2010; Wood et al., 2010; Post et al., 2013; Robroek et al., 2013). As Bound and colleagues noted, 'although variation in health status exists at all ages [...] it is the decline in health starting in late middle age that is likely to create a mismatch between an individual's capabilities and the requirements of his or her job' (Bound et al., 1999: 1). This is somewhat supported by the results of this study, where it was found that the proportion of individuals in both the older health and social care labour force and the older general labour force who reported having no health problems decreased with increasing age (Table 4.3). Whether and how older workers react to the on-set of ill-health is influenced by a variety of factors including one's socioeconomic position, gender and ethnicity (Bound et al., 1999; Loretto et al., 2007b; Victor, 2010).

Moreover, Post et al. (2013: 94) reported that 'individuals who perceive themselves to be healthy expect to retire later than those who perceive themselves to be in poor health'. Additionally, McGarry (2004) noted that when older individuals adjust their employment situation to meet the needs of their health, the likelihood of remaining in work increases; thus, when the configuration of health and job demand is satisfactory, health becomes less of a factor in retirement decisions (Robson et al., 2006). The results from this study show that with increasing age, greater proportions of individuals in the older health and social care labour force, and the older general labour force work part-time (Table 4.1 and Table 4.2). This may be a reflection of adjustments to working patterns that accommodate changes in health status; however, while this may enable older workers to remain in the labour market for longer, further research is required to confirm the relationship between health, adjustments in work pattern and the decision to extend the working life. In relation to the older health and social care labour force, literature that defines a

measure of how much good health is enough to promote extending working lives is sparse. Watson et al. (2003a), Andrews et al. (2005) and Blakeley and Ribeiro (2008) allude to the need for stress management strategies to reduce nurses' work-related stress, but they do not quantify an acceptable level of stress. Moreover, in its report outlining the *NHS Health and Well-being Improvement Framework*, rather than defining what a good level of health might be, the DH (2011b) focused on reducing the levels of sickness absence.

However, NHS Choices (2014) noted that for those with a long-term health problem, remaining in work can help to reduce the effect of the condition, and may assist with recovery. The results from this study found that 45 per cent of the older health and social care labour force, and over 40 per cent of the older general labour force reported that they had a long-term health problem (Figure 4.16). While evidence from the wider literature for the health and social care labour force is lacking in this area, the ONS (2015a) found that around 57 per cent of individuals in employment throughout England aged 50 to 64 years reported having a long-term health condition. It was also noted that the proportions of those in employment who reported a long-term health condition diminished with age (ibid.). As the research for this thesis extended to include individuals in employment over the age of 80, the decreasing proportion of staff who reported a long-term health problem may have influenced the overall pattern, and may account for the differences found.

While the results showed that skeletal and joint problems were the most common health problem among women in both labour forces, the results for men in the health and social care labour force suggested that 'other' problems, such as with mental health or hearing and speech, were more prevalent (Table 4.6). Moreover, the results for men in the older general labour force found that heart and circulation problems were more evident than 'other' health problems (Table 4.7). These results somewhat contradict evidence from Buchan (1999) and Fitzgerald (2007), where it was reported that skeletal and joints problems were the most common health problem among older nurses. However, as this analysis included a wider range of health and social care professions, such as AHPs, social workers and care staff, the results may be better compared to more recent evidence reported by Maertens et al. (2012), where the incidence of other common ailments associated with ageing, such as breathing problems, issues relating to the heart and circulation and a prevalence of diabetes, were found. In comparison with the older health and social care labour force, the results from the analysis of the older general labour force showed that similarities in the range of health problems were evident; perhaps as is suggested by Robroek et al. (2013), health conditions are not labour force specific, rather they reflect the heterogeneous nature of individuals.

In agreement with the WHO (2014), POST (2006) and Parsons et al. (2012), among the older general labour force and older male health and social care workers, it was found that with increasing age there was a greater likelihood of reporting a long-term health problem. However, it was found that among older female health and social care workers the proportion of women who reported a health problem at the age of 65 and over diminished (Table 4.5). Rather than this being an indicator that there are fewer health problems experienced by women in this labour force aged 65 and over, it is suggested, in accordance with the review by van den Berg et al. (2010), that there are selection effects at play in this area, i.e. women who remain in this labour force tend to be the healthier ones.

It is proposed that to address the cumulative effects of work-related ill-health that may prevent individuals within the older health and social care labour force from working for longer, initiatives within the EWL agenda need to collaborate with OH services to promote 'healthy age management' and 'health and workability' (McDermott et al., 2010: 1), and to increase performance ability by those with a long-term health condition (Ilmarinen, 2006; Crawford et al., 2009; DH, 2011a). Furthermore, for OH strategies to be successful in encouraging older workers in the health and social care labour force to remain in work for longer, an acceptable level health needs to be defined.

Having provided answers to research question 1 through the discussion of the empirical research, the following section continues by discussing key findings in relation to research question 2.

7.3 The characteristics of the older health and social care labour force by selected occupation group

This section discusses the results obtained to answer the second research question:

To what extent do the demographic, socioeconomic, health and employment characteristics of the older health and care professionals and the older health and care support staff differ?

Despite the paucity of documented evidence relating to the occupations that form the older health and social care labour force, the demand for professions such as personal care assistants and OTs is likely to increase in light of the introduction of the personalisation agenda (Appendix B, Table 8.4) (DH, 2010a; HM Government, 2012b; DH, 2014a).

While there is limited evidence available that pertains directly to the older health and social care labour force, the literature identified a range of characteristics for older workers in general that

are associated with employment decisions in later working life. It was established that characteristics such as gender, age and marital status were used to identify demographic factors; that earnings, educational attainment and housing tenure were commonly used to focus on socioeconomic status, and that characteristics, such as whether a long-term health problem exists enabled exploration as to how health is associated with the decision to remain in work for longer, or to retire from the labour market (Lissenburgh and Smeaton, 2003; Loretto et al., 2005b; Blakeley and Ribeiro, 2008; Flynn, 2010b; Morrell and Tennant, 2010; Phillips et al., 2010; Porcellato et al., 2010; Padilla, 2011). Other characteristics, such as job satisfaction and attitudes towards older workers, were also identified as being important to the decision to extend the working life (Loretto et al., 2000; Saari and Judge, 2004; Clayton, 2010; van Dalen et al., 2010; Conen et al., 2011; Oakman and Wells, 2012); however, due to constraints within the LFS, these factors were not investigated.

Within the older health and social care labour force, various occupation groups that require different qualifications, skills and attributes were identified. Due to the dearth of information relating to the older health and social care labour force *per se*, with the EWL agenda in mind, it was important to establish whether factors that are associated with decisions in later working life differ between occupational groups that may have different demographic, socioeconomic, health and employment characteristics. To this end, to enable answers to research question 2, the following section discusses the results found in relation to the older health and care professionals and the older health and care support staff.

7.3.1 The demographic characteristics of the selected occupation groups

The findings from the analysis of the older health and care professionals and older health and care support staff showed that in both selected occupation groups, the largest proportion of staff were aged 50 to 54, with diminishing proportions seen with increased age (Figure 5.1). These results corresponded with the pattern observed in data produced by the HSCIC (2014c), where the largest proportion of social care staff (over 18 per cent) were aged 50 to 54, decreasing to just over 2 per cent in those aged 65 and over. While employment rates for men and women aged 50 to 64 have risen since 1995, with employment rates of those aged 65 and over showing the largest level of growth (Dini, 2009; ONS, 2010a), the results from this research suggest that for the purposes of extending the working life, there is still room for improvement.

As reported in Chapter 2, most older people would like to work longer than they currently do (Lissenburgh and Smeaton, 2003; Smeaton et al., 2009); however, in encouraging extending working lives, policy must be 'sensitive to the actual processes and flows out of the labour

market' in order to retain older staff (Maltby, 2011: 300). In regard to the older health and care professionals and the older health and care support staff, implementing policy such as the *Work Ability* approach, which has been used in Finland for over 30 years, may assist with encouraging longer working life (Ilmarinen, 2010). The key concepts employed in this approach aim to not only improve the quality of life for older individuals by gaining an enhanced work-life balance, but to adopt a more holistic approach that encompasses improvement in the older individuals health and well-being; thus increasing productivity and the retention of older staff (Ilmarinen, 2010; Maltby, 2011). By incorporating work management, skills, motivation and attitudes, the *Work Ability* approach comprises references to an individual's skill-set together with formal qualifications (Maltby, 2011). This is particularly relevant to the older health and care support staff as many lack formal qualifications (Figure 5.9), but may have extensive *on-the-job* experience. Moreover, in comparison to the medical model used within OH services in the UK, the *Work Ability* approach applies a more social model of OH that incorporates the development of purposeful working conditions that has been demonstrated to extend the working life (Ilmarinen, 2005; Maltby, 2011).

In considering the age profile of the older health and social care labour force, the findings from this research showed that the age of staff within the older health and social care professionals group ranged from 50 to 89, and in the support staff group it ranged from 50 to 84 years (Appendix D, Table 8.16). These results confirm evidence of age-diversity within the older clinical workforce as posited by Sherman (2006). Lehmann-Willenbrock et al. (2012) concurred with this notion, reporting that the nursing labour force is becoming more age-diverse, and that age-diversity appreciation is important in predicting performance outcomes. While age-diversity implies differing training, thinking and communication strategies, potentially leading to conflicting emotions and work related stress (Jackson et al., 2003; Wegge et al., 2008), Lehmann-Willenbrock et al. (2012: 214) suggest that 'age diversity appreciation might reduce nurses' stress levels and increase their work-life balance and work commitment'. By acknowledging, understanding and appreciating age differences among one's colleagues and patients, it is suggested that among nurses (and by implication others within the selected occupation groups), co-worker trust, individual well-being and improvements to work attitudes are increased (ibid.).

With regard to the gender distribution among the older health and social care labour force, as discussed in Section 7.2.1, the findings showed that the older health and social care labour force as a whole is predominantly female. It was unsurprising therefore, to discover that when the older health and social care labour force was divided into the two selected occupation groups, that the same pattern was evident. Both the professionals group and the support staff group comprised a proportion of around 86 per cent that were women (Figure 5.2). These results are analogous with

reports from the HSCIC, where 85 per cent of professional staff and 87 per cent of support staff were female, and comparable data is available relating to the adult social service workforce, in which women comprised 82 per cent (Skills for Care, 2012; HSCIC, 2014a). As discussed previously, the prevalence of women in caring professions has also been documented by Eborall et al. (2010) and Leeves and Herbert (2014); moreover, female labour force participation has been increasing in recent decades due to improvements in women's educational attainment, and the introduction of family-friendly policies such as enhanced childcare provision, flexible working and paid carers' leave (Steinmetz, 2012; Thévenon, 2013).

To some extent, by referring to older workers in the general sense, initiatives within the EWL agenda, such as the removal of the DRA, increases to the SPA and pension reform, assume that all older workers are homogenous (DWP, 2010a; 2010b; c; DWP, 2013b). However, as Flynn (2010b: 308) noted, the older labour force comprises a range of workers whose experience influences their decisions in later life, and therefore a 'one-size fit all' approach to policy making should not be taken. With a female-dominant staff group, such as observed within the older health and care professionals and the older health and care support staff, from a legislative perspective, policy development needs to be mindful of gender-specific factors, that may influence decisions to remain in work for longer, such as work history, marital status and earnings (Kunze, 2005; Loretto and Vickerstaff, 2013; Szinovacz, 2013a; Finch, 2014; Leeves and Herbert, 2014). From a workforce planning perspective, this is important to ensure both selected occupation groups maintain an adequate skill-mix, with sufficient availability of staff.

The findings in regard to marital status showed that the majority of staff in both selected occupation groups were married, and that there was a larger proportion of older health and care support staff that were separated, divorced or widowed (Figure 5.4). While comparable evidence from the HSCIC and Skills for Care is unavailable, and evidence of the effects of marital status and occupation type on the older health and social care labour force is limited, it is acknowledged that marital status does have a bearing on employment choices in later working life. Although not related to the health and care sector, Atchley et al. (1979) found that among older women who had retired from professional or clerical occupations, widows had the highest level of social interaction with friends and relatives, single professional women interacted highly with family, and single women from clerical backgrounds had low interaction levels. Whereas, Lund et al. (2001) found that among those working in low-level occupations (such as care workers), no such concerns about poor interaction levels were associated with marital status and retirement.

However, in their study of men in higher level education, Etaugh and Stern (1984: 417) found that in relation to professional competence (in general), married individuals of both genders were

perceived to be 'more reliable and stable' than divorced individuals, that widowed individuals were considered more dedicated to their careers and more well-adjusted than other unmarried groups, and those individuals who were single were perceived to be 'more responsible and dedicated to their careers' than divorced individuals. It appears, therefore, despite limited documented evidence, that marital status may have an influence on later life work choices among individuals within different occupational groups. Moreover, marital status itself may have a bearing on individuals' and organisations' perception of older workers' ability, which in turn may affect an older workers' decision to remain in work for longer.

As was reported in Chapter 2, Lissenburgh and Smeaton (2003) and Flynn (2010b) suggested that marriage can be seen as beneficial to older workers. They reported that men in particular benefited from the social interaction that accompanies married life, in addition to the receipt of support from their spouses. It was also noted by Loretto et al. (2005b) and Vickerstaff et al. (2004) that women were more likely to leave employment before the SPA as they wanted to retire at the same time as their spouse. This view is supported and developed in more recent evidence, where Matthews and Fisher (2012) and Radl and Himmelreicher (2015) reported that joint retirement planning by spouses influences work preferences in later working life. Married women are also less likely to work beyond age 62 than unmarried women (Szinovacz, 2013a). In this respect, increasing women's SPA in line with that of men (HM Government, 2014b) may encourage women in the older health and care professionals' group and those in the older health and care support staff group to delay leaving the labour force until they are at least 65 years of age.

Although the findings from this research showed that the majority of individuals were married, for women who worked in the supporting occupations, over one-third were separated, divorced or widowed (Figure 5.4). This finding may have resonance for the EWL agenda, as in their comparative study between Germany and Spain, Radl and Himmelreicher (2015) found that widowed men and women leave the labour force earlier than married individuals (probably due to the receipt of the survivor pension), and that divorced women remain in work for longer. While within the literature it is acknowledged that marital status can change for both men and women throughout the life course and that this can influence employment decisions in late life (Haslam et al., 2012; Weyman et al., 2012; Szinovacz, 2013a), there is currently limited scope within the EWL agenda to address the effects of changes in marital circumstances. Thus, to ensure that *all* older individuals are adequately prepared for later life employment choices, sufficient strategies, such as financial planning for retirement, need to be made available to staff throughout their working life, irrespective of their current- or assumed marital status in older age.

With regard to ethnicity, while the findings showed that the ethnic composition of the older health and care support staff had a greater proportion of individuals from the BME community than the older health and care professionals, over 90 per cent of both groups comprised individuals from the White ethnic group (Figure 5.7). These findings differ slightly from those found in the literature, where 86 per cent of professionals, and 87 per cent of support staff were White (HSCIC, 2014a). Data from adult social services also reported that overall, individuals describing themselves as White comprised 82 per cent of the labour force (Skills for Care, 2012). While the findings differed from the literature, it must be borne in mind that data from the HSCIC and Skills for Care comprise all adults within the specific workforces aged 16 years and over, whereas the research findings include only those aged 50 years and over.

Literature discussing the relationship between ethnicity and the EWL agenda is scant, and Hussein (2011) reported that little is known about the participation of workers from BME groups in the UK care sector. Nonetheless, as well as population ageing, the older population is becoming more ethnically diverse, and it is estimated that by 2051 there will be 3.8 million BME individuals aged 65 and over, and 2.8 million aged 70 and over (Lievesley, 2010; ONS, 2014i). While authors such as Cohen et al. (2002) and Hussein (2011) discuss BME workers within health and social care, they do not relate their findings specifically to older BME workers, or to their individual occupations. Nevertheless, they do highlight some issues that may be relevant for older workers within the older health and care professionals and older health and care support staff groups. Hussein (2011) reported that a greater proportion of BME workers in the health and social care sector could be found in qualified nursing and social worker roles, a result similar to that found in the results from this research (Figure 5.7). However, Hussein (2011) also noted that within health and social care, BME workers without qualifications were also present, but tended to occupy roles that administer only basic care; demonstrated by the results of this research in Figure 5.7. The literature also points to evidence of a gender difference in the BME composition of the health and social care labour force. It was noted that there is a relative under-representation of BME women, and it was suggested that this may be related to perceptions from some BME communities that care work for women is an unsuitable profession (Robinson et al., 2006; Hussein, 2011). These results differ from the overall results found in this research (Figure 4.2). However, the work conducted by Hussein (2011) focused on *British* BME social care workers, whereas within this research individuals who identified as belonging to the BME ethnic group were considered regardless of being British born or migrant. Additionally, another potential reason for the difference in results could be related to the age groups examined; the age range of those included in Hussein's (2011) study was wider than within this research, and included all social care workers aged 18 and over.

In their study from the USA, Cohen et al. (2002: 100) championed the need to increase the ethnic diversity in the health care labour force, and argued that with increasing evidence of ethnic diversity among the wider population, health care workers 'must become culturally competent practitioners'. The authors argued that without exposing potential students to health and care workers who are from BME communities, not only are the needs of the population not being met, but that individuals from the BME community will be deprived of examples for professional aspiration, thus limiting the future labour force (Cohen et al., 2002). With the older population in the UK becoming more ethnically diverse, and the demand for health and social care increasing, continued effort to recruit, and arguably retain, employees from the BME community is required (Lievesley, 2010). 'While health and social care workers from BME groups in the UK cannot be considered homogenous' (Hussein, 2011: 6) due to differing cultural and religious practices, from a policy perspective, there is a need to promote health and social care jobs among BME groups without a *one-size-fits-all* approach (Hirsch et al., 2011). It is posited, that as well as promoting these sectors for recruitment purposes, raising the profile of health and social care work among older health and social care staff from BME backgrounds, may encourage them to remain in the labour force for longer. Thus, while White individuals form the majority of the older health and care professionals and support staff groups, the retention of older workers from a BME background is crucial. Within the EWL agenda, specific policy that takes into consideration the cultural needs of ethnic minority groups, is required that focuses on encouraging older BME workers to remain in work for longer.

7.3.2 The key socioeconomic characteristics of the selected occupation groups

Socioeconomic status is a measure of an individual's social position based on education, earnings, housing tenure and occupation (Lynch and Kaplan, 2000; Dalstra et al., 2006; Bukodi et al., 2011; Bukodi and Goldthorpe, 2013). The educational attainment of the two selected occupation groups showed that overall the older health and care professionals had attained higher education than the older health and care support staff group (Figure 5.9). Given that the groups were divided into those with a professional qualification (older health and care professionals) and those without (older health and care support staff), as defined by the HSCIC, Skills for Care and the CfWI, (Skills for Care, 2012; CfWI, 2013; HSCIC, 2014a), the findings were not unexpected. Nevertheless, the educational attainment of the older health and social care labour force is an important consideration when aiming to encourage longer working lives. In his research of older American workers, Burtless (2013a: 1) found that educational attainment was a 'key determinant of worker productivity', and reported that higher level education leads to higher pay, more employment opportunities and ultimately to better health in older age. As a profession, nursing in the UK is

now moving towards graduate status having been part of the higher education system since the turn of the twenty-first century (Andrew, 2012). Likewise, the social work profession has seen 'significant innovations', and the qualification process now leads to degrees at undergraduate and postgraduate level (Croisdale-Appleby, 2014: 10). Additionally, social workers now also have a core set of national standards of proficiency in place (HCPC, 2012). The AHPs have had graduate status since the early 1990s, and like social workers, have their own standards of proficiency (HCPC, 2013a; b, 2014). Therefore, according to Burtless' (2013a) argument, in terms of encouraging working for longer, from an educational attainment perspective, it appears that members of the older health and care professionals group are more likely to work for longer because of their higher socioeconomic status. While in contrast older health and care support staff, whose level of work may have been limited by lower level qualifications requirements, and the lack of recognition by a professional regulatory body, may choose to retire from the labour market (Lovegrove et al., 2013; Skills for Health, 2014).

However, it is argued that the situation for those employed as health and care support staff is to change. In light of the *Francis Inquiry* (Francis, 2013) into the failings of care at the Mid-Staffordshire NHS Foundation Trust, from a policy perspective, the education of support staff in health and social care has taken centre stage (The King's Fund, 2013). The reports by Cavendish (2013) and Lovegrove et al. (2013) recommended standardisation of training, with a focus on the links to nursing training and the development of a certificate of care to ensure that health and social care support workers provide consistent quality care. The subsequent *Care Certificate*, which was introduced in 2015, builds on the National Minimum Training Standards (Skills for Care and Skills for Health, 2013) and aims, through the use of learning outcomes and competencies, to ensure that health and social care support workers deliver 'caring, compassionate and quality care' (Skills for Care et al., 2014: 1).

While the development of the *Care Certificate* is to be applauded for improvements to the quality of care to patients and the recognition of the role of the support worker, it should be borne in mind that with regard to older workers, as discussed in Chapter 2, some individuals hold negative views about participating in training and development opportunities (Bohlinger and van Loo, 2010; Padilla, 2011), and furthermore, that training for older workers should be appropriate to their learning style (Armstrong-Stassen and Templer, 2005; Zwick, 2011; Oakman and Wells, 2012). While there is evidence that training is important to older workers, and when conducted in an appropriate manner, may be associated with their decision to remain in the labour force for longer (Zwick, 2011; Carmichael and Ercolani, 2012), at present initiatives under the EWL agenda do not explicitly encourage older workers to participate in training opportunities. By raising the profile of the support worker's role with the introduction of the *Care Certificate*, the EWL agenda

needs to recognise the changing nature of these roles. With increased role recognition, job satisfaction may improve, and may lead older health and care support staff to view remaining in work as more attractive than retiring from the labour market (Saari and Judge, 2004; Oakman and Wells, 2012; Pagán, 2013).

Confirming concerns raised by Blundell and Etheridge (2010) and Mandel (2012) that inequality in earnings between genders is evident, the analysis of earnings among both the older health and care professionals and older health and care support staff showed that, over half of the women earned in the lowest earnings level and over half of the men earned in the middle earnings level (Figure 5.10). Moreover, when the selected occupation groups were analysed separately, more nuanced differences in earnings were noted. Among the older health and care professionals group, the majority of men and women earned within the middle earnings level; however there was a far larger proportion of women than men who earned in the lowest earnings level (Figure 5.12 and Figure 5.13). In comparison, among the older health and care support staff, the largest proportions of both genders earned within the lowest earnings level (Figure 5.12 and Figure 5.13). The differences in earnings between the professionals and the support staff were in agreement with pay scales available for the health and social care sector (NHS Careers, 2014), and concurred with evidence from Gregorio and Lee (2002) and Piha et al. (2010) that those with a higher education generally receive higher wages. However, as noted by Hills et al. (2010), the discrepancy in earnings found between older men and women in the professionals group, confirmed the existence of earnings inequality between genders working in the same occupation. Nonetheless, despite concurring with documented evidence, the results highlight the need for EWL legislation to encompass policy that recognises earnings discrepancies between occupation groups, and between genders.

The policy implications of earnings inequalities not only affect an individual's material circumstances, but there is evidence of a relationship between earnings inequality and health (Diener et al., 1993; Fiscella and Franks, 2000; Weich et al., 2002; Rowlingson, 2011). Although there is a 'social gradient in health' (the higher the individual's socioeconomic position, the better their health), agreement has not been reached on a causal link (Rowlingson, 2011: 5). Moreover, there is a dearth of evidence relating to whether earnings inequality has an effect on older health and social care workers' health. Despite a lack of evidence proving causality, the effect that earnings inequality may have on the working patterns of the older health and social care labour force and specifically on older health and care support staff cannot be ignored. Within the political agenda, the Government needs to develop policy focussing on earnings equality; where men and women working in the same occupational group are paid equally, thus ensuring parity for all older health and social care staff.

With regard to housing tenure, as a whole, owner-occupation was found to be the dominant tenure status among the older health and social care labour force. However, when the older health and social care labour force was considered by selected occupation group, although owner-occupation remained the dominant, the results showed that a larger proportion of older health and care support staff than older health and care professionals rented their accommodation (Figure 5.15). For these individuals, this result may reflect the differences in earnings observed between the occupational groups, with the support staff earning less on average than the professionals (Figure 5.12 and Figure 5.13) (Barón and Cobb-Clark, 2010; Cribb et al., 2014b). Additionally, the impact of the economic crisis of 2008 caused a sharp increase in house prices and by creating increased borrowing restrictions, the crisis has made owner-occupation less attainable for many with lower earnings (Carter, 2011; ONS, 2013a). Moreover, with a higher proportion of divorced, separated or widowed individuals (Figure 5.4), the older health and care support staff may also find the costs of renting rather than owner-occupation more manageable (Carter, 2011).

Nevertheless, due to the effects of poor housing quality, location, and a generally lower socioeconomic status associated with renting, the literature suggests that older individuals living in rented accommodation tend to have a lower health status than those who live in owner-occupied accommodation (Frogner, 2002; Macintyre et al., 2003; Hartig and Fransson, 2006; Windle et al., 2006; Connolly, 2012). While within the remit of this study of the older health and social care labour force it has not been possible to determine a relationship between health and housing tenure, the observations from the literature may have implications for the working patterns of health and social care workers in later life. Hence, further research is required to determine whether there are health-related effects on the working patterns of older health and social care workers who rent their accommodation.

7.3.3 The work pattern characteristics of the selected occupation groups

The literature reported that flexible work opportunities are a factor in encouraging individuals to remain in work for longer in later life (Lissenburgh and Smeaton, 2003; Harris et al., 2010; Joyce et al., 2010; Vickerstaff, 2010; Shacklock and Brunetto, 2011). Flexible work patterns allow older workers to balance their need to pursue family commitments and leisure activities, while maintaining the benefits of labour market activity, such as earnings, savings and pension contributions (Loretto et al., 2005b; Cebulla et al., 2007; Blakeley and Ribeiro, 2008; EHRC, 2010; Sykes et al., 2010). As part-time working is the most prevalent type of flexible working pattern observed in the UK, analysis of the older health and care professionals and older health and care support staff focussed on those who reported working part time (Loretto et al., 2005b; Cebulla et

al., 2007; Padilla, 2011). In both selected occupation groups, over 40 per cent of staff worked part-time, with more support staff working part-time than professionals (Figure 5.16). These findings demonstrate that the opportunity for flexible work in the form of part-time work, was not only available to older workers in the selected occupation groups, but that this opportunity was taken up.

More nuanced results were found when the occupation groups were examined by age group. While it remained evident overall that a larger proportion of older support staff worked part-time in comparison to the older professionals group, among those aged 50 to 59, there was little difference (around 38 per cent) between the two occupation groups (Table 5.1). This suggests that like data from the ONS (2013d), in regards to age, older individuals in both occupation groups have a similar work pattern up to 60 years of age. However, the results for those aged 60 and over showed a different, and perhaps in terms of the EWL agenda, a more interesting result. Here, the results showed that a larger proportion of older support staff (over 70 per cent) than older professionals (over 60 per cent) worked on a part-time basis (Table 5.1). While documented evidence in relation to individuals within the selected occupation groups is limited, Topping (2006) and Atkinson and Hall (2011: 88) reported that healthcare employees perceive that flexible working makes them 'happy', and that happiness improves their work performance. Moreover, although the link between happiness and job satisfaction is debatable, there is a positive correlation between improved work performance and job satisfaction (Saari and Judge, 2004; Atkinson and Hall, 2011).

As well as a link to happiness, the effect of flexible working on health appears to be positively associated with improved health (Joyce et al., 2010). By reducing work-related stress and improving work-life balance, flexible working (especially in the form of part-time work) was found to benefit the health of older workers (Benach et al., 2002; Houston and Waumsley, 2003; Joyce et al., 2010; DH, 2012a). However as workers aged 50 years and over are not a homogenous group (Vickerstaff, 2010), caution should be noted when considering policy development in relation to specific groups of staff, such as those employed within the older professionals and older support staff groups. Furthermore, to dispel any existing differences, such as availability of flexible work, that may be experienced by different social groups, Joyce (2010: 1) reported that further evidence is required 'about how the health effects of flexible working are experienced by different types of workers, for instance, comparing women to men, old to young and skilled to unskilled'.

The results of this research suggest that flexible working opportunities are available and up taken by older workers in the older health and care professionals and older health and care staff groups.

As evidence from the literature suggested that access to these opportunities can potentially improve health and work place happiness (Atkinson and Hall, 2011), it is posited that efforts in relation to flexible working by the Government via the EWL agenda are creating an environment that is conducive to older workers extending their working lives. Additionally, with the right to request flexible working being extended to those without child- or family-care responsibilities (ACAS, 2014; BIS, 2014; Press Association, 2014), opportunities for more older health and care professionals and support staff to access flexible work may further the goal of the EWL agenda, to encourage older workers to remain in work for longer.

However, while having the opportunity to work flexibly may be seen as a positive move forwards for the older health and care professionals, the older health and care support staff and the EWL agenda, the main reason given by the older health and care support staff group, and the reason given by over one-quarter of the older health and care professionals for working part-time was the inability to find full-time work (Figure 5.17). While Loretto et al. (2005b) and Danson (2007), reported that workers aged 50 years and over find it challenging to find work, they referred to unemployed individuals wanting to re-enter the labour market, rather than those working part-time because of the lack of full-time opportunities. Valletta and Bengali (2013: 3) suggested that 'involuntary part-time workers' (i.e. individuals who work part-time but would prefer full-time work), are affected by wider economic issues such as the recent recession, where due to financial pressures organisations are unable to offer full-time employment. Although the Valletta and Bengali (2013) study was conducted in the USA, it may have relevance to the older professionals and support staff within this research, as since 2008, the health and care sector in England has been subject to austerity measures imposed by the Government as a result of the economic downturn (Roberts et al., 2012).

With these results in mind, for there to be a successful outcome from EWL initiatives, workforce planning for the health and social care sector requires urgent attention. On the back of the Government's report *Vision for Adult Social Care* (DH, 2010d), *Skills for Care* (2011b: 1) developed a workforce development strategy that was intended to 'support workforce commissioning, planning and development' by equipping those that provide social care with the knowledge and skills to provide quality services. Consequently the DH (2010c) and subsequently Smith (2015), produced a *National Framework* for planning and developing the NHS workforce by integrating service and financial planning. Crucially, what separates this latter measure from previous efforts is the focus on collaborative working between national, regional and local organisations. While these reports are to be commended in their focus on education, CPD, and acknowledging the need for the appropriate numbers of staff, there lacks discussion about how full- and part-time work opportunities may benefit health and social care workers aged 50 years and over. The DH,

Skills for Care and the wider Government should work together, much like the proposal to integrate health and social care (HM Government, 2012a), to bring their vision for health and social care workforce development and initiatives within the EWL agenda to successful fruition; only by combined efforts will there be outcomes that can sustain health and social care services for the ageing population, while simultaneously encouraging older workers to remain in work for longer.

7.3.4 The health characteristics of the selected occupation groups

The findings from the analysis of whether a long-term health problem existed among individuals within the older health and care professionals group and the older health and care support staff group showed that overall, within both selected occupation groups, over 50 per cent reported no health problems (Table 5.2). A comparable proportion of staff in both selected occupation groups reported that although a health problem existed, it did not affect their work, however a larger proportion of support staff than professionals reported that their health problem did affect work (Table 5.2). It is acknowledged by the Health and Safety Executive (HSE) that the health and social care sector has one of the highest records among all industries of working days lost per worker due to work-related self-reported ill-health (HSE, 2014). The occupations that had the highest average days lost due to self-reported illness (per full-time equivalent worker) in the year 2013/2014 were the caring personal services (i.e. care workers) and nurses. The occupations with the highest rate of new cases of self-reported illness 'caused or made worse by current or most recent job' were nurses, caring personal services and health and social care associate professionals (AHPs) (ibid.: 4). In both selected occupational groups a larger proportion of women than men reported that their health problem did affect their work (Table 5.3 and Table 5.4). This may in part be due to the gender differences noted in reporting ill-health, in that men delay accepting that a health problems exist longer than women, or it may reflect the differences in health problems experienced between men (for example, heart related problems), and women (for instance, stress) (Doyal et al., 2003; Johnson et al., 2003; Loretto et al., 2005a).

Both academic literature and the HSE confirmed that musculoskeletal disorders are the main cause of work-related health issues among the health and social care sector (Buchan, 1999; Fitzgerald, 2007; Brooke et al., 2012; HSE, 2014). However, while the results of this research showed that musculoskeletal problems were the main health problem experienced by women in both the older professionals and older support staff group (Table 5.6 and Table 5.8), among male older health and care professionals, the largest proportion reported health problems within the 'other' category; suggesting for example, problems with hearing or mental health (Table 5.5). To some degree there is evidence to support these results as 'age is the biggest single cause of

hearing loss' with the decline evident from around the age of 40 (NHS Choices, 2015: 1); however, although there is no evidence to suggest that hearing loss is more prevalent in men than women, men are more likely to report problems with hearing (Fook and Morgan, 2000; NIDCD, 2015), which may explain the results found in this research.

With regard to mental health, Rosenfield and Smith (2010: 260) suggested that women experience problems such as anxiety and depression, whereas men exhibit more problems related to substance abuse and antisocial behaviour, and concluded that 'neither men nor women exceed the other in mental health problems, but rather experience very different kinds of problems'. There is evidence that occupational stress influences nurses' mental health, and that the prevalence of depression and anxiety is high among nurses (Lee, 2013; Taghinejad et al., 2014). Nevertheless, the reasons for differences reported by men and women in the older health and care professionals group are not clear, but may reflect differences in the reporting of health problems in that men are less likely to want to admit to a health issue, and thus report health problems later than women (Doyal et al., 2003).

Among older male support staff the findings were more representative of evidence reported by Maertens et al. (2012), where problems with heart and circulation and diabetes were more prevalent (Table 5.7). This result may reflect the disparities associated with health status among those with a lower socioeconomic position. Unhealthy behaviours such as smoking, excessive alcohol consumption and reduced physical activity, while largely socially determined, are associated with individuals with lower education and earnings (Fiscella and Williams, 2004; Pampel et al., 2010). With a high prevalence of heart and circulation problems, as well as diabetes, the results for the older male support staff confirm concerns raised by Shavers (2007) and Mackenbach (2015), whereby lower socioeconomic status increases the risk of cardiovascular- and ischemic heart disease in later life. Through the *Independent Inquiry into Inequalities in Health* (DH, 1998), the Government attempted to address the disparities in health associated with socioeconomic position. However limited success was achieved, with the recommendation for more effective policy and a wider implementation strategy required to achieve a 'population-wide impact' (DH, 2010b; Mackenbach, 2011; Mackenbach, 2015: 121). In this respect, the *Marmot Review* (DH, 2010b: 15) aimed to 'ensure a healthy standard of living for all' by strengthening the role of ill-health prevention among the wider public; nevertheless, to date, it remains to be seen whether this aim has been realised.

With regard to overall discrepancies between the results for the men and evidence from the literature, it is reiterated that this research focussed on the *main* health problem reported. As such, while 'other' health problems were determined to be the main health problem for the

largest proportion of men, skeletal and joint problems were identified as the main health problem for over one-quarter of the men (Table 5.5).

The lowest proportions of men whose health problem affected their work were found among the older professionals aged from 55 to 59, and for older support staff in the age group of 65 and over (Table 5.3). While for women, in both selected occupation groups the lowest proportion was found in the age group of 65 and over (Table 5.4). From these results it may be presumed that within both selected occupation groups there is an element of self-selection, i.e. where older workers with a health problem, especially one that affects their work, choose to exit the labour force before the age of 65 (Cai, 2010; García-Gómez et al., 2010). Moreover, Higgs et al. (2003), van den Berg et al. (2010) and Robroek et al. (2013) reported that poor health is a contributory factor in exit from paid employment. Furthermore, in their study of early retirement among NHS employees, Pattani et al. (2001: 209) suggested that 'rates of early retirement were higher in jobs likely to involve more manual work', such as that completed by health and care support staff. Early-exit from the labour force due to ill-health may, on an individual level, increase the risk of financial problems and contribute to further health issues, while on a societal level, rather than early-exit, increases in work participation are being encouraged to compensate for the decreasing birth rates and increases in LE (Robroek et al., 2013). Thus, encouraging older workers to remain in work for longer has benefits for both the individual and society as a whole.

To prevent early labour market departure by older health and care professionals or older health and care support staff, policies that encourage older staff to remain in work for longer need to enrol the support of OH to promote work-based health endorsement (Ilmarinen, 2006; McDermott et al., 2010; Maertens et al., 2012). Considering that the integration of health promotion with activities that support OH is necessary 'to maintain a productive workforce' (Robroek et al., 2013: 124), the EWL agenda needs to integrate health promotion into policy to encourage older workers to remain in work for longer.

Having discussed findings from the research in relation to research question 2, the following section takes the discussion forward by considering the research results in relation to research question 3.

7.4 The characteristics of the older health and social care labour force and the likelihood of working part-time at the SPA and beyond

This section discusses the results of the analysis that focussed on the third and final research question:

Among the health and social care labour force aged at the SPA and over, what factors are associated with working part-time and what are the differences between the genders?

Faced with population ageing and the resulting economic costs, in line with EU guidance, the Government has implemented a series of measures to encourage working longer (OECD, 2013; Lain and Vickerstaff, 2014). One of the most contested measures to encourage longer working lives has been raising the SPA; currently the SPA for men and women in the UK (65, and 60 or 62 years respectively) will rise to 68 years by 2050 (OECD, 2011; 2013). However, as has recently been conveyed within the DWP's *Fuller Working Lives* report which advocates 'working as long as is necessary to create the future you want' (DWP, 2014b: 4), rather than extending working life indefinitely, the abolition of the DRA enables an element of choice for those who wish to work beyond the age of 65 (Carr, 2010; BIS, 2010; HM Government, 2011). With the introduction of a new State Pension in 2016, and automatic enrolment in an employer pension scheme, the aim of these Government initiatives is to remove the 'cliff-edge' retirement scenario and to enable individuals to plan for the retirement that suits their needs and desires (Vickerstaff, 2010: 875).

The number of individuals working beyond the age of 65 has been increasing, and it is likely that this trend will continue with the rise in the SPA (Lain and Vickerstaff, 2014; Vickerstaff, 2014). Yet despite evidence relating to the reasons why individuals exit the labour market before the SPA, limited empirical attention has been given to those who currently work at the SPA and beyond (Cebulla et al., 2007; Finch, 2014). For older workers who remain in work, flexible working patterns are preferred and part-time work is considered a 'viable option' (Gannon and Roberts, 2011: 4749). Furthermore, Clayton (2010) and Schalk (2010) argue that there is strong evidence to seek reform to enable individuals to work at and beyond the SPA on a more flexible basis.

Given that flexible working opportunities are a factor in older workers' decisions to remain in work for longer (Loretto et al., 2007a; Harris et al., 2010; Joyce et al., 2010; Atkinson and Hall, 2011) and with workforce planning in mind, key demographic, socioeconomic, health and employment characteristics were used to establish associations with the likelihood of the older health and social care labour force working part-time at and beyond the SPA. As presented in Chapter 6, all of the regression analyses completed found that the final Model (Model 4), provided the best-fit; therefore the following discussion focuses on these results.

7.4.1 The characteristics of the older health and social care labour force associated with working part-time at the SPA and beyond

As Szinovacz (2013b: 2) stated, 'plans to work in later life have great policy relevance' as they affect welfare expenditure, state and employer pension expenditure, and labour force supply and demand. The literature showed that factors associated with an older worker's choice to work at and beyond the SPA are varied and complex, ranging from demographic characteristics such as age and marital status, to health, earnings and which occupational sector the older worker was employed within (Blake, 2004; Hedges and Sykes, 2009; Flynn, 2010a; Morrell and Tennant, 2010; Brown and Vickerstaff, 2011; Maltby, 2011; Brooke et al., 2012).

It appears that with regard to the older health and social care labour force, gender is not significantly associated with the likelihood of working part-time at or beyond SPA (Table 6.2). While there is evidence from the literature that suggests gender is associated with retirement decisions, such as with the link between women's retirement and spousal retirement, and the necessity for women to work for longer due to interrupted working lives, there is little evidence to support the significance of gender for those who decided to continue to work at and beyond the SPA (Vickerstaff et al., 2008; Atkinson and Hall, 2009; Frieze et al., 2011; Lain and Vickerstaff, 2014). The results of this research may however suggest that older men and women who work in the health and social care labour force may have similar expectations from work after the SPA as they doing preceding it. While it has been recognised that men and women's career paths differ due to the influence of care and domestic responsibilities (Loretto and Vickerstaff, 2011; Duberley et al., 2014), the nature of health and social care work regardless of gender, requires individuals who have a caring personality (Brody, 1988; Wilkin and Slevin, 2004). This type of personality may reflect work decisions that are more aligned with personal values rather than gender (Mirvis and Hall, 1994). Moreover, the results may have been influenced by the predominance of women found in the older health and social care labour force; nevertheless, they may also reflect the nature of men and women in the older health and social care labour force who carry out caring work.

The presence of a health problem that affected work was found to be significantly associated with working part-time at or beyond the SPA (Table 6.1). While evidence of a relationship between health and part-time work at and beyond the SPA is limited, wider literature suggests that older workers with a health problem often choose to transition to retirement through part-time work (Bound et al., 1999; Blundell et al., 2002; Cai, 2010; Jones et al., 2010). Ill-health has been widely reported to be associated with an older worker's decision to leave the labour market, although it has been suggested that as long as employers take a flexible approach to work, health problems

are not necessarily a barrier to remaining in employment (McGarry, 2004; van den Berg et al., 2010; Robroek et al., 2013; Schofield et al., 2013). With the support of OH services, those with health problems who remain in work, can be supported to manage their problem within the realm of their job role (McDermott et al., 2010; Maertens et al., 2012). Thus, to encourage older health and social care workers to remain in work for longer, the provision of OH services that both promote good health and manage ill-health are required.

Age and ethnicity were found to be associated with the likelihood of working part-time at and beyond the SPA, and did not appear to have an effect on other characteristics (Table 6.1). In support of these findings, although the ethnic composition of her study of retirement expectations in the USA differed (White, Hispanic and Black African Americans), Honig (1996) also found that that ethnicity was associated with work patterns at and beyond the SPA. Additionally, age and ethnicity were found to be significant factors in the decision to work part-time as a transition from full-time work to full-time retirement (Quinn and Kozy, 1996). Moreover, from the UK perspective, the ONS (2013d) reported that age was an important factor in the working patterns of older workers, where after the SPA, there was a preference for part-time work.

With the notion that financial security is 'typically the outcome of accumulated advantage through working life' (Vickerstaff et al., 2008: 125), it was to be expected that with the addition of earnings and housing tenure, and to some degree educational attainment (as this has an effect on earnings (Galobardes, 2006b)), the likelihood of working part-time would be influenced (Table 6.1). Earnings play an important role in decision-making about working in later life and they are an important reason for many to remain in work (McKay and Smeaton, 2003; Barnes et al., 2004; Clayton, 2010). Information on how earnings are associated with older workers' choice of part-time work at and beyond the SPA is scant; however, one notion based on evidence from the wider literature, is that due to the need for additional income, low earnings can *push* an individual into part-time work (Adams and Rau, 2004; Leeves and Herbert, 2014). This may be particularly relevant for individuals in the older health and care support staff group, whose earnings capacity is generally lower than those within the older health and care professionals group (Figure 5.11). It may also be relevant for older female workers throughout the health and care labour force, as they attempt to increase their finances for later life, which may have been diminished due to the provision of child – and family related care earlier in their working life (Andrews et al., 2005; Finch, 2014). Another notion is that individuals in the older health and social care labour force who had sufficient earnings, and were thus able to build funds for later life through savings and pension contributions, are *pulled* into working part-time through the acknowledgement of the benefits of working, and the need to maintain a work-life balance (Saari and Judge, 2004; Atkinson and Hall, 2011; Sahlgren, 2013).

In line with the results from this research, Lain and Vickerstaff (2014) reported that educational attainment is significant in the decision to work past the SPA, and suggested that higher level attainment is synonymous with continuing in work; although in agreement with Szinovacz et al. (2013), Lain and Vickerstaff (2014) did acknowledge that gender differences may be evident. Additionally, the results from this research support the evidence by Blake (2004), in that there is a relationship between housing tenure (because of implications on wealth) and employment decisions at and beyond the SPA. Nonetheless, although Macintyre et al. (2003) reported that individuals who own their own home are often seen to be wealthier than those who rent, they advised caution when using housing tenure as a proxy for income, as these measures may only be weakly associated with each other.

This section discussed the results of the first regression analysis where the whole health and social care labour force aged at the SPA and beyond were considered. The following section builds the discussion further, by deliberating the findings from the regression analysis that controlled for gender.

7.4.2 The characteristics of the older health and social labour force associated with working part-time at or beyond the SPA: gender differences

Within the literature it was reported that demographic, socioeconomic, health and employment characteristics among the wider labour market are associated with working longer after the SPA (Weyman et al., 2012; Szinovacz, 2013a; DWP, 2014b; Lain and Vickerstaff, 2014). However, while these provide evidence to compare the results of the research to, it is borne in mind that these reports do not take into account female-dominant workforces, and do not necessarily relate specifically to the older health and social care labour force.

The literature suggested that gender is associated with employment decisions made by older workers around the SPA and that flexible working opportunities, especially part-time working, motivate older workers to remain in the labour force rather than to retire from it (Finch, 2011; Post et al., 2013; Ryan and Whelan, 2013; Timms et al., 2015). Part-time working at or beyond the SPA has become more widespread among both sexes (Lain and Vickerstaff, 2014); however, as has been identified throughout this thesis, there is a lack of evidence relating directly to the older health and social care labour force. Moreover, as Finch (2014) reported, there is a lack of evidence relating to working at and beyond the SPA in general. Finch (2014: 31) asserted 'for policy to successfully promote extended working, it is important to understand *why* people work longer'. The results presented in this research therefore add to our understanding of the older health and social care labour force, and inform the limited debate regarding working at and

beyond the SPA. With this in mind, and with consideration of the initiatives to encourage older workers to work for longer (Silcock, 2012; Weyman et al., 2012; DWP, 2014a), factors associated with working part-time at and beyond the SPA among the men and women in the health and social care labour force were examined.

With the exception of the selected occupation group variable, the findings showed that among women, demographic, socioeconomic, health and employment characteristics were significantly associated with likelihood of working part-time at or beyond the SPA (Table 6.3). In contrast, the findings showed that for men in the health and social care labour force aged at the SPA and over, with the exception of ethnicity and marital status, all demographic, socioeconomic, health and employment characteristics were found to be not significantly associated with the likelihood of working part-time at and beyond the SPA (Table 6.4). These results, particularly those relating to the men, may have been affected by the sample population size (women N=2,206, men N=146). Nonetheless, at 14 per cent, the sample population size of men aged at the SPA and beyond in the health and social care labour force (2009-2013) represented the pattern observed from the analysis of the whole older health and social care labour force (Figure 4.2).

The findings suggested that regardless of gender, individuals who were separated, divorced or widowed were less likely to work part-time at and beyond the SPA than their married counterparts (Table 6.3 and Table 6.4). Nevertheless, the literature provides conflicting opinion. Lissenburgh and Smeaton, (2003), Barnes et al. (2004) and Whiting (2005) suggested that married individuals are more likely to continue in work, and to link their working pattern with their spouse to maximise financial benefits, and to make the move to full-time retirement together. In contrast, Finch (2014) reported that divorced women (but not men) remain in work for longer, and married women tend to retire from the labour force before the SPA. Additionally, Smeaton and McKay (2003) found that while overall widows and those who are single are less likely to work, women who were separated or divorced exceeded those who were married. Moreover, they suggested that this may be motivated by the social interactions in which one can engage by going to work, together with financial motives attached to the negative effects on household income through marital breakdown (*ibid.*).

For men, educational attainment, like most of the characteristics considered, was deemed not to be a significantly associated with working part-time at or beyond the SPA; nonetheless, it was significant for women who held a diploma or a degree (Table 6.3 and Table 6.4). These results differed from reports within existing literature which found that older workers with a higher level of education were more likely to work beyond the SPA, while having no qualifications was associated with leaving the workforce prior to or at the SPA (Campbell, 1999; Smeaton and

McKay, 2003; Järnefelt, 2010; Burtless, 2013a). However, Lain and Vickerstaff (2014) reported that the association between educational attainment and working beyond the SPA is also influenced by gender; that men with degrees were more likely to work beyond the SPA, whereas for women, those with middle-level qualifications (such as A-Levels) were more likely to do so. Although the evidence from the literature does not directly relate to the older health and care labour force or to part-time working *per se*, it is suggested that the relationship between educational attainment and working beyond the SPA is complex, especially when other factors such as a gender are included (Smeaton and McKay, 2003; Clayton, 2010; Burtless, 2013a). Thus, with regard to educational attainment, the findings from this study add to the debate about working patterns beyond the SPA, and highlight the need for further empirical research to explore the subtleties associated with the decision to work at and beyond the SPA.

In relation to the health and social care labour force aged at the SPA and over, lower earnings were found to be significantly associated with the likelihood of women (but not men) working part-time (Table 6.3 and Table 6.4). Evidence from the literature suggested that one of the major influences for older workers of either gender to continue in work at or beyond the SPA, was that of financial security (Clayton, 2010; Lain and Vickerstaff, 2014). However, while Barnes et al. (2004: 34) recognised that finances were an important component, they found that older workers' opinion in this regard 'varied considerably'. Some older workers reported that the financial rewards of remaining in work, even on reduced earnings, ensures the maintenance of quality of life, while others cited being able to defer pension entitlements as important (Smeaton and McKay, 2003; Barnes et al., 2004). Conversely, some older workers were content to forfeit the financial benefits of remaining in work in favour of more leisure time (Barnes et al., 2004). The results found in this research may reflect women's heterogeneous work histories that result in a disjointed financial history and lower expected income in retirement (Oakman and Wells, 2012; Post et al., 2013; Finch, 2014: 31). Women may need to remain in work at and beyond the SPA to ensure financial security in later life, but may also require a flexible work pattern to attend to domestic responsibilities such as caring for a partner or grandchildren (Gangl and Ziefle, 2009; Evers and Sieverding, 2013; Madero-Cabib and Kaeser, 2015). Additionally, as there is the propensity for women in general to work on a part-time basis prior to the SPA, it may be difficult for them to consider increasing their hours to full-time at and beyond the SPA (Finch, 2014). Thus, the results from this research support the general notion that for women, earnings are significant in the likelihood of working part-time at and beyond the SPA.

Both men and women with the highest probability of working in later life are those with outstanding mortgages, with those that rent their accommodation being the least likely to work (however, this may be a reflection of access to housing benefits among those aged at the SPA and

over) (Smeaton and McKay, 2003). The results from this research showed that both renting and having a mortgage were significant factors associated with working part-time at and beyond the SPA for women, but neither were for men. Nonetheless, as women are more likely to have lower earnings than men throughout their working life, and a lower expected income in retirement (due to reduced savings resulting from gaps in their career to support children and family), for women these findings may reflect the need to continue paying for accommodation whether through rent or mortgage (Frogner, 2002; Finch, 2014). For many individuals, housing costs account for the majority of their monthly outlay, and these costs influence the earnings individuals seek (Ford et al., 1996; Frogner, 2002). Therefore, the results for men may suggest that rather than exploring part-time work, they seek full-time employment to afford necessary housing costs (Atkinson and Hall, 2009). Furthermore, Gregory (2011) argued that individuals who own their property outright or who have outstanding mortgage repayments, may in fact be disadvantaged when considering their employment options. He reported that as housing costs have risen, the notion that an owned-home is a 'portable asset' is outdated; the advantages of being able to sell and downsize or to relocate for employment purposes is far more difficult, and thus in turn forces individuals to work in jobs that are less than desirable (ibid.: 17). For the older health and social care labour force it is clear that housing tenure has an influence on work patterns at and beyond the SPA; however although owning a property, either outright or with a mortgage, has a positive influence on working part-time in later working life (which can be argued as advantageous for work-life balance and job satisfaction), as suggested by Oswald (1997) there may be negative influences associated with these decisions. Therefore, in relation to gender it is suggested that further research is required to explore factors associated with housing tenure, and the older health and social care labour forces' decision to work part-time at and beyond the SPA.

In the older health and social care labour force, for women aged 65 and over with a health problem that did not affect their work, there was a greater likelihood of working part-time at the SPA and beyond, than for women of the same age with no health problems (Table 6.3). These results may support evidence from Irving et al. (2005) who suggested that health problems do not necessarily have to be a barrier to remaining in work, and Smeaton and McKay (2003: 20) who reported that 'there is a strong link between people's perceptions of their health, and the likelihood that they were in paid work [after the SPA]'. However, the results may also infer that female health and social care workers aged 65 and over need to continue in work for financial reasons, but are unable to complete full-time work due to health restrictions (Smeaton and McKay, 2003; Clayton, 2010). Nevertheless, by remaining in work at and beyond the SPA, older women in the health and social care labour force support the concept of *active ageing* (whereby older individuals are encouraged to increase their potential by fully participating in activities, such

as work) to mitigate against further health issues, and to challenge negative perceptions that society may have towards older people (Šímová, 2010; Walker and Maltby, 2012).

The differences noted between the research results and the literature may reflect differences in research design. Firstly, rather than focusing on the health and social care labour force, research conducted by Lissenburgh and Smeaton (2003), Smeaton and McKay (2003), Barnes et al. (2004), Whiting (2005) and Finch (2014) examined older people in the labour force *per se*, and as such may not have identified the nuances specific to particular workforces such as of those working within health and social care. Secondly, findings reported by Lissenburgh and Smeaton (2003) and Barnes et al. (2004) were obtained through qualitative methods, and as such may have contemplated factors not considered within the LFS (2009-2013). Thirdly, by analysing the British Household Panel Survey (BHPS), Finch (2014) accessed household data rather than information relating solely to the individual. Finally, while relevant to this research, the studies used to compare the results of this research had different overall objectives; Smeaton and McKay (2003) and Whiting (2005) considered labour market participation of older workers, and Finch (2014) the influences of work-family history on later life employment. It is however evident that additional research would enable these differences to be explored further.

Although the sample size for this analysis may be seen as a limitation to this research, it does concur with reports from the literature of women being over-represented in caring professions and with the acknowledgment that within the NHS there is a great reliance on female employees (Atkinson and Hall, 2009; Eborall et al., 2010; Leeves and Herbert, 2014). Moreover, individuals working beyond the age of 65 are increasing (Vickerstaff, 2014), and Finch (2014) reported that within the UK, women are more likely than men to extend their working lives. Finch reasoned that women are less able to accrue adequate pension provision due to 'opportunity costs' (such as, providing care within the family, divorce and bringing up children as a single parent) incurred over the working life span (*ibid.*: 31). This notion is supported by Loretto and Vickerstaff (2013) and Evandrou and Glaser (2003) who conceded that compared to men, women are more likely to have disparities in their career path due to variations in care responsibilities and the effect of marital status, which in turn lead to lower individual income in older age (Bardasi and Jenkins, 2002; Leeves and Herbert, 2014). Additionally, the desire to maintain social status that is attached to being in work encourages women to remain in work beyond the SPA (Finch, 2014).

EWL initiatives need to recognise the influences and motivations that are associated with the older health and social care labour force continuing to work at and beyond the SPA. Moreover, to assist with workforce planning policy, a greater understanding behind the choice of work pattern in later life is essential. In addition to the analyses for this thesis, further research concerning the

working patterns of older workers within health and social care is necessary to inform policy makers of the importance of demographic, socioeconomic, health and employment characteristics (both at an individual and household level), in the decision-making process around work in later life.

7.5 Chapter summary

In this chapter, the key results of the research were discussed in relation to the research questions of this thesis, and relative to the literature available. In contributing to the evidence base, this unique piece of research offers insights into the characteristics and work patterns of the older health and social care labour force in England; providing much needed data on this under-researched group.

The results were consistent with the literature in that they showed that, like older workers in general, a proportion of older health and social care staff leave the labour force before the SPA (Vickerstaff et al., 2008). Also as in the literature relating to workers in general, inequality in earnings between genders was evident, and it was shown that health has an influence on work patterns in later working life (Smeaton and McKay, 2003; Danson, 2007; Loretto et al., 2007b; Cann and Dean, 2009; Blundell and Etheridge, 2010; Gray, 2013). Moreover, it was clear that in regard to the gender composition of the older health and social care labour force, direct comparisons could be made with research conducted by Eborall et al. (2010) and Leeves and Herbert (2014). Nevertheless, while consistencies with documented evidence were found, discrepancies were also evident.

The findings showed that gender was not associated with likelihood of working part-time at or beyond the SPA. This was a surprising result, as in the main the literature suggested that gender is influential in employment decisions made in later working life (Kunze, 2005; Flynn, 2010a; Loretto and Vickerstaff, 2013; Szinovacz, 2013b; Finch, 2014). The discrepancy between the results and the literature may reflect the unique nature of the study; that by focussing on a female dominant research population rather than older workers *per se*, distinctive rather than general observations were identified. Moreover (and perhaps more pertinent to this research), is the suggestion that there is limited evidence to support the association between gender and those who do decide to remain in work beyond the SPA (Lain and Vickerstaff, 2014).

Regarding ethnic composition, a discrepancy was noted between the research findings and evidence from the literature. While there was agreement in terms of the overall ethnic configuration of the labour force, in that White individuals form the majority of the older health and social care labour force, the findings showed that there was a greater proportion of

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individuals from the BME group than described in the literature (HSCIC, 2014a; Skills for Care, 2012). Although this discrepancy may again allude to the specific sample population identified for this research, it may also suggest that nationally representative data is limited. For example, in relation to ethnicity, Skills for Care and the HSCIC considered all staff aged 16 years and over (ibid.); whereas using defined age groups such as 50 to 54, and 55 to 59 would enable more nuanced analysis. It is also acknowledged by authors such as Hussein (2011) that in regard to the UK, there is limited information available on the participation of BME individuals in the care sector.

Chapter 8: Conclusion

8.1 The characteristics of the older health and social care labour force

In light of an ageing population within the UK, the Government introduced a series of measures to encourage older workers to remain in work for longer (Pensions Commission, 2006; Hedges and Sykes, 2009; ONS, 2012). Among the policies introduced under the EWL agenda, the DRA was abolished and increases to the SPA were introduced (Carr, 2010; BIS, 2010; HM Government, 2014). With policy encouraging older workers to extend their working lives, and with the health and social care labour force ageing concomitantly with the general population (Buchen, 1999; Cohen, 2006; Ono, et al., 2013), the aim of this research was to fill a gap in the literature by exploring the characteristics of the older health and social care labour force, and to determine factors that are associated with their working pattern in later life. To realise this aim, factors that influence older worker's employment decisions in later working life were ascertained, and descriptive, bivariate and multivariate analyses of merged data from the LFS (2009-2013) (N=10,123) were completed.

Although the literature review highlighted the paucity of evidence relating to the older health and care labour force, evidence relating to older workers in general showed that factors such as age, gender, ethnicity and marital status (Lissenburgh and Smeaton, 2003; Loretto et al., 2005b; Griffiths, 2007; Flynn, 2010b; Phillips et al., 2010; Radl and Himmelreicher, 2015), health (Schofield et al., 2013; Taghinejad et al., 2014; Timms et al., 2015), education, earnings and housing tenure (Andrews et al., 2005; Blakeley and Ribeiro, 2008; Porcellato et al., 2010; Morescalchi, 2011) and length of service (Igbeneghu and Popoola, 2010; Kosana and Gordana, 2013) were important in influencing working patterns leading up to and beyond the SPA. However, factors that are associated with labour market participation in later working life are complex, and it is acknowledged that the older health and social care labour force is heterogeneous; showing diversity in attitudes, skills, health, domestic commitments and financial status (Marshall, 1995; Lissenburgh and Smeaton, 2003; Loretto et al., 2005b; Flynn, 2010b; Padilla, 2011). Additionally, due to limited empirical evidence relating to this workforce and the need to address workforce planning issues to secure adequate health and care provision for the ageing population (Dixon, 2011; Skills for Care, 2011b), the importance of understanding the characteristics of the older health and social care labour force, together with establishing factors that are associated with their working patterns in later working life became apparent.

The context of studying the older health and social care labour force in England is firstly, that of the ageing population, and secondly, the EWL agenda (Hedges and Sykes, 2009; ONS, 2012). LE for men and women has risen over the last 30 years, and is expected continue to rise in the foreseeable future (Danson, 2007; Cracknell, 2010; ONS, 2013b). In addition to living longer, men and women can expect to live a healthier life; at age 65, men are expected to live a further 10 years, and women a further 12 years in good health (ONS, 2012f). Nevertheless, in terms of the provision of health and social care, concern has been raised about the state's ability to socially and financially support an increasing number of older people (Tinsley, 2012). It was suggested by authors including Loretto et al. (2005b), Ingham et al. (2009) and the ONS (2012m), that to cope with the associated rising costs of an ageing population, such as increases in pension provision and decreases in taxation, older workers should be encouraged to remain in work for longer by extending their working lives.

The EWL agenda was borne out of the need to address the social and economic implications relating to increases in longevity, and has led to the Government prioritising initiatives to encourage older workers to remain in work for longer (OECD, 2006; Weyman et al., 2012; House of Lords, 2013). While the RCM (2012) and Leversidge (2013) raised concerns around the notion of meeting the physical and mental demands that accompany the midwifery role at age 68, the implications of the EWL agenda for the older health and social care labour force have received little attention within the academic literature. Empirical evidence is crucial to raise our understanding of the older health and social care labour force, and how the EWL agenda may influence working patterns in later working life. Therefore importantly, this thesis adds to our understanding of this little-researched group, and enables debate about the adequacy of current policy provision in encouraging their longer working lives.

In addition to the lack of documented literature concerning the older health and social care labour force, there is scant information relating to the occupations that this labour force comprises. As the health and social care labour force includes older workers from a wide demographic, socioeconomic and health spectrum (HSCIC, 2014b; Skills for Care, 2014), it was important to determine whether specific occupation groups had particular characteristics that may be associated with their employment decisions in later working life. Thus, the older health and social care labour force was divided into two selected occupation groups; the older health and care professionals, which comprised nurses, social workers and AHPs, and the older health and care support staff, which included care workers and nursing auxiliaries.

One of the aims of the EWL agenda is to encourage older workers to remain in work for longer (Banks and Tetlow, 2008; DWP, 2010b; Weyman et al., 2012). While there is some evidence on

older workers who remain in work beyond the SPA, such as work by Smeaton and McKay (2003) and Clayton (2010), there is a dearth of information relating to the older health and social care workers who continue to work at and beyond the SPA. Evidence does however suggest that flexible working opportunities are a key factor to encourage older workers to remain in work (Loretto et al., 2007a; Vickerstaff et al., 2008; Atkinson and Hall, 2011); to this end, to address the gap in the literature, factors associated with the likelihood of the older health and social care labour force working part-time at and beyond the SPA were examined.

8.2 Revisiting the aims and the research questions for the thesis

The overarching aim of this thesis investigated the older health and social care labour force in England. More specifically, the objective was to establish the characteristics of this labour force, and to determine the factors associated with their decision to work part-time at and beyond the SPA. As outlined in Section 1.4, the research questions for this thesis were:

1. What are the characteristics of the older health and social care labour force in England that are associated with later working life employment decisions and how do these compare to the general labour force of the same age?
2. To what extent do the demographic, socioeconomic, health and employment characteristics of the older health and care professionals and the older health and care support staff differ?
3. Among the health and social care labour force aged at the SPA and over, what factors are associated with working part-time and what are the differences between the genders?

The findings based on the three research questions provided important insights in the shape of demographic, socioeconomic, health and employment characteristics, and established a baseline for further quantitative and qualitative research. For example, in answering research question 1, it was evident that in comparison to the older general labour force in England, the older health and social care labour force comprised a greater proportion of staff aged 50 to 59 (Figure 4.1). It was also apparent that, in agreement with Eborall et al. (2010) and Leeves and Herbert (2014), women formed the majority of the older health and social care labour force; whereas the older general labour force had a more even gender distribution, with men forming the larger proportion (Figure 4.2). There was a clear divide between the job sectors; the majority of older health and social care staff were employed within the public sector, while the preponderance of the older general labour force worked in the private sector (Figure 4.13). Similar work patterns were found between the older health and social care and the older general labour force, with both showing

that less than half of their staff worked on a part-time basis (Figure 4.14). While the older health and social care labour force appeared more highly educated, a smaller proportion earned in the highest earnings level, and similar proportions of both labour forces had mortgages remaining on their properties (Figures 4.9, 4.10, 4.11, 4.12). From a health perspective, over 45 per cent of older health and social care workers reported a long-term (over twelve months) health problem (Figure 4.16). Moreover, among women with a health problem, in agreement with the literature, skeletal or joint problems were the main cause for concern (Buchan, 1999; Clayton, 2010; Brooke et al., 2012). While the results for men in the older health and social care labour force showed that 'other' problems, such as with hearing and eyesight were the main health problem, heart or circulation problems were also a concern for around one quarter of the men, again demonstrating similarities to the literature (Maertens et al., 2012).

To further our understanding of the older health and social care labour force, research question 2 focussed on selected occupation groups within the older health and social care labour force. Here, it was confirmed that both the older health and care professionals group, and the older health and care support staff, were again predominantly female (Figure 5.2). It was encouraging to ascertain that flexible working opportunities were available to both selected occupation groups, and that over 40 per cent of both groups worked on a part-time basis (Figure 5.16). It was however, disappointing to establish, though concurring with Loretto et al. (2005b), that the main reported reason for working part-time was the inability to find a full-time job (Figure 5.17). The main differences between the older health and care professionals and the older health and care support staff was in regard to educational attainment and earnings (Figure 5.9 and Figure 5.10). Given that the division between the groups was created by whether their occupation required a professional qualification or not, it was not surprising to find that overall the professionals were more highly educated than the support staff. It therefore follows, as higher educational attainment leads to greater earnings (Post et al., 2013), overall the support staff (who generally had lower educational attainment than the professionals), on average earned less than the professionals; a likely reflection of the differing responsibility level held by the different selected occupation groups.

From the explorations for research questions 1 and 2, a key set of characteristics were established to inform the investigation for research question 3. Thus, using the key characteristics as identified during the literature review and the analysis for research questions 1 and 2, the third research question examined the association between the older health and social care labour forces' characteristics and the likelihood of working part-time at or beyond the SPA. Table 6.1 through Table 6.8 illustrated the demographic, socioeconomic, health and employment characteristics associated with such an outcome; for example, with regard to the older health and

social care labour force as a whole, it was one's age, ethnicity and earnings which were significant factors (Table 6.1). The findings concurred with evidence from the literature, where for example, Smeaton and McKay (2003) and Oakman and Wells (2012) found that age was a factor in working beyond the SPA, Phillipson and Smith (2005) identified ethnicity as an influence, and Barnes et al. (2004) reported that earnings influenced the decision to remain in work beyond the SPA.

However, in contrast to the literature (Smeaton and McKay, 2003; Clayton, 2010; Post et al., 2013), having a health problem (that does not affect work) was found to be not significant. It is proposed, as suggested by Dwyer and Mitchell (1999), that this may reflect a selection effect; that individuals within the older health and social care labour force who have significant or unmanageable health problems, exit the labour force earlier, and that those who remain in work are more likely to be able to manage their health problem.

The results relating specifically to gender showed that among women in the older health and social care labour force, a similar pattern was observed to that of the whole older health and social care labour force, and likely reflects the predominance of female workers in this labour force (Table 6.3). The findings for men however, showed that only ethnicity and marital status were significant factors in working part-time at or beyond the SPA (Table 6.3). These results may reflect differences in working patterns demonstrated by non-White males (i.e. an increased likelihood of considering part-time work) (ONS, 2014c), and the importance of the social interaction received through work (Radl and Himmelreicher, 2015). Within the older health and social care labour force, men comprised a small minority (Figure 4.2), which echoes reports from Leeves and Herbert (2014) and Eborall et al. (2010). This may be a factor in the different patterns observed between men and women; however other considerations may also explain the differences seen. For example, disjointed employment patterns experienced by women may lead to reduced savings and pension entitlement, requiring them to work for longer than men, or it may suggest that women's tendency to work on a part-time basis prior to the SPA is carried over in the working pattern post-SPA (Oakman and Wells, 2012; Post et al., 2013; Finch, 2014).

8.3 Policy implications

The findings in relation to the older health and social care labour force highlighted the importance of understanding the characteristics and motivations that are associated with later life employment choices. For policies under the auspices of the EWL agenda, and for health and social care sector workforce planning to be successful in achieving effective provision for the demands of an ageing society, policy makers need to address key issues that may currently inhibit choice in later working life. This section focuses on issues raised by this thesis relating to three policy areas;

earnings inequality between the genders, the availability of flexible work patterns for older workers and the need for development of workplace health promotion.

Equality between the genders, particularly in relation to earnings, is a key EWL policy concern, as it has been shown that inequality in earnings affects subjective well-being, which may ultimately influence the decision to work for longer in later life (Karlsson et al., 2010; Šímová, 2010; McNair et al., 2012; Rözer and Kraaykamp, 2013). This thesis found that unlike the older general labour force, the older health and social care labour force was dominated by female workers (Figure 4.1). It was established that over 50 per cent of women in the older health and social care labour force earned within the lowest earnings level (Figure 4.11), whereas the largest proportion of men (54.1 per cent) in this labour force, earned within the middle earnings level (Figure 4.11). Moreover, earnings was determined to be a statistically significant factor associated with women working part-time at and beyond the SPA (Table 6.2). Furthermore, disparity in earnings between men and women *in the same* labour force (older health and social care labour force) was evident.

Figure 5.10 showed that within both selected occupation groups, the majority of women earned in the lowest earnings level, whereas for men, the majority earned within the middle earnings level. These findings support reports within the literature about gender inequalities and earnings. The *National Equality Panel Report* (Hills et al., 2010) stated that on average, women earned 22 per cent less than men, even though women now have qualifications that are equal to, or higher than men's (ibid.: 220). Post et al. (2013: 92) concurred, and suggested that 'structural and economic constraints', such as labour market interruptions and part-time employment associated with child-care, contribute to women accumulating less wealth over the life course than men. With the EWL agenda in mind, it is important to understand that gender inequalities experienced over the life course continue to influence the need to undertake paid work at and beyond the SPA, with women in particular continuing to work to balance the 'opportunity costs' resulting from care giving, divorce and child-support (Finch, 2014: 31).

Strudwick and Kirkpatrick (2013: 8) define extending working lives as 'providing opportunities for those who want to work longer, both up to [the] SPA and beyond'. While the Government has introduced measures to encourage longer working lives, such as the removal of the DRA, increases to the SPA, and developments to employment benefits (DWP, 2008; Weyman et al., 2012), it has not addressed the ongoing inconsistencies in earnings between the genders. While Finch (2014) suggested that women work for longer to make up for the financial discrepancies associated with gaps in the working life course, men have different reasons for working longer, such as job satisfaction and autonomy (Clayton, 2010). Employment in later life and working after the SPA should be a matter of choice (Vickerstaff, 2006a; Clayton, 2010; Vickerstaff, 2010). However with the existence of the gender wage-gap (Kunze, 2005; Booth, 2009; Antonczyk et al.,

2010), without parity in earnings between men and women throughout the working life course, opportunities to grow savings and pension contributions are uneven (Price, 2007). The decision as to whether to continue to work in older age for women is currently limited to that of necessity rather than choice, or as an 'unavoidable obligation' as defined by Vickerstaff (2010: 873). To achieve success with the EWL measures, it is necessary for the Government and policy makers to focus on greater work-life balance during one's working life, so that extending one's working life in older age is a matter of choice rather than compulsion (RCN, 2008; NHS Employers, 2012).

Throughout the literature, access to flexible working opportunities was reported to be an important factor in decisions relating to later life working (Loretto et al., 2007a; Clayton, 2010; Harris et al., 2010; Joyce et al., 2010; Atkinson and Hall, 2011; Timms et al., 2015). With regard to the older health and social care labour force, the findings from this research suggested that opportunities for flexible employment are available and undertaken, with a greater proportion (almost 45 per cent) than the older general labour force (33 per cent) reporting that they worked on a part-time basis (Figure 4.14). However this result was somewhat sullied by the finding that over one-third of the older health and social care labour force worked part-time because they could not find adequate full-time employment (Figure 4.15). It is evident from the findings that older health and social care workers require access to not only flexible working practices, but also to full-time work opportunities.

Under the auspices of the EWL agenda, the Government aims to encourage older workers to remain in work, and indeed to work for longer in later life (DWP, 2010b; Metcalf and Meadows, 2010; Morrell and Tennant, 2010; Sykes et al., 2010). It is to be applauded that the Government and organisations are working towards ending the *cliff-edge* retirement scenario (Vickerstaff, 2006b), by enabling individuals to access part-time work. Nevertheless, following the introduction of the Health and Social Care Act (HM Government, 2012b), Clinical Commissioning Groups (CCGs) now have the responsibility for the purchase and provision of health and care services, and although supporting the need for Government and organisations to enable older workers to work part-time, the House of Lords (2013) recommended the move to 24-hour NHS and community services seven days-a-week. Although workforce specifics were not alluded to in the *Ready for Ageing?* document (ibid.), in light of the reforms, to encourage older workers to remain in the health and social care sector, further work is required from the Government to ensure that via the CCGs, a range of flexible and full-time work opportunities are available.

Within the literature health was identified as a key determinant for exiting the labour market early (Watson et al., 2003b; Andrews et al., 2005; Blakeley and Ribeiro, 2008; Berry, 2010; Post et al., 2013), and as the results of this research showed that 45 per cent of older health and social

care workers experience a long-term health problem (Figure 4.16), the health of this labour force is a key policy concern. Moreover, as health issues that affect the amount of work that can be completed were found to be significantly associated with working part-time at and beyond the SPA (Table 6.1), the health of older health and social care workers may have resonance for the EWL agenda.

While among the older health and social care labour force a comparable proportion (54 and 54.4 per cent respectively) of men and women reported that they did not experience a health problem (Table 4.4 and Table 4.5), of those that did experience a long-term health problem, differences in the type of problem were noted between the genders (Table 4.6 and Table 4.8). The results concurred with evidence from the literature where, for example, skeletal or joint problems were prominent for women, while heart and circulation problems were conspicuous for men (Buchan, 1999; Fitzgerald, 2007; Brooke et al., 2012; Maertens et al., 2012). However despite the differences observed, as a range of health problems were evident across the age groups for both men and women, the development of policy in relation to improving the health of the workforce should take an holistic approach that focuses on the individuals' unique health problems (McDermott et al., 2010; Maertens et al., 2012).

A key policy strategy in addressing the health needs of the workforce, is the development of OH services. According to NHS Health at Work (2015) OH is fundamental to the success of the NHS, and as Ilmarinen (2006) and McDermott et al. (2010) suggested, OH departments play a crucial role in enabling older workers to remain in work for longer. However, despite attempts from the Government to instigate improvements in workplace health, through reports such as the *Healthy Staff, Better Care [...]* (DH, 2011a) and *NHS Health and Well-being Improvement Framework* (DH, 2011b), little tangible evidence is available to show that improvements are being made. The *Fuller Working Lives* document (DWP, 2014b: 4) attempts to dispel the myth that older workers must continue to work 'until you drop' and proposes to 'offer more support to help keep people in work' (ibid.: 24), but falls short in outlining developments to OH services. While NHS Health at Work (2015: 1) purports to ensure that the NHS has a 'healthy, motivated workforce' the documents cited as evidence are becoming somewhat out-dated (for example, the *NHS Health and Well-being Report* (2009)). At present, unlike England, Scotland appears to have developed policy related to the *Health Working Lives* strategy discussed in the *Fuller Working Lives* document (DWP, 2014b). There is demonstrable evidence through the *Scottish Centre for Healthy Working Lives* (2015) that the health and well-being of employees is being taken seriously. Employers are guided about how they can promote health at work, with practical advice including how to improve the diet, increase physical activity and support the mental health and well-being of their staff (ibid.). Similarly, as discussed earlier, by considering the capacity of the individual

worker and the work that they do, in Finland the *Work Ability* approach has proven to be successful in sustaining working life into older age for over thirty years (TAEN, 2008; Ilmarinen, 2010). The challenge for Government in relation to maintaining and promoting a healthy older health and social care labour force that is able and willing to work for longer, is to move beyond the rhetoric, and encourage both employers and employees to engage with practical strategies, such as those demonstrated in Scotland and Finland.

8.4 Limitations of the research

The limitations highlighted in this study provide guidance for further research involving the older health and social care labour force.

The first limitation to this research lies within the dataset. For example, the LFS does not offer variables in relation to self-reported general health or limiting long-standing illness (LLSI) which are standard measures of health (Bound et al., 1999; Crawford et al., 2009; Riddell et al., 2010). Self-report has the advantage of capturing an individual's perceptions of their health status, and can reveal patterns that may lead to changes in health status by considering social and behavioural factors (National Collaborating Centre for Primary Care (National Collaborating Centre for Primary Care (UK), 2009). While this type of rich data was not available in the LFS for the analyses in this study, and may have affected the findings, other variables which were not affected by the limitations of self-report (such as reliability or accuracy of response (Bound, 1989)) were available. These variables compensated for the absence of a self-reported health variable, eliciting important results that can be further explored with alternate datasets (that include a self-reported health variable) such as the English Longitudinal Study of Ageing (ELSA). Furthermore, the absence of LFS variables relating to job satisfaction and age discrimination may have affected the results obtained in this research. For example, individuals who are dissatisfied with their work may be more likely to reduce their working hours to part-time (Vickerstaff et al., 2008; Clayton, 2010; Post et al., 2013). By not having variables within the LFS to analyse job satisfaction, it is not possible to comment on its importance for the older health and social care labour force. That said, factors such as age discrimination might be more appropriately examined from a qualitative viewpoint, as demonstrated by Karpinska et al. (2013) and McGregor and Gray (2002), or in regard to job satisfaction, by employing an alternate dataset such as the Survey of Health, Ageing and Retirement in Europe (SHARE) as demonstrated by Pagán (2013).

Although representative, the sample population of men in this analysis was small (N=146). This may have influenced the findings in that a small sample size can affect the likelihood that a statistically significant result is true (Button et al., 2013). However, the relatively small number of

older male health and social care workers may reflect the notion that men are less likely to extend their working lives than women (Finch, 2014). To increase confidence in the results, further research could consider a larger sample of men, although caution should be taken to avoid the chances of creating a false positive result, or adopt a qualitative research design to gain rich data to support the quantitative findings from this study (Ritchie and Lewis, 2003; Bryman, 2008).

A further limitation of this study to be considered is selection effects. 'Selection effects occur when factors that influence the choices that produce cases also influence the outcome or dependent variable for each case' (Fearon, 2002: 7). In this study, the sample population comprised economically active individuals and excluded economically inactive older health and social care workers. It is possible that the individuals who exited the labour force did so because they experienced work-affecting health problems; creating a selection bias in that only the healthiest older workers remained in the labour market (Punnett, 1996). Additionally, by excluding occupations such as hospital doctors and GPs from the sample population, findings associated with earnings may have been subject to bias, in that only workers within a limited earnings capacity were considered (Ballantine et al., 2007; Kachan et al., 2015). Furthermore, by focussing on a predominantly female workforce, older male workers were under-represented within the analysis; creating a selection bias that may be the cause for the observed gender differences found relating to the factors associated with working part-time at and beyond the SPA (Bonsignore et al., 2002; Eborall et al., 2010). Nevertheless, only analysis of the full cohort permits unbiased results (Punnett, 1996), which (due to time and economic constraints) was not possible in this research. However future research may consider widening the sample population to capture data from economically inactive older health and social care workers, potentially reducing the selection effect (Punnett, 1996; Thygesen et al., 2011).

Finally, while the analyses did not address the direction of causality in the relationship between part-time work at and beyond the SPA and the factors associated with this decision, as different patterns were noted between the findings for men and women, and among the selected occupation groups, it is proposed that the findings from this study warrant further exploration. [ENREF 445](#)

8.5 Recommendations for further research

While this thesis has explored the characteristics and working patterns of the older health and social care labour force in England at a specific point in time (2009-2013), it has highlighted a number of opportunities for further research that could improve our understanding further.

To provide a more complete illustration of the older health and social care labour force, further research could include studies with a longitudinal design. In longitudinal research, the researcher conducts several observations of the same subject over a period of time, thus providing the researcher with the ability to detect changes or developments in the characteristics of the population (Goldstein, 1968; Institute for Work and Health, 2009). Within the wider labour force, it has been reported that ill-health is associated with early-exit from the labour market exit (van den Berg et al., 2010; Schofield et al., 2013), and in response it has been argued that increasing health promotion activities through OH services may maintain a productive labour force and lead to more older workers remaining in work in later life (Lund et al., 2001; Ilmarinen, 2006; Robroek et al., 2013; Scottish Centre for Healthy Working Lives, 2015). Furthermore, McDermott et al. (2010: 203) suggested that OH intervention needs to 'adopt a life course perspective in addressing the health, well-being and workability of older workers'. Thus, it is posited that to further our understanding of the older health and social care labour force, the relationship between OH services, health promotion and reported ill-health requires examination. Using a longitudinal approach could determine changes over time that may show health improvements associated with OH intervention and or health promotion activities. Additionally, this approach may determine further evidence of factors that are associated with working patterns in later life and, more specifically, a longitudinal study could address issues of causation within the interpretation of results, such as whether health promotion is associated with the decision to remain in work for longer in later life (Field, 2009).

Additional research could utilise qualitative methods, which can further investigate patterns emerging from the statistical analyses. Qualitative research focuses on the '*why* and *how* of human behaviour' (Guest et al., 2013: 1), therefore this approach could offer data that would enrich the research conducted for this thesis. As reported in Section 2.3.2.2, job satisfaction is associated with the decision to remain in work in later life, but due to constraints within the LFS, as discussed in Section 8.4, this research was not able to explore this characteristic. While job satisfaction is a complex concept (Oakman and Wells, 2012), it has been shown that high levels of job satisfaction are associated with the retention of staff in the wider labour force (Wright and Bonett, 2007). Moreover, job satisfaction involves the interaction between dynamic and changing structural determinants (such as organisation and occupation related factors), and psycho-social determinants (such as self-evaluation and the importance of work) (Oakman and Wells, 2012). As such, it is suggested that the use of qualitative semi-structured research methods, such as individual interviews and focus groups, would allow researchers to explore emerging themes related to the older health and social care labour force, job satisfaction and employment choices

in later life. This would not only enhance the results found within this research, but also benefit the wider body of evidence relating to the EWL agenda.

Finally, the results from this research showed that, as observed in the wider labour force (Gray, 2013; Rözer and Kraaykamp, 2013; Leeves and Herbert, 2014), earnings inequality is apparent among the older health and social care labour force (Figure 4.10 and Figure 4.11). While these findings add to the body of knowledge relating to earnings inequalities, further study of the older health and social care labour force could augment these results. For instance, by exploring the nuances of gender and interrupted careers (Gangl and Ziefle, 2009; Kearns, 2010; Finch, 2014; Madero-Cabib and Kaeser, 2015), and the association with earnings, savings and pension provision (Price, 2007; Bardasi and Jenkins, 2010), could lead to the development of important workforce planning policy. Additionally, an investigation into what later-life financial planning the health and social care labour force have in place, could improve our understanding of their employment decisions around the SPA and have impact on EWL legislation. Furthermore, due to the paucity of evidence specifically relating to the older health and social care labour force, research with a cross-sectional, longitudinal or qualitative nature would contribute to our understanding of this labour force, and in turn, provide crucial evidence to support the need for focus on how their characteristics influence employment choice in later working life.

Appendices

Appendix A

Submission Number: 7779

Submission Name: The older health and social care labour force 30/10/2013: *This is email is to let you know your submission was approved by the Ethics Committee.*

Table 8.1 Ethics application

Risk Assessment Form
<p>Researcher's name: Alison Wadey</p> <p>Part 1: Dissertation/project activities</p> <p><i>What do you intend to do? (Please provide a brief description of your project and details of your proposed methods.)</i></p> <p>Secondary data analysis (descriptive, bivariate and multivariate) of the Labour Force Survey (England)</p> <p><i>Will this involve collection of information from other people? (In the case of projects involving fieldwork, please provide a description of your proposed sample/case study site.)</i> No</p> <p><i>If relevant, what location/s is/are involved?</i> N/A</p> <p><i>Will you be working alone or with others?</i></p> <p>UoS desk based research working alone (in a multiple occupancy office) with support from my supervisors</p> <p>Part 2: Potential safety issues / risk assessment.</p> <p><i>Potential safety issues arising from proposed activity?</i> Nil untoward</p> <p><i>Person/s likely to be affected?</i> Nil</p> <p><i>Likelihood of risk?</i> Nil</p> <p>Part 3 – Precautions / risk reduction</p> <p><i>Existing precautions:</i> If I am working away from the office environment, I inform my supervisors.</p> <p><i>Proposed risk reduction strategies if existing precautions are not adequate:</i> Nil required</p>

Table 8.2 Ethics subcommittee application

SSEGM ETHICS SUB-COMMITTEE APPLICATION FORM	
1.	Name(s): Alison Wadey
2.	Current Position: MPhil/PhD Candidate in Gerontology
3.	Contact Details: Division of Gerontology, Faculty of Social and Human Sciences ab2e09@soton.ac.uk 07983425372
4.	Is your study being conducted as part of an education qualification? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
5.	If Yes, please give the name of your supervisor N/A
6.	Title of your project: The older health and social care labour force: characteristics, retirement patterns and policy implications.
7.	What are the start and completion/hand-in dates of your study? 11/11/2013-28/02/2015
	When are you planning to start and finish the fieldwork part of your study? On-going secondary data analysis
8.	Describe the rationale, study aims and the relevant research questions of your study Along with the other three countries of the United Kingdom (UK), England has an ageing population (ONS, 2012n; o) and while living longer is a cause for celebration and has benefits for individuals and society, there are also challenges to be faced by society and Government (Loretto et al., 2007b; Mayhew, 2009; Vickerstaff, 2010). As individuals in the UK are living longer and spending more time in retirement and the ratio of people no longer in paid work versus those still working increases (the old-age dependency ratio), the economic pressure on the individual and the state is becoming unsustainable (Hedges and Sykes, 2009; ONS, 2012m). In an effort to address the economic consequences of the ageing population such as increased pension and welfare provision versus diminishing taxation from a smaller labour force, the UK Government has developed a series of policy measures aimed at extending the working life (Pensions Commission, 2006a; Hedges and Sykes, 2009). Although population ageing affects all occupational sectors, understanding how ageing impacts on the health and social care labour force is important as older people are the most common users of the health and social care system. With the background of an ageing population and policy reform to encourage longer working lives, the aim of this research is to explore the employment patterns of the older health and social care labour force in England. In identifying the determinants that affect their decision to remain in work or to retire, the impact on the older health and social care labour of working longer can be debated. To realise this aim, this research examines the implications of working longer, the Extending Working Lives (EWL) agenda (Weyman et al., 2012) and employs secondary data analysis of the Labour Force Survey (LFS). The unique contributions of this research are threefold. First, the examination of key occupation groups in the older health and social care labour force in England to determine their demographic and socioeconomic characteristics. Second, to establish working patterns prior to and beyond State Pension Age (SPA) and thirdly to highlight policy implications for the older health and social care labour force which may affect decisions to remain in work for longer. The importance of addressing this labour force lies with increasing longevity and the on-going demand for health and social care support from an ageing population. To ensure that the older health and social care labour force maintain an effective and efficient service, sufficient Government policy and organisational practice is required which acknowledges their on-going need for support as they themselves age. Research Question 1 To what extent have the demographic and socioeconomic characteristics of the older health and social care labour force changed over time (2002 and 2012)?

Research Question 2 What determinants affect the older health and social care labour forces' decision to remain in work beyond the current State Pension Age?	
9.	Describe the design of your study. Secondary data analysis of the Labour Force Survey (England). Descriptive, bivariate and multivariate data analysis that provides results to consider the research questions posed.
10.	Who are the research participants? N/A
11.	If you are going to analyse secondary data, from where are you obtaining it? The UK Data Service: http://ukdataservice.ac.uk/get-data.aspx
12.	If you are collecting primary data, how will you identify and approach the participants to recruit them to your study? N/A
13.	Will participants be taking part in your study without their knowledge and consent at the time (e.g. covert observation of people)? If yes, please explain why this is necessary. N/A
14.	If you answered 'no' to question 13, how will you obtain the consent of participants? N/A
15.	Is there any reason to believe participants may not be able to give full informed consent? If yes, what steps do you propose to take to safeguard their interests? N/A
16.	If participants are under the responsibility or care of others (such as parents/carers, teachers or medical staff) what plans do you have to obtain permission to approach the participants to take part in the study? N/A
17.	Describe what participation in your study will involve for study participants. Please attach copies of any questionnaires and/or interview schedules and/or observation topic list to be used. N/A
18.	How will you make it clear to participants that they may withdraw consent to participate at any point during the research without penalty? N/A
19.	Detail any possible distress, discomfort, inconvenience or other adverse effects the participants may experience, including after the study, and you will deal with this. N/A
20.	How will you maintain participant anonymity and confidentiality in collecting, analysing and writing up your data? When collecting the data, the UK Data Service, adhere to strict Data Protection and confidentiality legislation. Participants within the dataset will not be identified as part of this research, either within the analysis or the write-up. Data will not be shared with or passed on to third parties who do not have access permission from the UK Data Service
21.	How will you store your data securely during and after the study? The University of Southampton has a Research Data Management Policy, including for data retention. The Policy can be consulted at http://www.calendar.soton.ac.uk/sectionIV/research-data-management.html Data is stored on a password protected University desktop computer.
22.	Describe any plans you have for feeding back the findings of the study to participants. N/A
23.	What are the main ethical issues raised by your research and how do you intend to manage these? I have permission from the UK Data Service to use the LFS datasets for my research. I have agreed to use these as part of the PhD research only and agree not to forward these to anyone else. The dataset are stored on my university desktop computer and are password protected.
24.	Please outline any other information you feel may be relevant to this submission. Nil

Appendix B

Table 8.3 Tier-2 Point Based System (PBS)

Section	Sponsorship routes	Points	Qualification	Points	Prospective earning (£)	Points
A*	Job offer that MAC has defined as a shortage occupation	50	No qualifications	0	20,000-23,999	5
			A level	5		
	Job offer that passes resident labour market test	30			24,000-27,999	10
	(in key occupations)	(+5)	Bachelor's Degree	10	25,000-31,999	15
	Intra-company transfer	30	Master's Degree or PhD	15	32,000 +	20
B	Maintenance requirement (mandatory)	10				
C	Competence in English (mandatory)	10				

*Note: *=50 points required 70 points are required for a migrant to be categorised as a skilled worker and if the job is not included on the shortage occupation list, the employers must prove that the post cannot be filled by a resident worker (Bach, 2010).*

Source: Bach (2010: 258)

Table 8.4 The Personalisation Agenda

Major changes in 'care' are now planned for the UK. These have been framed in terms of 'personalisation' and are part of a broader personalisation agenda that is meant to transform public services, customising them to each individual citizen. In social care this development was initially presented as synonymous with a move to 'self-directed support', which was to be achieved mainly through 'individual budgets'. These represent a development of the direct payments pioneered by disabled people as part of the independent living movement. Here the aim is for service users to determine and control the support that they need to live independently. Qualifying service users receive a sum of money to spend as they wish on their support.

More recently, personalisation in social care has been discussed in broader terms to denote a move to more person-centred approaches to support across all services and support arrangements, including residential, day and traditional domiciliary services. The rhetoric is that personalisation will offer service users greater 'choice and control'. We are also learning that it is one thing for policymakers to adopt the language of independent living, but it may be another for the practices to be implemented.

Funding limits and narrowing eligibility criteria, rather than criteria of independent living, still largely determine what if any support people receive. There is still far from adequate or secure funding provided for service users' organisations, despite increasing government commitments to it. Finally, what has been developed as a democratising and liberating approach to supporting service users through them being in control of their own 'package of support' has tended to be reconceived by policy-makers in consumerist terms as the equivalent of them being an individual customer simply purchasing a service. This has seriously limited the gains achieved so far by these radical new ways of thinking.

Personalisation, however, has mainly been discussed as a new approach to providing support, rather than care. It is offered as a fundamental departure from a traditional menu of care-based responses, to a much wider range of possible means of offering support. These may be:

- mainstream provision, rather than dedicated social care services;
- conventional medicalised provision (for example, for mental health service users) or complementary therapies; and
- user-controlled support services.

The emphasis is on people being able to work out imaginative and effective ways of meeting their needs, regardless of what these are. In addition to personal assistance to help with daily living tasks, this can include money to pursue recreation and hobbies, to gain skills, to undertake education courses, to have breaks and holidays, to visit friends and strengthen circles of support, to have company or help from a trusted person out of hours, to access a user-controlled crisis centre, to pay for a pet, counselling or peer therapy.

Source: Beresford (2008)

Table 8.5 Standard Occupational Classification 2010

Standard Occupational Classification: Major Groups	
1	Managers, Directors and Senior Officials
2	Professional Occupations
3	Associate Professional and Technical Occupations
4	Administrative and Secretarial Occupations
5	Skilled Trades Occupations
6	Caring, Leisure and Other Service Occupations
7	Sales and Customer Service Occupations
8	Process, Plant and Machine Operatives
9	Elementary Occupations

Source: ONS (2010b: 11)

Table 8.6 Standard Occupational Classification 2010: Example of Structure

Major Group	Sub-major Group	Minor Group	Unit Group	Group Title
2				PROFESSIONAL OCCUPATIONS
	21			SCIENCE, RESEARCH, ENGINEERING AND TECHNOLOGY PROFESSIONALS
		211		Natural and Social Science Professionals
			2111	Chemical scientists
			2112	Biological scientists and biochemists
			2113	Physical scientists
			2114	Social and humanistic scientists
			2119	Natural and social science professional
		212		Engineering Professionals
			2121	Civil engineers
			2122	Mechanical engineers
			2123	Electrical engineers
			2124	Electronics engineers
			2126	Design and development engineers
			2127	Production and process engineers
			2129	Engineering professionals
		213		Information Technology and Telecommunications Professionals
			2133	IT specialist managers
			2134	IT project and programme managers
			2135	IT business analysts, architects and systems designers
			2136	Programmers and software development professionals
			2137	Web design and development professionals
			2139	Information technology and telecommunications professionals
		214		Conservation and Environment Professionals
			2141	Conservation professionals
			2142	Environment professionals
		215		Research and Development Managers
			2150	Research and development managers
	22			HEALTH PROFESSIONALS
		221		Health Professionals
			2211	Medical practitioners
			2212	Psychologists
			2213	Pharmacists
			2214	Ophthalmic opticians
			2215	Dental practitioners
			2216	Veterinarians
			2217	Medical radiographers
			2218	Podiatrists
			2219	Health professionals
		222		Therapy Professionals
			2221	Physiotherapists
			2222	Occupational therapists
			2223	Speech and language therapists
			2229	Therapy professionals
		223		Nursing and Midwifery Professionals
			2231	Nurses
			2232	Midwives
	23			TEACHING AND EDUCATIONAL PROFESSIONALS
		231		Teaching and Educational Professionals

		2311	Higher education teaching professionals
		2312	Further education teaching professionals
		2314	Secondary education teaching professionals
		2315	Primary and nursery education teaching professionals
		2316	Special needs education teaching professionals
		2317	Senior professionals of educational establishments
		2318	Education advisers and school inspectors
		2319	Teaching and other educational professionals
24			BUSINESS, MEDIA AND PUBLIC SERVICE PROFESSIONALS
	241		Legal Professionals
		2412	Barristers and judges
		2413	Solicitors
		2419	Legal professionals
	242		Business, Research and Administrative Professionals
		2421	Chartered and certified accountants
		2423	Management consultants and business analysts
		2424	Business and financial project management professionals
		2425	Actuaries, economists and statisticians
		2426	Business and related research professionals
		2429	Business, research and administrative professionals
	243		Architects, Town Planners and Surveyors
		2431	Architects
		2432	Town planning officers
		2433	Quantity surveyors
		2434	Chartered surveyors
		2435	Chartered architectural technologists
		2436	Construction project managers and related professionals
	244		Welfare Professionals
		2442	Social workers
		2443	Probation officers
		2444	Clergy
		2449	Welfare professionals
	245		Librarians and Related Professionals
		2451	Librarians
		2452	Archivists and curators
	247		Media Professionals
		2471	Journalists, newspaper and periodical editors
		2472	Public relations professionals
		2473	Advertising accounts managers and creative directors

Source: ONS (2010b: 13-16)

Table 8.7 Merging LFS datasets

NB *When the same information is presented within two different variables in different years e.g. ethcen15 & ETHEWUL (ethnicity), when merging datasets, these have to be paired. Only then can analysis be run that includes both data*

Identify the dataset required (e.g. 2009 which includes Q1, Q2, Q3, Q4)

Decide which is to be the destination dataset (all will be merged into this)

Destination dataset = Q1

Open Q1

Run a frequency to establish the total number of participants (thiswv) N=120,076

GET

FILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\ORIGINAL DATASETS\2009 LFS\2009 6199 Q1.sav'.

DATASET NAME DataSet1 WINDOW=FRONT.

FREQUENCIES VARIABLES=thiswv

/ORDER=ANALYSIS.

Wave to which data refers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	24963	20.8	20.8	20.8
	2	25875	21.5	21.5	42.3
	3	24586	20.5	20.5	62.8
	4	22813	19.0	19.0	81.8
	5	21839	18.2	18.2	100.0
	Total	120076	100.0	100.0	

Open Q2

Close Q1

Run a frequency to establish the total number of participants (thiswv)

Note number in wave 1 N=24,471

FILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA DATASETS\2009 6276 Q2.sav'.

DATASET NAME DataSet32 WINDOW=FRONT.

DATASET ACTIVATE DataSet32.

DATASET CLOSE DataSet31.

FREQUENCIES VARIABLES=thiswv

/ORDER=ANALYSIS.

Wave to which data refers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	24471	20.7	20.7	20.7
	2	24820	21.0	21.0	41.8
	3	23919	20.3	20.3	62.1
	4	23110	19.6	19.6	81.6
	5	21649	18.4	18.4	100.0
	Total	117969	100.0	100.0	

Select only those cases that are in wave 1 (as participants were interviewed in five consecutive waves and I don't want repeated data, so only their first wave data is required) IF (THISWV=1)

Run a frequency to check the numbers N=24,471

FILTER OFF.

USE ALL.

SELECT IF (THISWV=1).

EXECUTE.

FREQUENCIES VARIABLES=thiswv
/ORDER=ANALYSIS.

Wave to which data refers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	24471	100.0	100.0	100.0

Save as Q2W1

SAVE OUTFILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA '+
'DATASETS\2009 6276 Q2 W1.sav'

/COMPRESSED.

Open Q3

Close Q2

Run a frequency to establish the total number of participants (thiswv)

Note number in wave 1 N=24,935

GET

FILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA DATASETS\2009 6334
Q3.sav'.

DATASET NAME DataSet33 WINDOW=FRONT.

DATASET CLOSE DataSet32.

FREQUENCIES VARIABLES=thiswv

/ORDER=ANALYSIS.

Wave to which data refers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	24935	21.4	21.4	21.4
2	24869	21.3	21.3	42.7
3	22795	19.6	19.6	62.3
4	22143	19.0	19.0	81.3
5	21810	18.7	18.7	100.0
Total	116552	100.0	100.0	

Select only those cases that are in wave 1 IF (THISWV=1)

Run a frequency to check the numbers N=24,935

FILTER OFF.

USE ALL.

SELECT IF (THISWV=1).

EXECUTE.

FREQUENCIES VARIABLES=thiswv

/ORDER=ANALYSIS.

Wave to which data refers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	24935	100.0	100.0	100.0

Save as Q3W1

SAVE OUTFILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA '+
'DATASETS\2009 6334 Q3 W1.sav'

/COMPRESSED.

Open Q4

Close Q3

Run a frequency to establish the total number of participants (thiswv)

Note number in wave 1 N=23,650

GET

FILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA DATASETS\2009 6404
Q4.sav'.

DATASET NAME DataSet34 WINDOW=FRONT.

DATASET CLOSE DataSet33.

FREQUENCIES VARIABLES=thiswv
/ORDER=ANALYSIS.

Wave to which data refers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	23650	20.7	20.7	20.7
2	25245	22.1	22.1	42.8
3	22849	20.0	20.0	62.8
4	21353	18.7	18.7	81.5
5	21097	18.5	18.5	100.0
Total	114194	100.0	100.0	

Select only those cases that are in wave 1 IF (THISWV=1)

Run a frequency to check the numbers N=23,650

FILTER OFF.

USE ALL.

SELECT IF (THISWV=1).

EXECUTE.

FREQUENCIES VARIABLES=thiswv

/ORDER=ANALYSIS.

Wave to which data refers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	23650	100.0	100.0	100.0

Save as Q4W1

SAVE OUTFILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA '+

'DATASETS\2009 6404 Q4 W1.sav'

/COMPRESSED.

Open Q1 (the destination dataset)

Open merge file (in the SPSS Data Tab)

Click add cases

Browse to find Q2W1

Continue

Add all the variables (left box to right box)

Repeat for Q3W1, and Q4W1

Rename new merged dataset.

Run frequency to establish dataset numbers

GET

FILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA DATASETS\2009 6199

Q1.sav'.

DATASET NAME DataSet35 WINDOW=FRONT.

DATASET CLOSE DataSet34.

SAVE OUTFILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA '+

'DATASETS\2009 MERGED DATASET.sav'

/COMPRESSED.

ADD FILES /FILE=*

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/FILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA DATASETS\2009

6276 Q2 W1.sav'

/RENAME (atfrm2 atfrom cgqul dayspz degqul difqul4 evday eveve evhm98 evnght evsat evsun fled9d

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gorone hghqul homed1 homed2 homed21 homed22 homed23

homed3 hstqul in0792do indd07o indsc07o lssoth m3cry m3cryo matlve newqul nocust nolwf nvqhi

nvqqul nvqsam oycirc oycry oycryo oyeqm3 oyftpt oymnge oympr02 oysind oysocc oysolo oystat oysupvi

qalpl99 qlplo99 reg3 regone rsaqul samqul sc2komj sc2komn scqul

shftwk99 shftyp smesit smest2 soc2ko tecqul teleqa teleqb telqa2 telqb2 trhr93 trnday tronjb usuwrk1

usuwrk2 usuwrk3 usuwrkm1 usuwrkm2 usuwrkm3

```

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wchsu wchth wchtu wchwe
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d18 d19 d20 d21 d22 d23 d24 d25 d26 d27 d28 d29 d30 d31 d32 d33 d34 d35 d36 d37 d38 d39 d40 d41
d42 d43 d44 d45 d46 d47 d48 d49 d50 d51 d52 d53 d54 d55 d56
d57 d58 d59 d60 d61 d62 d63 d64 d65 d66 d67 d68 d69 d70 d71 d72 d73 d74 d75 d76 d77 d78 d79 d80
d81 d82 d83 d84 d85 d86 d87 d88 d89 d90 d91 d92 d93 d94 d95 d96 d97 d98 d99 d100 d101 d102 d103
d104 d105 d106 d107 d108 d109 d110 d111 d112 d113 d114 d115
d116 d117 d118 d119 d120)
/DROP=d0 d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17 d18 d19 d20 d21 d22 d23 d24
d25 d26 d27 d28 d29 d30 d31 d32 d33 d34 d35 d36 d37 d38 d39 d40 d41 d42 d43 d44 d45 d46 d47 d48
d49 d50 d51 d52 d53 d54 d55 d56 d57 d58 d59 d60 d61 d62 d63
d64 d65 d66 d67 d68 d69 d70 d71 d72 d73 d74 d75 d76 d77 d78 d79 d80 d81 d82 d83 d84 d85 d86 d87
d88 d89 d90 d91 d92 d93 d94 d95 d96 d97 d98 d99 d100 d101 d102 d103 d104 d105 d106 d107 d108
d109 d110 d111 d112 d113 d114 d115 d116 d117 d118 d119 d120.
EXECUTE.
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/FILE=\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA DATASETS\2009
6334 Q3 W1.sav'
/RENAME (camemt cameyr2 conpre conprm conprc conpry contuk dayspz evday eveve evhm98 evnght
evsat evsun fled9d flex9d1 flex9d2 flex9d3 homed1 homed2 homed3 indsc07l indsc07m indsc07s lang
langd1 langd2 lsooth m3cry m3cryo nolwf oycirc oycry oycryo
oyeqm3 oyftpt oymnge oympr02 oysind oysocc oysolo oystat oysupvi shftwk99 shftyp usuwrk1 usuwrk2
usuwrk3 usuwrkm1 usuwrkm2 usuwrkm3 wchday1 wchday2 wchday3 wchday4 wchday5 wchday6
wchday7 ynotft yptcia=d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17
d18 d19 d20 d21 d22 d23 d24 d25 d26 d27 d28 d29 d30 d31 d32 d33 d34 d35 d36 d37 d38 d39 d40 d41
d42 d43 d44 d45 d46 d47 d48 d49 d50 d51 d52 d53 d54 d55 d56 d57 d58 d59 d60 d61 d62)
/DROP=d0 d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17 d18 d19 d20 d21 d22 d23 d24
d25 d26 d27 d28 d29 d30 d31 d32 d33 d34 d35 d36 d37 d38 d39 d40 d41 d42 d43 d44 d45 d46 d47 d48
d49 d50 d51 d52 d53 d54 d55 d56 d57 d58 d59 d60 d61 d62.
EXECUTE.
ADD FILES /FILE=*
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/FILE=\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\SPA DATASETS\2009
6404 Q4 W1.sav'
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bnkhol07 bnkhol08 bnkhol09 bnkhol10 bnkhol11 bnkhol12 camemt cameyr2 caradv caradv2 chatt501
chatt502 chatt503 chatt504 chatt505 chatt506 chatt507 chatt508
chatt509 chatt510 chinf1 chinf2 chpeo1 chpeo2 chpeo3 chpeo4 chpeo5 chpeo6 chpeo7 chpeo8 chpeo9
chpri1 chpri2 conpre conprm conprc conpry contuk coth ctrm dayspz evday eveve evhm98 evnght evsat
evsun fled9d flex9d1 flex9d2 flex9d3 flexw1 flexw2 flexw3
flexw4 flexw5 flexw6 flexw7 flexw8 flexw9 hols homed1 homed2 homed3 idref indsc07l indsc07m
indsc07s lsooth m3cry m3cryo nolwf oycirc oycry oycryo oyeqm3 oyftpt oymnge oympr02 oysind oysocc
oysolo oystat oysupvi qualch91 qualch92 qualch93 qualch94
qualch95 qualch96 qualch97 quladv1 quladv2 quladv3 quladv4 quladv5 quladv6 quladv7 quladv8 quladv9
qulfut shftwk99 shftyp tuvres union usuwrk1 usuwrk2 usuwrk3 usuwrkm1 usuwrkm2 usuwrkm3
wchday1 wchday2 wchday3 wchday4 wchday5 wchday6 wchday7 wkfri
wkmon wksat wksun wkthu wktue wkwed ynotft yptcia ystrtf=d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16
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d56 d57 d58 d59 d60 d61 d62 d63 d64 d65 d66 d67 d68 d69 d70 d71 d72 d73 d74 d75 d76 d77 d78 d79
d80 d81 d82 d83 d84 d85 d86 d87 d88 d89 d90 d91 d92 d93 d94 d95 d96 d97 d98 d99 d100 d101 d102
d103 d104 d105 d106 d107 d108 d109 d110 d111 d112 d113 d114 d115
d116 d117 d118 d119 d120 d121 d122 d123 d124 d125 d126 d127 d128 d129 d130 d131 d132 d133 d134
d135 d136 d137 d138 d139 d140 d141 d142 d143 d144)

```

Appendices

```

/DROP=d0 d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17 d18 d19 d20 d21 d22 d23 d24
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d49 d50 d51 d52 d53 d54 d55 d56 d57 d58 d59 d60 d61 d62 d63
d64 d65 d66 d67 d68 d69 d70 d71 d72 d73 d74 d75 d76 d77 d78 d79 d80 d81 d82 d83 d84 d85 d86 d87
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d122 d123 d124 d125 d126 d127 d128 d129 d130 d131 d132 d133 d134 d135 d136 d137 d138 d139 d140
d141 d142 d143 d144.
EXECUTE.
GET
FILE='\\soton.ac.uk\ude\PersonalFiles\Users\ab2e09\mydocuments\DATASETS\ORIGINAL
DATASETS\2009 LFS\2009 MERGED DATASET.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.
DATASET ACTIVATE DataSet2.
DATASET CLOSE DataSet1.
FREQUENCIES VARIABLES=thiswv
/ORDER=ANALYSIS.

```

Wave to which data refers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	171075	64.3	64.3	64.3
2	25875	9.7	9.7	74.0
3	24586	9.2	9.2	83.2
4	22813	8.6	8.6	91.8
5	21839	8.2	8.2	100.0
Total	266188	100.0	100.0	

Source: *Author's own analysis of LFS 2009-2013*

Table 8.8 Key explanatory variables used in analysis

LFS variable name	Recoded variable name	Description
SOC10M	LABOURFORCES	Labour Forces (2)
SOC10M	HSCLF1X	HSCLF occupation groups (5)
SOC10M	HSCLF2X	HSCLF occupation groups (2)
AGE	AGE1	Age (all, continuous)
AGE	AGE14	Age (50-65, 5 year age groups)
AGE	AGE24X	Age (SPA & over)
SEX	GENDERX	Gender
ETHEWEUL	ETHNICITY3X	Ethnicity (2 groups)
MARSTA	DOMRELS4X	Marital status (3 groups)
HIQUAL11	EDUCATION1X	Education (5 groups)
GRSSWK	INCOME2X	Earnings (3 groups)
TEN1	HOUSINGTENURE1X	Housing tenure (Status)
LNLIM & HEALTH	HEALTH6X	Health problem (6 groups).
LIMITA	HEALTH10X	Health problem & whether it affects work
SECTOR	SECTOR1X	Public or Private Sector
FTPTWK	PARTTIME	Part-time work
YPTJOB / YNOTFT	WORKPATTERN6X	Reason for part-time work
EMPLN	EMPLOYMENT3X	Length of Service (5 Groups)

Source: *Author's own analysis LFS 2009-2013*

Table 8.9 LFS variable recodes

```

COMMENT England.
RECODE COUNTRY (MISSING=SYSMIS) (1=COPY) (2=COPY) (3=COPY) (4=COPY) (5=4) INTO ENGLAND.
VARIABLE LABELS ENGLAND Country.
ADD VALUE LABELS ENGLAND 1 'ENGLAND' 2 'WALES' 3 'SCOTLAND' 4 'NORTHERN IRELAND'.
EXECUTE.

COMMENT Labour Forces (HSCLF & GLF).
RECODE SOC10M (-9=-9) (-8=-8) (MISSING=99) (2217=1) (2218=1) (2219=1) (2221=1) (2222=1) (2223=1)
(2229=1) (2231=1) (2232=1) (2442=1) (6141=1) (6145=1) (6146=1) (6147=1) (ELSE=2) INTO
LABOURFORCES.
VARIABLE LABELS LABOURFORCES H&SCLF & GLF.
ADD VALUE LABELS LABOURFORCES 1 'Health & Social Care' 2 'General'.
EXECUTE.

COMMENT HSCLF (5 groups).
RECODE SOC10M (MISSING=999) (-9=999) (-8=999) (2217=1) (2218=1) (2219=1) (2221=1) (2222=1)
(2223=1) (2229=1) (2231=2) (2232=2) (6141=3) (2442=4) (6145=5) (6146=5) (6147=5) (ELSE=6) INTO
HSCLF1X.
VARIABLE LABELS HSCLF1X H&SC Occupations (5 Groups).
ADD VALUE LABELS HSCLF1X 1 'Allied Health Professionals' 2 'Nurses' 3 'Nursing Auxiliaries' 4 'Social
Workers' 5 'Care Workers' 6 'General Labour Force' 999 'Missing'.
EXECUTE.

COMMENT HSCLF (2 groups)
RECODE SOC10M (MISSING=999) (-9=999) (-8=999) (2217=1) (2218=1) (2219=1) (2221=1) (2222=1)
(2223=1) (2229=1) (2231=1) (2232=1) (6141=2) (2442=1) (6145=2) (6146=2) (6147=2) (ELSE=3) INTO
HSCLF2X.
VARIABLE LABELS HSCLF2X H&SCLF Occupation Groups (2 Groups).
ADD VALUE LABELS HSCLF2X 1 'Health & Care Professionals' 2 'Health & Care Support Staff' 3 'General
Labour Force' 999 'Missing'.
EXECUTE

COMMENT Age (all continuous).
RECODE AGE (LOWEST THRU HIGHEST=COPY) INTO AGE1.
VARIABLE LABELS AGE1 Age (All Continuous).
EXECUTE.

COMMENT Age (50-65 | 5 year age groups).
RECODE AGE (50 THRU 54 =1) (55 THRU 59 =2) (60 THRU 64 =3) (65 THRU HIGHEST =4) (ELSE = -7) INTO
AGE14.
MISSING VALUES AGE14 (-7).
VARIABLE LABELS AGE14 Older Age (5 Year Groups to 65+).
ADD VALUE LABELS AGE14 1 '50 to 54' 2 '55 to 59' 3 '60 to 64' 4 '65+' -7 '0 to 49'.
EXECUTE.

COMMENT Age (SPA & over).
COMPUTE AGE24X=99.
IF (AGE20X EQ 2) AGE24X=2.
IF (AGE23X EQ 2) AGE24X=2.

```

```

IF (AGE20X EQ 1) AGE24X=1.
IF (AGE23X EQ 1) AGE24X=1.
VARIABLE LABELS AGE24 SPA (Women 60 & Men 65).
ADD VALUE LABELS AGE24 1 'SPA & Over' 2 'Up to SPA'.
EXECUTE.

COMMENT Gender.
RECODE SEX (1=2) (2=1) INTO GENDERX.
VARIABLE LABELS GENDERX Gender.
ADD VALUE LABELS GENDERX 1 'Women' 2 'Men'.
EXECUTE.

COMMENT Ethnicity (2 groups).
RECODE ETHEWEUL (MISSING=999) (-9=999) (-8=999) (-6=1) (1 THRU 3=1) (ELSE=2) INTO ETHNICITY3X.
VARIABLE LABELS ETHNICITY3X Ethnic Groups (2).
ADD VALUE LABELS ETHNICITY3X 1 'White' 2 'BME' 999 'Missing'.
EXECUTE.

COMMENT Marital Status (3 groups).
RECODE MARSTA (MISSING=999) (-9=999) (-8=999) (1=2) (2=1) (3=COPY) (4=3) (5=3) (6=2) (7=3) (8=3)
(9=3) INTO DOMRELS4X.
VARIABLE LABELS DOMRELS4X Marital Status (3 Groups).
ADD VALUE LABELS DOMRELS4X 1 'Married' 2 'Single' 3 'Separated/Divorced/Widowed' 999 'Missing'.
EXECUTE.

COMMENT Education (5 groups).
RECODE HIQUAL11 (MISSING=5) (-9=5) (-8=5) (1 THRU 9=1) (10 THRU 29=2) (30 THRU 46=3) (47 THRU
78=4) (79 THRU 80=5) INTO EDUCATION1X.
VARIABLE LABELS EDUCATION1X Highest Educational Attainment.
ADD VALUE LABELS EDUCATION1X 1 'Degree' 2 'Diploma' 3 'A-Level' 4 'GCSE' 5 'No Qualifications' 999
'Missing'.
EXECUTE.

COMMENT Earnings (3 groups).
RECODE GRSSWK (-9=999) (-8=999) (MISSING=999) (700 THRU HIGHEST=1) (325 THRU 699=2) (0 THRU
324=3) INTO INCOME2X.
VARIABLE LABELS INCOME2X Gross Weekly Earnings (3 Levels).
VALUE LABELS INCOME2X 1 'Highest' 2 'Middle' 3 'Lowest' 999 'Missing'.
EXECUTE.

COMMENT Housing tenure (4 groups).
RECODE TEN1 (MISSING=1) (-9=1) (-8=1) (1=COPY) (2=COPY) (3=COPY) (4=3) (5=4) (6=4) INTO
HOUSINGTENURE1X.
VARIABLE LABELS HOUSINGTENURE1X Housing Tenure (Status).
ADD VALUE LABELS HOUSINGTENURE1X 1 'Owned Outright' 2 'Mortgaged' 3 'Rented' 4 'Rent Free' 999
'Missing'.
EXECUTE.

COMMENT Health problem (6 groups).
COMPUTE HEALTH6X=999.
IF (LNGLIM=-9) AND (HEALTH=-9) HEALTH6X=999.

```

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```
IF (LNLIM=-8) AND (HEALTH=-8) HEALTH6X=999.
IF (LNLIM=2) HEALTH6X=999.
IF (LNLIM=1) AND (HEALTH=1) HEALTH6X=1.
IF (LNLIM=1) AND (HEALTH=2) HEALTH6X=1.
IF (LNLIM=1) AND (HEALTH=3) HEALTH6X=1.
IF (LNLIM=1) AND (HEALTH=4) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=5) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=6) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=7) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=8) HEALTH6X=2.
IF (LNLIM=1) AND (HEALTH=9) HEALTH6X=3.
IF (LNLIM=1) AND (HEALTH=10) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=11) HEALTH6X=4.
IF (LNLIM=1) AND (HEALTH=12) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=13) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=14) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=15) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=16) HEALTH6X=5.
IF (LNLIM=1) AND (HEALTH=17) HEALTH6X=5.
VARIABLE LABELS HEALTH6X Health Problem.
ADD VALUE LABELS HEALTH6X 1 'Skeletal or Joints' 2 'Chest or Breathing' 3 'Heart or Circulation' 4
'Diabetes' 5 'Other' 999 'Missing'.
EXECUTE.

COMMENT Health problem & whether it affects work.
COMPUTE HEALTH10X=999.
IF (LNLIM=-9) AND (LIMITA=-9) HEALTH10X=999.
IF (LNLIM=-8) AND (LIMITA=-8) HEALTH10X=999.
IF (LNLIM=2) HEALTH10X=1.
IF (LNLIM=1 AND LIMITA=2) HEALTH10X=2.
IF (LNLIM=1 AND LIMITA=1) HEALTH10X=3.
VARIABLE LABELS HEALTH10X Health problem & whether it affects work.
ADD VALUE LABELS HEALTH10X 1 'No health problem exists' 2 'Yes health problem exists BUT problem
does not affect amount of work' 3 'Yes health problem exists and problem does affect amount of work'
999 'Missing'.
EXECUTE.

COMMENT Public or Private Sector.
RECODE SECTOR (MISSING=999) (-9=999) (-8=999) (1=2) (2=1) INTO SECTOR1X.
VARIABLE LABELS SECTOR1X Public or Private Sector.
ADD VALUE LABELS SECTOR1X 1 'Public Sector' 2 'Private Sector' 999 'Missing'.
EXECUTE.

COMMENT Part-time work.
RECODE FTPTWK (MISSING=1) (-9=1) (-8=1) (1=COPY) (2=COPY) INTO PARTTIME.
VARIABLE LABELS PARTTIME Dependent Variable PT.
ADD VALUE LABELS PARTTIME 1 'Full-time' 2 'Part-time' 999 'Missing'.
EXECUTE.

COMMENT Reason for part-time work.
```

```

COMPUTE WORKPATTERN6X=999.
IF (YPTJOB=1) WORKPATTERN6X=1.
IF (YPTJOB=2) WORKPATTERN6X=2.
IF (YPTJOB=3) WORKPATTERN6X=3.
IF (YPTJOB=4) AND (YNOTFT=1) WORKPATTERN6X=4.
IF (YPTJOB=4) AND (YNOTFT=2) WORKPATTERN6X=5.
IF (YPTJOB=4) AND (YNOTFT=3) WORKPATTERN6X=5.
IF (YPTJOB=4) AND (YNOTFT=4) WORKPATTERN6X=5.
IF (YPTJOB=4) AND (YNOTFT=5) WORKPATTERN6X=5.
IF (YPTJOB=4) AND (YNOTFT=6) WORKPATTERN6X=6.
IF (YNOTFT=3) AND (YPTCIA=1) WORKPATTERN6X=5.
IF (YNOTFT=3) AND (YPTCIA=2) WORKPATTERN6X=5.
IF (YNOTFT=3) AND (YPTCIA=3) WORKPATTERN6X=6.
IF (YNOTFT=4) AND (YPTCIA=1) WORKPATTERN6X=5.
IF (YNOTFT=4) AND (YPTCIA=2) WORKPATTERN6X=5.
IF (YNOTFT=4) AND (YPTCIA=3) WORKPATTERN6X=6.
IF (YNOTFT=6) AND (YPTCIA=1) WORKPATTERN6X=5.
IF (YNOTFT=6) AND (YPTCIA=2) WORKPATTERN6X=5.
IF (YNOTFT=6) AND (YPTCIA=3) WORKPATTERN6X=6.
IF (YPTCIA=1) WORKPATTERN6X=5.
IF (YPTCIA=2) WORKPATTERN6X=5.
IF (YPTCIA=3) WORKPATTERN6X=6.
IF (YPTJOB=-9) WORKPATTERN6X=999.
IF (YPTJOB=-8) WORKPATTERN6X=999.
IF (YNOTFT=-9) WORKPATTERN6X=999.
IF (YNOTFT=-8) WORKPATTERN6X=999.
IF (YPTCIA=-9) WORKPATTERN6X=999.
IF (YPTCIA=-8) WORKPATTERN6X=999.
VARIABLE LABELS WORKPATTERN6X Reason for PT work.
ADD VALUE LABELS WORKPATTERN6X 1 'Student' 2 'Ill or disabled' 3 'Could not find FT work' 4 'Financially
secure' 5 6 'Domestic commitments' 6 'Other' 999 'Missing'.
EXECUTE.

COMMENT Length of Service (5 Groups).
RECODE EMPLN (MISSING=5) (-9=5) (-8=5) (1 THRU 3=1) (4 THRU 5=2) (6=3) (7=4) (8=5) INTO
EMPLOYMENT3X.
VARIABLE LABELS EMPLOYMENT3X Length of time with current employer (5 Groups).
ADD VALUE LABELS EMPLOYMENT3X 1 '<1' 2 '1 to 4' 3 '5 to 9' 4 '10 to 19' 5 '20+' 999 'Missing'.
EXECUTE.

```

Source: Author's own analysis LFS 2009-2013

Table 8.10 Multicollinearity

Test for Multicollinearity		
<p>Multicollinearity: Predictors should not be too highly correlated. Ideally your predictor will be strongly related to your dependent variable but not strongly related to each other. 'Menard (1995) suggests that a tolerance value less than 0.1 almost certainly indicates a serious collinearity problem. Myers (1990) also suggests that a VIF value greater than 10 is a cause for concern..... The eigenvalue gives us an idea as to how accurate our regression model is: If eigenvalues are fairly similar then the derived model is likely to be unchanged by small changes in the measured variables....The condition index is another way of expressing eigenvalues. There are no rules as to how much larger a condition index needs to be, to indicate collinearity problems (Field, 2009: 297). Variance proportions: each regression can be broken down across eigenvalues. The variance proportions tell us the proportion of the variance of each predictors regression coefficient that is attributed to each eigenvalue [converting them to percentages makes them more understandable] (Field 2009: 298). E.g. in the analysis of 2014 05 08, for NS-SEC, 50% of the variance coefficient is associated with eigenvalue number 9, 40% is associated with eigenvalue number 8 and 2% is associated with eigenvalue number 11 (Field, 2009)</p>		
<pre>REGRESSION /MISSING LISTWISE /STATISTICS COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT PARTTIME /METHOD=ENTER AGE25X GENDERX ETHNICITY3X DOMRELS4X HEALTH10X INCOME2X EDUCATION1X HOUSINGTENURE1X SECTOR1X HSCLF2X EMPLOYMENT3X.</pre>		
For Table 6.1	Colinarity Statistics	
	Tolerance	VIF
Age groups	.814	1.229
Gender	.826	1.211
Ethnic groups	.943	1.060
Marital status	.937	1.067
Health problem & whether it affects work	.953	1.050
Gross weekly earnings	.940	1.064
Highest educational attainment	.563	1.775
Housing tenure	.930	1.076
Public or private Sector	.887	1.128
Selected occupation groups	.549	1.820
Length of time with current employer	.898	1.114
For Table 6.1	Colinarity Statistics	
	Tolerance	VIF
Age groups	.814	1.229
Gender	.826	1.211
Ethnic groups	.943	1.060
Marital status	.937	1.067
Health problem & whether it affects work	.953	1.050
Gross weekly earnings	.940	1.064
Highest educational attainment	.563	1.775

Housing tenure	.930	1.076
Public or private Sector	.887	1.128
Selected occupation groups	.549	1.820
Length of time with current employer	.898	1.114
Collinearity Statistics		
For Table 6.3	Tolerance	VIF
Age groups	.935	1.070
Ethnic groups	.947	1.057
Marital status	.937	1.067
Health problem & whether it affects work	.951	1.052
Gross weekly earnings	.940	1.064
Highest educational attainment	.533	1.878
Housing tenure	.942	1.061
Public or private sector	.874	1.144
Selected occupation groups	.519	1.927
Length of time with current employer	.903	1.108
Collinearity Statistics		
For Table 6.4	Tolerance	VIF
Age groups	.726	1.377
Ethnic groups	.949	1.053
Marital status	.623	1.605
Health problem & whether it affects work	.693	1.444
Gross weekly earnings	.841	1.189
Highest educational attainment	.751	1.332
Housing tenure	.618	1.618
Public or private sector	.686	1.458
Selected occupation groups	.543	1.841
Length of time with current employer	.705	1.419
Collinearity Statistics		
For Table 6.6	Tolerance	VIF
Age groups	.772	1.295
Gender	.814	1.229
Ethnic groups	.941	1.063
Marital status	.919	1.088
Health problem & whether it affects work	.927	1.079
Gross weekly earnings	.906	1.104
Highest educational attainment	.965	1.036
Housing tenure	.918	1.090
Public or private sector	.866	1.154
Length of time with current employer	.962	1.040

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For Table 6.7	Collinearity Statistics	
	Tolerance	VIF
Age groups	.840	1.190
Gender	.802	1.247
Ethnic groups	.931	1.075
Marital status	.945	1.058
Health problem & whether it affects work	.944	1.059
Gross weekly earnings	.944	1.060
Highest educational attainment	.936	1.068
Housing tenure	.939	1.065
Public or private sector	.876	1.142
Length of time with current employer	.906	1.104

Source: Author's own analysis LFS 2009-2013

Appendix C

Table 8.11 Number of economically active older individuals in the health and social care labour force and general labour force in England, by age range (2009-2013)

Age of Respondent	Health & Social Care Labour Force	General Labour Force
50	930	14145
51	799	13862
52	819	13388
53	882	12986
54	802	12417
55	762	11995
56	663	11077
57	635	10575
58	662	10477
59	530	10073
60	489	8786
61	431	7853
62	307	7742
63	321	6803
64	200	6201
65	154	4398
66	173	3471
67	129	2574
68	119	2119
69	74	1760
70	49	1332
71	42	1081
72	35	854
73	26	766
74	30	658
75	6	420
76	14	322
77	12	222
78	5	182
79	0	186
80	2	133
81	4	129
82	7	93
83	5	57
84	3	41
85	0	20
86	0	33
87	0	12
88	0	8
89	2	9
90	0	8
91	0	4
94	0	2
	10,123	179,274

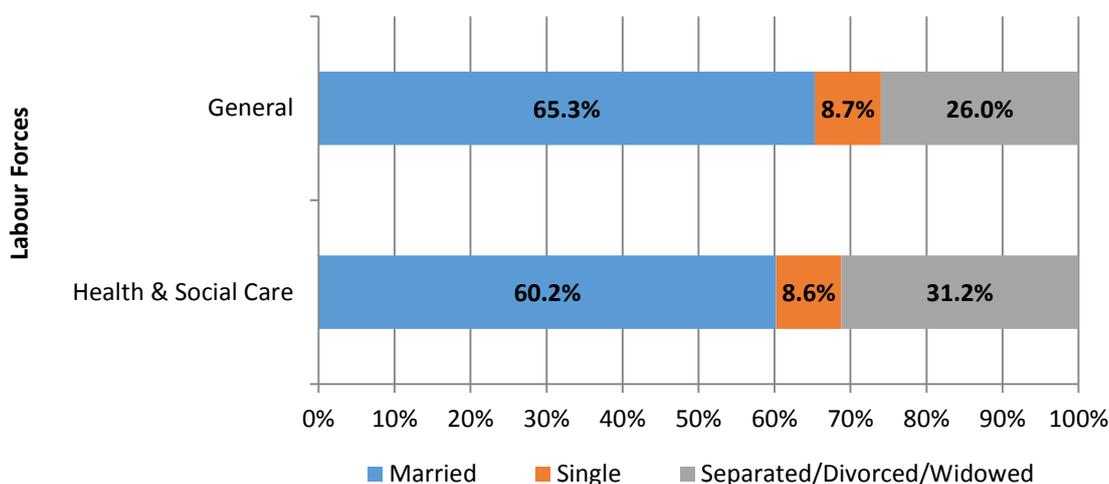
Source: Author's own analysis of LFS 2009-2013 (unweighted)

Table 8.12 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by age range (2009-2013) (%)

Labour Forces	Age Group (Years)							Total
	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80+	
General	38.5%	29.6%	19.9%	7.3%	2.2%	1.6%	0.8%	100%
Health & Social Care	43.7%	31.1%	16.3%	5.6%	1.6%	1.2%	0.5%	100%

Source: Author's own analysis of LFS 2009-2013

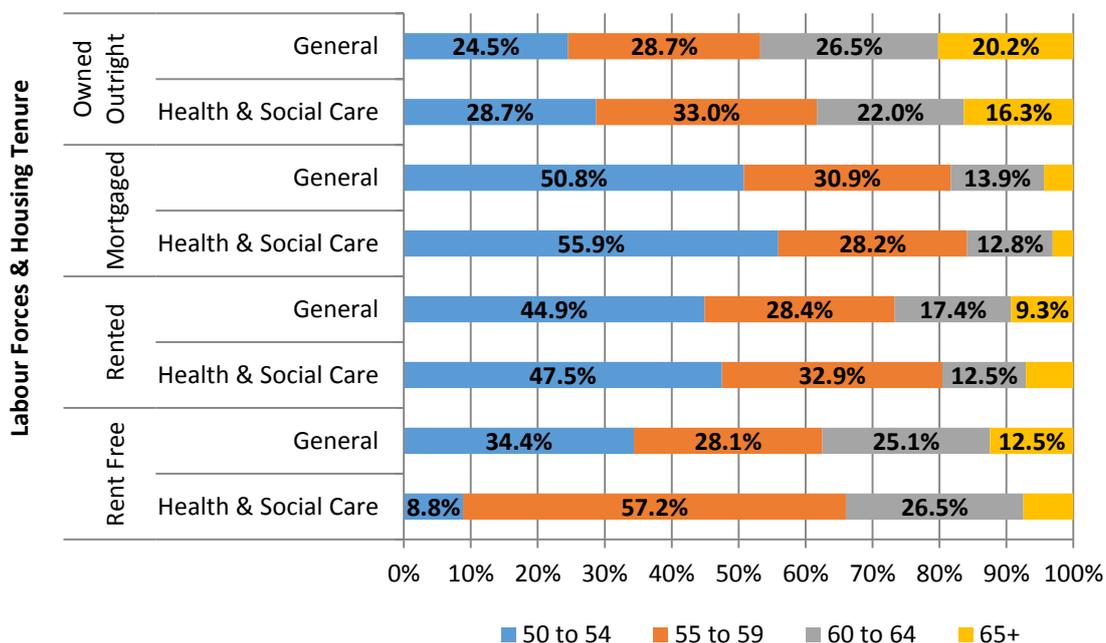
Figure 8.1 Percentage of economically active older women in the health and social care labour force and general labour force in England, by marital status (2009-2013) (%)



Notes: $\chi^2=31536.1$ (df 2, $p<0.001$); General Labour Force N=78,829, Health & Social Care Labour Force N=8,687

Source: Author's own analysis LFS 2009-2013

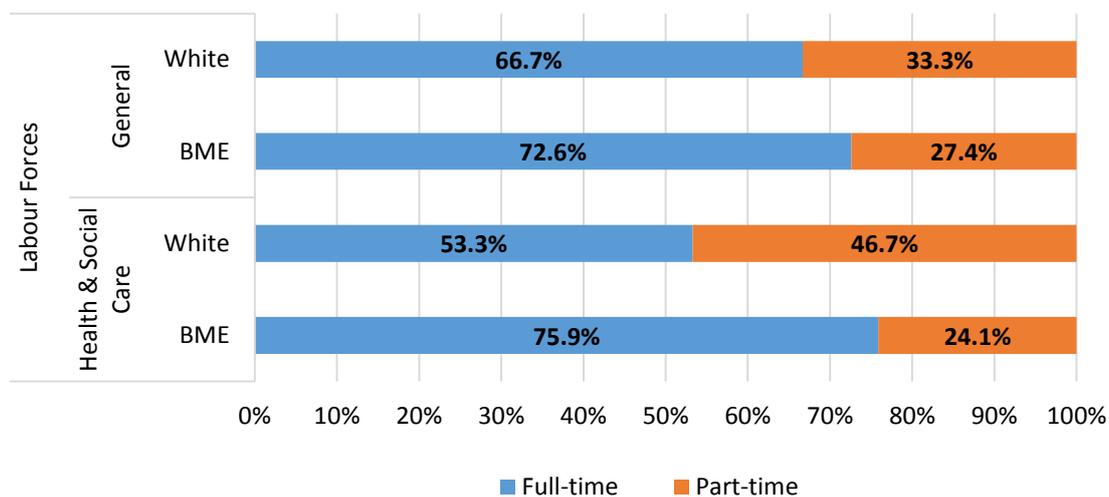
Figure 8.2 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by age group and housing tenure (2009-2013) (%)



Notes: Total $\chi^2=61556.9$ (df 3, $p<0.001$); General Labour Force $N=179,274$, Health & Social Care Labour Force $N=10,123$; Owned Outright $\chi^2=30692.0$ (df 3, $p<0.001$); General Labour Force $N=77,937$, Health & Social Care Labour Force $N=3,824$; Mortgaged $\chi^2=14424.4$ (df 3, $p<0.001$); General Labour Force $N=75,943$, Health & Social Care Labour Force $N=4,393$; Rented $\chi^2=15088.9$ (df 3, $p<0.001$); General Labour Force $N=23,977$, Health & Social Care Labour Force $N=1,859$; Rent Free $\chi^2=6111.0$ (df 3, $p<0.001$); General Labour Force $N=1,417$, Health & Social Care Labour Force $N=47$

Source: Author's own analysis LFS 2009-2013

Figure 8.3 Percentage of economically active older individuals in the health and social care labour force and general labour force in England, by ethnicity and work pattern (2009-2013) (%)



Notes: Health & Social Care Labour Force $\chi^2=44488.4$ (df 1, $p<0.001$) $N=8,399$; General Labour Force $\chi^2=26289.2$ (df 1, $p<0.001$) $N=164,393$

Source: Author's own analysis LFS 2009-2013

Table 8.13 Percentage of economically active older individuals in the health and social care labour force and general labour force, in England, by work pattern, ethnicity and age group (2009-2013) (%)

Ethnic Group	Age Groups (Years)	Health and Social Care Labour Force			General Labour Force		
		Full-time	Part-time	Total	Full-time	Part-time	Total
White	50-54	62.2%	37.8%	100%	77.1%	22.9%	100%
				N=3,043			N=53,832
	55-59	57.4%	42.6%	100%	73.2%	26.8%	100%
				N=2,433			N=44,491
60-64	41.4%	58.6%	100%	60.7%	39.3%	100%	
			N=1,338			N=31,152	
65+	16%	84%	100%	29.9%	70.1%	100%	
			N=676			N=17,599	
Total		53.3%	46.7%	100%	66.7%	33.3%	100%
				N=7,490			N=147,074
BME	50-54	78%	22%	100%	77.1%	22.9%	100%
				N=457			N=4,319
	55-59	77.7%	22.3%	100%	72.9%	27.1%	100%
				N=275			N=2,713
60-64	73.7%	26.3%	100%	68.7%	31.3%	100%	
			N=124			N=1,208	
65+	51.6%	48.4%	100%	43.2%	56.8%	100%	
			N=53			N=680	
Total		75.9%	24.1%	100%	72.6%	27.4%	100%
				N=909			N=8,920

Notes: All associations in this figure were statistically significant $p < 0.001$; for details see Appendix C, Table 8.15

Source: Author's own analysis LFS 2009-2013

Table 8.14 Percentage of economically active older individuals in the health and social care labour force and general labour force, in England, by work pattern, ethnicity and age group (2009-2013) (%)

Ethnic Group	Age Groups (Years)	Health and Social Care Labour Force			General Labour Force		
		Full-time	Part-time	Total	Full-time	Part-time	Total
White	50-54	62.2%	37.8%	100%	77.1%	22.9%	100%
	55-59	57.4%	42.6%	100%	73.2%	26.8%	100%
	60-64	41.4%	58.6%	100%	60.7%	39.3%	100%
	65+	16%	84%	100%	29.9%	70.1%	100%
	Total	53.3%	46.7%	100%	66.7%	33.3%	100%
BME	50-54	78%	22%	100%	77.1%	22.9%	100%
	55-59	77.7%	22.3%	100%	72.9%	27.1%	100%
	60-64	73.7%	26.3%	100%	68.7%	31.3%	100%
	65+	51.6%	48.4%	100%	43.2%	56.8%	100%
	Total	75.9%	24.1%	100%	72.6%	27.4%	100%

Notes: White: Health & Social Care Labour Force $\chi^2=130748.8$ (df 3, $p<0.001$) $N=7,490$; General Labour Force $\chi^2=2725936.9$ (df 3, $p<0.001$) $N=147,074$; BME: Health & Social Care Labour Force $\chi^2=4555.3$ (df 3, $p<0.001$) $N=909$; General Labour Force $\chi^2=60813.4$ (df 3, $p<0.001$) $N=8,920$

Source: Author's own analysis LFS 2009-2013

Table 8.15 Details of statistical significance

Figure	Notes
Figure 4.3	Total: $\chi^2=61556.9$ (df 3, $p<0.001$); Health & Social Care Labour Force $N=10,123$, General Labour Force $N=179,274$; Men $\chi^2=11008.1$ (df 3, $p<0.001$); Health & Social Care Labour Force $N=1,436$, General Labour Force $N=100,445$; Women $\chi^2=17587.4$ (df 3, $p<0.001$); Health & Social Care Labour Force $N=8,687$, General Labour Force $N=78,829$
Figure 4.5	Total $\chi^2=11008.1$ (df 3, $p<0.001$); General Labour Force $N=100,445$, Health & Social Care Labour Force $N=1,436$; Married $\chi^2=7850.6$ (df 3, $p<0.001$); General Labour Force $N=75,554$, Health & Social Care Labour Force $N=946$; Single $\chi^2=2279.2$ (df 3, $p<0.001$); General Labour Force $N=9,044$, Health & Social Care Labour Force $N=215$; Separated/Divorced/Widowed $\chi^2=682.9$ (df 3, $p<0.001$); General Labour Force $N=15,847$, Health & Social Care Labour Force $N=275$
Figure 4.6	White: Health & Social Care Labour Force $\chi^2=130748.8$ (df 3, $p<0.001$) 50-54 $N=3,043$, 55-59 $N=2,433$, 60-64 $N=1,338$, 65+ $N=676$, Total $N=7,490$; General Labour Force $\chi^2=2725936.9$ (df 3, $p<0.001$) 50-54 $N=53,832$, 55-59 $N=44,491$, 60-64 $N=31,152$, 65+ $N=17,599$, Total $N=147,074$; BME: Health & Social Care Labour Force $\chi^2=4555.3$ (df 3, $p<0.001$) 50-54 $N=457$, 55-59 $N=275$, 60-64 $N=124$, 65+ $N=53$, Total $N=909$; General Labour Force $\chi^2=60813.4$ (df 3, $p<0.001$) 50-54 $N=4,319$, 55-59 $N=2,713$, 60-64 $N=1,208$, 65+ $N=680$, Total $N=8,920$

Source: Author's own analysis (LFS 2009-2013)

Appendix D

Table 8.16 Number of economically active older individuals in selected occupation groups in England, by age range (2009-2013)

Age of Respondent	Health and care professionals	Health and care support staff	Total
50	466	464	930
51	401	398	799
52	443	376	819
53	449	433	882
54	458	344	802
55	432	330	762
56	330	333	663
57	298	337	635
58	300	362	662
59	212	318	530
60	205	284	489
61	197	234	431
62	100	207	307
63	126	195	321
64	102	98	200
65	58	96	154
66	69	104	173
67	49	80	129
68	51	68	119
69	22	52	74
70	12	37	49
71	15	27	42
72	9	26	35
73	6	20	26
74	7	23	30
75	2	4	6
76	4	10	14
77	3	9	12
78	3	2	5
80	2	0	2
81	2	2	4
82	0	7	7
83	0	5	5
84	0	3	3
89	2	0	2
	4835	5288	10123

Source: Author's own analysis of LFS 2009-2013 (unweighted)

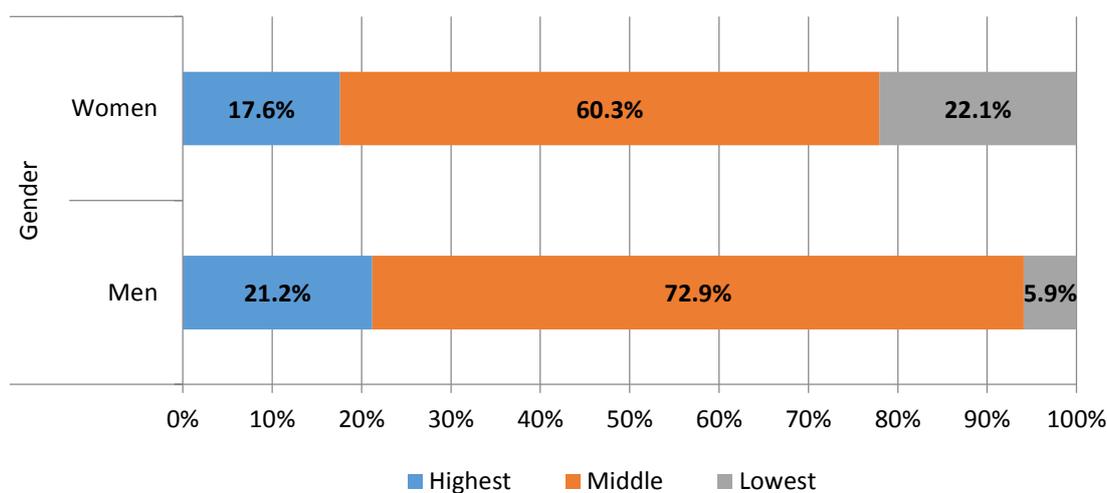
Table 8.17 Percentage of economically active older individuals in the health and care professional group and the health and care support group in England, by age group and marital status (2009-2013) (%)

Age Groups (Years)	Health & Care Professionals				Health & Care Support Staff			
	Married	Single	S/D/W	Total	Married	Single	S/D/W	Total
50-54	68.7%	10.3%	21%	100%	57.8%	12.3%	29.9%	100%
55-59	64.3%	9.3%	26.4%	100%	58.7%	9.7%	31.6%	100%
60-64	58.9%	11.2%	29.9%	100%	59.3%	5.8%	34.9%	100%
65+	61.0%	7.2%	31.8%	100%	47.4%	3.5%	49.2%	100%

Notes: S/D/W=Separated/Divorced/Widowed; Health & Care Professionals: $\chi^2=12465.7$ (df 6, $p<0.001$); N=4,835; Health & Care Support Staff: $\chi^2=35794.1$ (df 6, $p<0.001$); N=5,288; Total: $\chi^2=43149.2$ (df 6, $p<0.001$); N=10,123

Source: Author's own analysis LFS 2009-2013

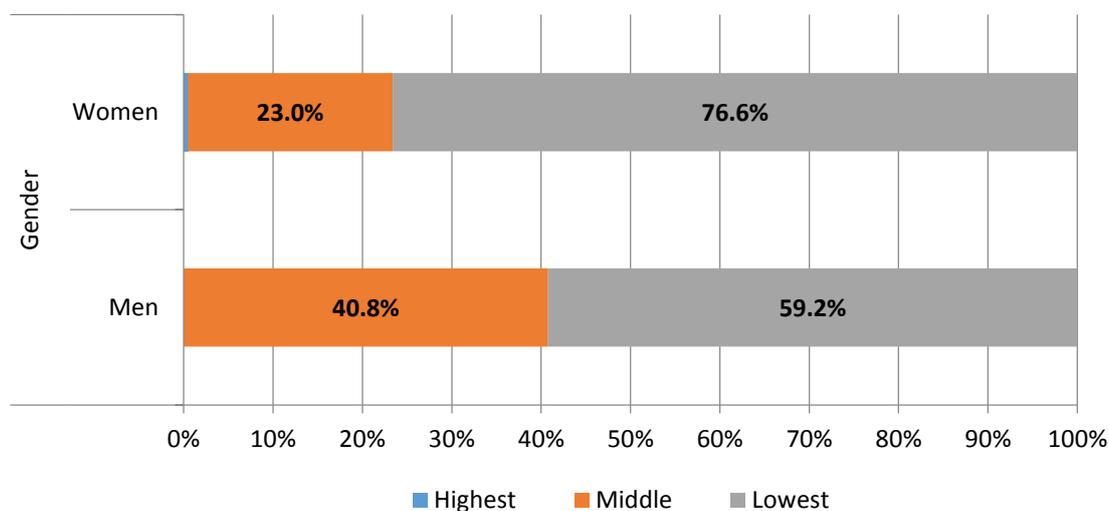
Figure 8.4 Percentage of economically active older individuals in the health and social care professionals group in England, by gender and earnings level (2009-2013) (%)



Notes: $\chi^2=8477.6$ (df 2, $p<0.001$); Women N=1,947, Men N=285

Source: Author's own analysis LFS 2009-2013

Figure 8.5 Percentage of economically active older individuals in the health and social care support staff group in England, by gender and earnings level (2009-2013) (%)



Notes: $\chi^2=12314.8$ (df 2, $p<0.001$); Women $N=2,034$, Men $N=365$

Source: Authors own analysis LFS 2009-2013

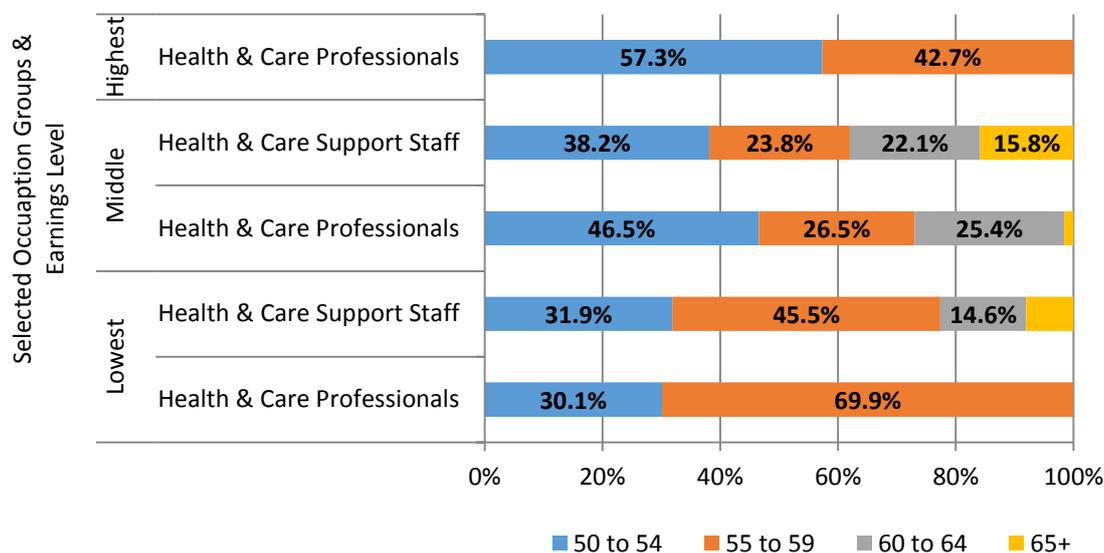
Figure 8.6 Percentage of economically active older women in the health and care professional group and the health and care support group in England, by age group and earnings level (2009-2013) (%)



Notes: Total $\chi^2=25533.1$ (df 3, $p<0.001$); Health & Care Professionals $N=1,947$, Health & Care Support Staff $N=2,034$; Highest $\chi^2=4559.7$ (df 3, $p<0.001$); Health & Care Professionals $N=348$, Health & Care Support Staff $N=10$; Middle $\chi^2=9369.9$ (df 3, $p<0.001$); Health & Care Professionals $N=1,187$, Health & Care Support Staff $N=467$; Lowest $\chi^2=1643.7$ (df 3, $p<0.001$); Health & Care Professionals $N=412$, Health & Care Support Staff $N=1,557$

Source: Author's own analysis LFS 2009-2013

Figure 8.7 Percentage of economically active older men in the health and care professional group and the health and care support group in England, by age group and earnings level (2009-2013) (%)



Notes: Total $\chi^2=6718.9$ (df 3, $p<0.001$); Health & Care Professionals $N=1,947$, Health & Care Support Staff $N=2,034$; Highest Health & Care Professionals $N=60$, Health & Care Support Staff $N=5$; Middle $\chi^2=5347.1$ (df 3, $p<0.001$); Health & Care Professionals $N=198$, Health & Care Support Staff $N=133$; Lowest $\chi^2=1201.2$ (df 3, $p<0.001$); Health & Care Professionals $N=27$, Health & Care Support Staff $N=227$

Source: Author's own analysis LFS 2009-2013

Table 8.18 Details of statistical significance

Figure	Notes
Figure 5.1	$\chi^2=30128.8$ (df 3, $p<0.001$); Health & Care Professionals 50-54 N= 2,217, 55-59 N=1,572, 60-64 N=730, 65+ N=613, Total N = 4,835; Health & Care Support Staff 50-54 N=2,015, 55-59 N=1,680, 60-64 N=1,018, 65+ N=575, Total N = 5,288
Figure 5.1	$\chi^2=152.4$ (df 1, $p<0.001$); Health & Care Professionals Women N=4,166, Men N=669, Total N=4,835; Health & Care Support Staff Women N=4,521, Men N=767, Total N=5,288
Figure 5.3	Total $\chi^2=30128.8$ (df 3, $p<0.001$), Health & Care Professionals Total N=4,835, Health & Care Support Staff Total N=5,288; Men: $\chi^2=1727.9$ (df 3, $p<0.001$); Health & Care Professionals N=669, Health & Care Support Staff N=767; Women: $\chi^2=35593.4$ (df 3, $p<0.001$); Health & Care Professionals N=4,166, Health & Care Support Staff N=4,521
Figure 5.4	Total: $\chi^2=27564.5$ (df 2, $p<0.001$); Health & Care Professionals N=4,835, Health & Care Support Staff N=5,288; Married: Health & Care Professionals N=3,125, Health & Care Support Staff N=3,049; Single: Health & Care Professionals N=472, Health & Care Support Staff N=521; Separated/Divorced/Widowed: Health & Care Professionals N=1,238, Health & Care Support Staff N=1,718
Figure 5.5	Total: $\chi^2=36855.9$ (df 2, $p<0.001$); Health & Care Professionals N=4,835, Health & Care Support Staff N=5,288; Married: Health & Care Professionals N=2,685, Health & Care Support Staff N=2,543; Single: Health & Care Professionals N=377, Health & Care Support Staff N=401; Separated/Divorced/Widowed: Health & Care Professionals N=1,104, Health & Care Support Staff N=1,577
Figure 5.6	Total: $\chi^2=5007.3$ (df 2, $p<0.001$); Health & Care Professionals N=4,835, Health & Care Support Staff N=5,288; Married: Health & Care Professionals N=440, Health & Care Support Staff N=506; Single: Health & Care Professionals N=95, Health & Care Support Staff N=120; Separated/Divorced/Widowed: Health & Care Professionals N=134, Health & Care Support Staff N=141
Figure 5.7	Total: $\chi^2=90311.3$ (df 2, $p<0.001$); Health & Care Professionals N=4,823, Health & Care Support Staff N=5,284; White: Health & Care Professionals N=4,350, Health & Care Support Staff N=4,848; BME: Health & Care Professionals N=473, Health & Care Support Staff N=436
Figure 5.8	Total: $\chi^2=88841.9$ (df 6, $p<0.001$); Health & Care Professionals N=4,823, Health & Care Support Staff N=5,284; White: $\chi^2=90620.0$ (df 6, $p<0.001$); Health & Care Professionals N=4,350, Health & Care Support Staff N=4,848; BME: $\chi^2=12258.5$ (df 6, $p<0.001$); Health & Care Professionals N=473, Health & Care Support Staff N=436
Figure 5.9	Total $\chi^2=1575562.9$ (df 4, $p<0.001$); Health & Care Professionals N=4,823, Health & Care Support Staff N=5,284; Degree Health & Care Professionals N=2,000, Health & Care Support Staff N=289; Diploma Health & Care Professionals N=2,309, Health & Care Support Staff N=651; A-Level Health & Care Professionals N=234, Health & Care Support Staff N=1,449; GCSE Health & Care Professionals N=258, Health & Care Support Staff N=2,352; No Qualifications Health & Care Professionals N=34, Health & Care Support Staff N=547
Figure 5.11	Total $\chi^2=349038.1$ (df 2, $p<0.001$); Health & Care Professionals N=2,232, Health & Care Support Staff N=2,399; Highest: Health & Care Professionals N=408, Health & Care Support Staff N=15; Middle: Health & Care Professionals N=1,385, Health & Care Support Staff N=600; Lowest: Health & Care Professionals N=439, Health & Care Support Staff N=1,784
Figure 5.12	Total $\chi^2=306110.5$ (df 2, $p<0.001$); Health & Care Professionals N=1,947, Health & Care Support Staff N=2,034; Highest: Health & Care Professionals N=348, Health & Care Support Staff N=10; Middle: Health & Care Professionals N=1,187, Health & Care Support Staff N=467; Lowest: Health & Care Professionals N=412, Health & Care Support Staff N=1,557
Figure 5.13	Total: $\chi^2 = 50927.5$ (df 2, $p<0.001$); Health & Care Professionals N=285, Health & Care; Support Staff N=365; Highest: Health & Care Professionals N=60, Health & Care Support Staff N=5; Middle: Health & Care Professionals N=198, Health & Care Support Staff N=133; Lowest: Health & Care Professionals N=27, Health & Care Support Staff N=227

	<p>Women: $\chi^2=1643.7$ (df 3, $p<0.001$); Health & Care Professionals N=412, Health & Care Support Staff N=1,557; Men: $\chi^2=1201.2$ (df 3, $p<0.001$); Health & Care Professionals N=27, Health & Care Support Staff N=227</p>
<p>Figure 5.14</p>	
<p>Figure 5.15</p>	<p>Total: $\chi^2=170272.9$ (df 3, $p<0.001$); Health & Care Professionals N=4,835, Health & Care Support Staff N=5,288 Owned Outright: Health & Care Professionals N=1,874, Health & Care Support Staff N=1,950; Mortgaged: Health & Care Professionals N=2,471, Health & Care Support Staff N=1,922; Rented: Health & Care Professionals N=467, Health & Care Support Staff N=1,392; Rent-free: Health & Care Professionals N=23, Health & Care Support Staff N=24</p>
<p>Figure 5.16</p>	<p>Total: $\chi^2=5113.5$ (df 1, $p<0.001$); Health & Care Professionals N=4,835, Health & Care Support Staff N=5,288; Full-time: Health & Care Professionals N=2,862, Health & Care Support Staff N=2,778; Part-time: Health & Care Professionals N=1,973, Health & Care Support Staff N=2,510</p>
<p>Figure 5.17</p>	<p>Total: $\chi^2=17498.6$ (df 8, $p<0.001$); Health & Care Professionals N=651, Health & Care Support Staff N=1,015; Student: Health & Care Professionals N=17, Health & Care Support Staff N=10; Ill or disabled: Health & Care Professionals N=36, Health & Care Support Staff N=95; Could not find work: Health & Care Professionals N=84, Health & Care Support Staff N=288; Financially secure: Health & Care Professionals N=245, Health & Care Support Staff N=251; Domestic commitments: Health & Care Professionals N=102, Health & Care Support Staff N=121; Other: Health & Care Professionals N=167, Health & Care Support Staff N=250</p>

Source: Author's own analysis LFS 2009-2013

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