

Recruitment and Retention in Adult Social Care: Evidence from the Annual Population Survey

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The views expressed are entirely those of the authors.

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Executive Summary

Background

Adult Social Care (ASC) is characterised by high vacancy levels and high rates of staff turnover. Existing estimates suggest that around one third of care workers leave their employer each year. Such high rates of labour turnover have potentially adverse implications for the continuity and quality of care, and generate costs for employers, who must engage time and money in the recruitment, induction and training of new staff. Low wages – and poor job quality more generally – are thought to be a key factor in explaining these high rates of labour turnover. However, a dearth of evidence situates ASC within the broader low-skilled labour market – much of which faces similar challenges.

We contribute to the literature through an analysis of the Office for National Statistics' *Annual Population Survey* (APS) over the period 2012-2020. We seek to identify the factors associated with staff turnover, including the relevance of outside options elsewhere in the labour market. We also make comparisons with similar low-wage occupations, assessing how care work may differ from other occupations where job separation rates are notably lower.

In our analysis, we define care workers as employees classified to Unit Groups 6145, 6146 and 6147 of the *Standard Occupational Classification (2010)* and Adult Social Care settings as those in Classes 87.10, 87.20, 87.30, 88.10 of the *Standard Industrial Classification (2007)*.

Changes in economic activity

We begin by examining changes in the economic activity of care workers over a 12-month period. We find that around two-thirds (65%) of care workers in ASC in *year t* are still working as care workers in ASC 12 months later. A further quarter have transitioned to other roles or settings, whilst around one in ten have left employment. The rate of "sectoral wastage" (the share of employees leaving Social Care for another sector or non-employment) is around one fifth.

Most of the transitions in and out of care work in ASC are to or from other caring roles in the broader Health and Social Care sector. The extent of mobility between ASC and other low-wage sectors such as Retail, Hospitality or Cleaning is very limited. This suggests that the main benchmark for employers seeking to recruit and retain care workers in ASC should be other caring roles in Health and Social Care.

Those care workers who remain in ASC tend to see no substantive change in their working conditions over a 12-month period. However, those who move to other areas of social care tend to experience an increase in the probability of receiving job-related training, whilst those who move to roles in the Health sector tend to experience an increase in the probability of working standard hours and an increase in hourly pay.

Job search

Around one in ten care workers in ASC are looking for a different job at any given time. The incidence of job search among care workers in ASC is higher than that seen in other, similar caring occupations. In a minority of cases, the prompt to search for a new job comes from the temporary nature of the existing position, or by a desire to move on to a different occupation or sector.

However, in most cases, job search arises from dissatisfaction with some aspect of the working environment: pay, hours, commuting time or some other, unspecified aspect of the job.

Job separations

Around one quarter of care workers in ASC leave their job in a given year. Around one in seven move to a new job with a different employer, whilst one in ten exit employment. We use regression analysis to identify the independent association between the probability of job separation and various personal, job and employer characteristics among care workers in ASC. The rate of job separations is higher among younger workers aged 20-29 than among older workers, and is higher for those with health problems, those who are unmarried and those without young school-aged children.

A number of job characteristics are also associated with the probability of leaving one's job. The probability of job separation is 9 percentage points higher among those on temporary contracts than among those on permanent contracts. It is also higher among those working non-standard hours. Job separation is 6 percentage points lower among those who have recently received, or been offered, job-related training, indicating the role that investments in employee's skills and career development can play in supporting employee retention. The probability of job separation is also lower among those on higher wages, but the association between pay levels and job separations is relatively weak when compared with other job characteristics.

We find that job characteristics are generally more important in shaping the probability of moving to another employer than they are in shaping the probability of exiting employment altogether. In other words, they are relevant to an employee's choice of job within the labour market. However, again, contract type, working hours and the provision of training appear more important than relative pay in this regard.

Job separation rates do vary across local labour markets, however it has not been possible to detect the reasons for these variations in our analysis. The wages on offer in other similar jobs in the local labour market are not significantly associated with the probability of job separation in our analyses.

Comparison with other occupations

We show that job separation rates among care workers are similar to those seen among other lowwage caring occupations, such as nursery nursing or veterinary nursing. However, the rates among care workers are around 10 percentage points higher than among healthcare assistants (nursing auxiliaries) and teaching assistants, who are at a similar level in the occupational hierarchy. Differences in the work setting seem to account for much of these disparities. In particular, around two-thirds of the difference in job separation rates between care workers and healthcare assistants can be explained by the greater propensity of healthcare assistants to work in public sector organisations and in large workplaces.

We propose that one reason for the lower rates of turnover seen in these types of setting is that they tend to have stronger internal labour markets that offer greater opportunities for advancement whilst staying within the same firm. We provide evidence in support of this hypothesis by showing that the wage returns to tenure for employees in low-wage caring and personal service occupations are higher in the public sector than in the private sector.

These findings imply that there is a need to provide greater opportunities for career progression among care workers, for instance by seeking to replicate the types of career ladders available to workers in similar occupations in the health sector. Currently, tenure with the same employer does not bring any substantial wage gains for care workers in ASC. As a result, there are likely to be limited economic incentives to staying with the same firm.

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1 Introduction

The Adult Social Care (ASC) sector provides a wide range of activities and support to help adults who are older, or living with disability, or physical or mental ill health. Provision can range from support with personal hygiene and health, to the provision of meals and assistance with other routine daily activities. These services may be residential (provided in care homes) or non-residential (provided in people's homes or day care settings).

The sector is characterised by high vacancy levels and high rates of staff turnover. Estimates from Skills for Care, suggest that over one quarter of directly-employed staff working in the adult social care sector leave their employer each year, with the turnover rate estimated at around one third for those in care worker roles (Skills for Care, 2021: 54).

Such rates of labour turnover have a number of potential implications. First, they may disrupt the continuity and quality of care for those in receipt of care services. Second, they may increase the burden on the remainder of the workforce, particularly when vacancies are hard to fill. Third, they may generate costs for employers, who must engage time and money in the recruitment, induction and training of new staff.

Low wages – and poor job quality more generally – are judged to be important in explaining high rates of labour turnover in ASC (see Moriarty et al, 2018; National Audit Office, 2018; Skills for Care, 2021). However, there is a dearth of evidence situating social care within the broader, low-skilled labour market – much of which faces similar challenges (see Moriarty et al, 2018, p.27).

We contribute to the literature through an analysis of the Office for National Statistics' Annual *Population Survey* (APS). We cover the years 2012-2020, thereby covering most of the decade prior to the time of writing, including the first phase of the COVID pandemic. We investigate patterns of recruitment and retention among care workers in Adult Social Care (ASC). We also seek to identify the factors associated with the probability of labour turnover, including the relevance of outside options elsewhere in the labour market. Our research is distinct from much of the existing work in this area in that we explicitly make comparisons with similar low-wage occupations, assessing how care work may differ from other occupations where job separation rates are notably lower.

The remainder of the paper proceeds as follows. Chapter 2 reviews the existing literature on employee turnover and retention in social care. Chapter 3 introduces the *Annual Population Survey* dataset and outlines the analytical methods used in the remainder of the paper. Chapter 4 provides a portrait of the personal and job characteristics of care workers in ASC, comparing them with other employees in ASC and employees in other caring and personal service occupations. Chapter 5 tracks care workers in ASC across successive years to examine the destinations of those who leave the role, and the origins of those who enter it. The remaining chapters then focus specifically on the issue of job tenure and job separations. Chapter 6 compares patterns of job tenure among care workers in ASC and employees in other roles; Chapter 7 examines the factors that cause care workers to look for a different job; and Chapter 8 examines the incidence and correlates of job separations.

2 Existing evidence

Employees may leave their job for a number of reasons, including retirement, dismissal or voluntary resignation. A wide range of factors are therefore relevant, including personal circumstances, working conditions, management style and characteristics of the local labour market. Each of these factors are discussed to some extent in the existing literature on care worker turnover.

2.1 Personal characteristics

The personal characteristics shown to be associated with the probability of job separation include the employee's age, health condition and family circumstances. As noted above, retirement is one cause of labour turnover, such that the probability of job separation tends to increase from the age of 60 (Skills for Care, 2021, p.123). Younger workers also tend to have a higher probability of job separation than those in middle-age (Turnpenny and Hussein, 2020: 8). In some cases, this may represent a process of 'trial and error' as younger workers seek out a job and organisation that best fits their capabilities and expectations, in other cases it may represent a desire to undertake further study. Family circumstances are also relevant, insofar as the emergence of new or additional domestic caring responsibilities may affect an employee's ability to work (Weale et al, 2019). The employer may have limited leverage on job separations caused by such factors, although of course the relative attractiveness of full-time education, caring or retirement will be determined to some extent by the rewards of the current job.

Health also affects turnover, with the physical nature of care work leading (in particular) to musculoskeletal complaints which may require employees to seek out less physically-demanding work, or even to retire through ill-health (Turnpenny and Hussein, 2020). Research has also pointed to the role played by personal values in shaping labour turnover, with employers who prioritise values-alignment during recruitment experiencing lower rates of turnover (Skills for Care, 2021, p.55). Personal values or attitudes are not typically measured in quantitative datasets, however.

2.2 Job characteristics

Job characteristics and working conditions have arguably been the main focus of attention in the existing literature on labour turnover among care workers. The intention to leave may be prompted by an evaluation of circumstances internal to the job (e.g. comparing one's own rewards or working conditions with those enjoyed by co-workers, or comparing the level of rewards with the effort expended). Such comparisons can act as push factors. However, the intention to leave may also be prompted by an assessment of perceived alternatives elsewhere in the labour market (e.g. the relative pay on offer in competing occupations). Such assessments of the worker's "outside options" may act as pull factors to influence the probability of job separation.

As implied above, the physical nature of care work and the emotional demands of the role may lead to an increased intention to leave (Butler et al, 2010). Research has also focused on the influence of terms and conditions. There is some evidence from the international literature that better pay is associated with reduced turnover; however, the evidence base is mixed and UK-based evidence is surprisingly scarce. Baughman and Smith's (2012) study of care workers in the United States indicates that the relative wage on offer for care work versus other occupations has a relatively modest impact on quit decisions (Frijters et al (2007) reach a similar conclusion in their study of nurses in the UK). Contractual status and work patterns also have an impact on turnover. In a study of care workers in Canada, Zeytinolgu et al (2006, 2009) show that the provision of temporary

contracts and the provision of non-standard hours are positively associated with the intention to leave but again, UK evidence is lacking. One aim of our research is to address these gaps.

2.3 Characteristics of the work setting

Turning to the nature of the work setting, there is a sizeable body of literature looking at the impact of work relationships and labour turnover, with the intention to quit generally being lower in work settings characterised by high levels of managerial support, fairness and respect (see Turnpenny and Hussein, 2020). The provision of opportunities for career development within the firm is another feature that may affect the intention to leave and here, a number of concerns have been expressed over the low rate of return to experience in care work (Skills for Care, 2021; MAC, 2022).

Naturally, employers have greater leverage over job characteristics than over employee's personal circumstances. Research shows that the provision of greater job flexibility and autonomy, for example, can reduce labour turnover (Barken et al, 2018). One issue often raised in respect of social care, however, is the limited scope that employers may have to alter pay and conditions due to budget constraints (e.g. Moriarty et al, 2018; MAC, 2022).

2.4 Types of evidence

The foregoing discussion has cited literature from a range of different contexts, including the UK. Much of the UK evidence is based on either qualitative research or quantitative analysis of Skills for Care's Adult Social Care Workforce Data Set (ASC-WDS). Whilst studies often include anecdotal evidence on how the situation in ASC might differ from the situation in other sectors, few studies offer explicit comparisons between care work in ASC and other low-wage occupations or settings. The recent report from the Migration Advisory Committee (MAC, 2022) is one exception. They compare working conditions among care workers with those found in a set of 'competing occupations' (other public service roles, hospitality roles, administrative roles, retail roles, and cleaning and domestic roles), finding that terms and conditions for care workers are generally inferior. However, they do not explicitly analyse the implications for labour turnover rates. Moreover, as we discuss in Chapter 3, the sample of care workers used in their analysis is not restricted to ASC, and so there are limits to what can be inferred specifically about the sector from their report.

Finally, it should be noted that labour turnover is not always dysfunctional from the point of view of the employer: if employees who are not a good fit for the position are replaced with those who are more suited or more capable, this can bring benefits to the organisation and its clients. However, studies of labour turnover using employee-level data typically cannot distinguish between functional and dysfunctional turnover. Assessing the impact of care worker turnover on productivity or service quality typically requires the use of firm-level data, and this literature is somewhat separate from the literature on the determinants of turnover, discussed above. We do not review it here. Suffice to say that the existing empirical evidence has generally found that poor staff retention and workforce shortages have a significant negative effect on the quality of service provision in caring environments (see Allan and Vadean, 2021).

3 Data and methods

3.1 Cross-sectional data

We use data from the *Annual Population Survey* (APS) administered and made available for research by the Office for National Statistics (ONS) (Office for National Statistics Social Survey Division, 2022).

The APS combines survey records from two sources. The first source is the *Quarterly Labour Force Survey* (QLFS). The QLFS is a rolling, quarterly panel survey in which respondents are interviewed over five successive quarters before exiting the sample. The APS includes records from waves 1 and 5 of the QLFS across the four quarters of the calendar year in question. The second source is the *Local Labour Force Survey* (LLFS). The LLFS is a rolling annual panel in which respondents are interviewed over four successive years. The LLFS sample is divided into four waves and the APS includes records from all four waves of the LLFS for the calendar year in question. Weights are provided to make the APS dataset representative of the general population in a given year. In our cross-sectional analyses, we use data from the APS for the years 2011-2020 inclusive.¹

	APS Dataset: January – December 2018								
	Jan – March 2018	April – June 2018	July – Sept 2018	Oct – Dec 2018					
LFS cohort 1 (first sampled January – March 2017)	Wave 5								
LFS cohort 2 (first sampled April – June 2017)	Wave 4	Wave5							
LFS cohort 3 (first sampled July – Sept 2017)	Wave 3	Wave 4	Wave 5						
LFS cohort 4 (First sampled Oct – Dec 2017)	Wave 2	Wave 3	Wave 4	Wave 5					
LFS cohort 5 (First sampled Jan – March 2018)	Wave 1	Wave 2	Wave 3	Wave 4					
LFS cohort 6 (first sampled April – June 2018)		Wave 1	Wave 2	Wave 3					
LFS cohort 7 (first sampled July – Sept 2018)			Wave 1	Wave 2					
LFS cohort 8 (First sampled Oct – Dec 2018)				Wave 1					
LLFS cohort 1 (first sampled Jan– Dec 2015)		Wave	e 4						
LLFS cohort 2 (first sampled Jan– Dec 2016)	Wave 3								
LLFS cohort 3 (first sampled Jan– Dec 2017)	Wave 2								
LLFS cohort 4 (first sampled Jan– Dec 2018)		Wave	e 1						

Figure 1: Structure of the Annual Population Survey, 2018

Source: ONS (2019) Labour Force Survey User Guide: Volume 6 – Annual Population Survey (Local Area Database), page 3.

In a typical year, the APS contains records for around 300,000 individuals in the United Kingdom. Around half of these cases derive from the QLFS and the other half from the LLFS. A typical annual sample includes around 2,500 employees with a main job as a care worker in Adult Social Care. We define care workers as those in Unit Groups 6145, 6146 and 6147 of the *Standard Occupational*

¹ The year 2021 is not used because it utilises the 2020 Standard Occupational Classification (SOC), potentially causing a discontinuity with previous years, which are coded to the 2010 SOC.

Classification (2010) and Adult Social Care settings as those in Classes 87.10, 87.20, 87.30, 88.10 of the *Standard Industrial Classification (2007)* (Table 1).

Our definition is narrower than that used by the Migration Advisory Committee (MAC) in their recent report on the Adult Social Care workforce (MAC, 2022). The MAC includes all care workers, irrespective of the sector in which they are working. We prefer to confine our attention to Adult Social Care, not least because of the well-noted differences in the working environment between Social Care and Health. Indeed, MAC themselves recommend that social care and healthcare should be separated in statistical outputs, where possible (MAC, 2022, p.6).

SOC(2010)	Description	SIC(2007)	Description
614	Caring Personal Services	86	Human health activities
6141	Nursing auxiliaries and assistants	86.10	Hospital activities
6142	Ambulance staff (exc. paramedics)	86.21	General medical practice activities
6143	Dental nurses	86.22	Specialist medical practice activities
6144	Houseparents and residential wardens	86.23	Dental practice activities
6145	Care workers and home carers	86.90	Other human health activities
6146	Senior care workers	87	Residential care activities
6147	Care escorts	87.10	Residential nursing care activities
6148	Undertakers, mortuary and	87.20	Res. care activities for learning disabilities,
	crematorium assistants		mental health and substance abuse
		87.30	Residential care activities for the elderly and disabled
		87.90	Other residential care activities
		88	Social work activities without
			accommodation
		88.10	Social work activities without
			accommodation for the elderly and disabled
		88.91	Child day-care activities
		88.99	Other social work activities without
			accommodation n.e.c.

Table 1: Classification of care workers in Adult Social Care

One notable advantage of the APS cross-sectional data, when compared with Skills for Care's *Adult Social Care Workforce Dataset* (ASC-WDS) is that the survey is not restricted to care work or Adult Social Care settings. The survey covers all occupations and all sectors of the economy. It is then possible to use the APS to compare the personal, job and employer characteristics of care workers in Adult Social Care with those of employees in a variety of other low-wage occupations and sectors. Such comparisons are also possible using the *Annual Survey of Hours and Earnings* (ASHE), which has an annual sample of employees that is around 50 per cent larger than the APS; however, we rely on the APS as it observes a wider set of personal and job characteristics for the sampled employee.

3.2 Longitudinal data

The panel nature of the QLFS means that individuals who respond at wave 1 and wave 5 will be observed in the same quarter of two successive calendar years. The same is true of individuals who respond in two successive years of the LLFS. An individual's records can be linked across waves by using personal identifiers provided on the APS dataset (PERSID).

This longitudinal linking makes it possible to observe all destinations of those leaving a job in ASC, even if this entails the person moving to another sector or even exiting employment altogether. One

can then obtain a more complete view of job separations than is possible in the ASC-WDS, where employees who leave their job are only observed in the next period if they move to another social care provider who participates in Skills for Care's data collection exercise.

We use a succession of 10 two-year APS panel datasets covering the period 2011/12 to 2020/21.² In these panel datasets, we observe individuals at two points in time, 12 months apart: we refer to these time points as *year t* and *year t+1*, where t = 2011, ..., 2020. We follow ONS (LFS User Guide Volume 11, p.5) by selecting individuals into the panel only when:

- they are aged 15-69 in year t
- their observations for year t and year t+1 match on sex (SEX)
- their observed age in year t+1 is one year more than the age recorded at year t
- their data for *year t+1* has not been brought forward from a previous quarter or year.

To address attrition bias in the panel, we construct a longitudinal weight which seeks to make the sample of individuals observed in *year t* and *year t+1* representative of all individuals observed in *year t*. The variables used to construct this weight are: sex, age (5-year age groups), government office region (20 regions), housing tenure (owner-occupier/renter) and employment status (employee, self-employed, unemployed, inactive). The weighting procedure involves estimating the probability that an individual is observed in *year t+1*, conditional on having been observed in *year* t, and using the inverse of this probability to calibrate the cross-sectional weight provided with the APS dataset (PWTA). The resulting weight is trimmed to avoid outliers, following the procedure outlined by Valliant and Dever (2018, pp.157-158).³

The resulting panel dataset, which we refer to as the *Longitudinal APS (LAPS)*, contains around 405,000 panel observations from around 305,000 individuals who hold an employee job in either *year t* or *year t+1*, where *t*=2011,...,2020. This sample includes around 10,000 panel observations from around 8,000 individuals who are observed to be working as employee care workers in Adult Social Care in either *year t* or *year t+1*.

All analyses using this panel dataset are weighted using the longitudinal weights described above. Standard errors are clustered using the person identifier to account for the non-independence of records belonging to individuals who appear in the data at multiple time-points.⁴

Again, the advantage of the LAPS data, when compared with the longitudinal element of Skills for Care's *Adult Social Care Workforce Dataset* (ASC-WDS) is that LAPS is not restricted to care work or Adult Social Care settings. This means that it is possible to observe all of the destinations the care workers transition to when leaving Adult Social Care (including transitions that involve leaving the labour force altogether). This also gives LAPS an advantage over ASHE, since it is not possible in ASHE to separately identify transitions to non-employment from non-response in *year t+1* (see Forth et al.,

² We do not use the ONS Two-Year Longitudinal APS datasets as these are not available in some years (specifically, 2018/19 and 2020/21). However, our two-year datasets are created using the same protocol as used by ONS to generate their two-year datasets (described in the text).

³ The variables used to construct the weight are identical to those used by ONS when creating its own longitudinal weight for the APS; however, ONS use a calibration weighting procedure rather than a propensity score approach (see LFS User Guide Volume 11). Our longitudinal weight is highly correlated with the longitudinal weight provided on the ONS Two-Year Longitudinal APS datasets that are available in the Secure Research Service (Pearson correlation coefficient of 0.87-0.89, depending on the year).

⁴ This can occur if an individual is observed across more than two years of the LLFS, or if an individual is reselected for and responds to the QLFS after having been rotated out of the sample at an earlier time point.

2022). LAPS has an advantage over the *UK Household Longitudinal Study* (also known as *Understanding Society*) in offering a substantially larger sample of care workers.

4 The care workforce in Adult Social Care

4.1 Estimated numbers of care workers in Adult Social Care

We use the definitions presented in Table 1 of Chapter 3 to identify care workers and other employees in the Adult Social Care sector, and use the cross-sectional APS to derive estimates of their numbers. Figure 2 presents these estimates for the period 2011-2020.

The APS estimates that there are around half a million persons working as care workers in Adult Social Care with employee status. The sector also includes around 300,000 employees in other jobs; these include managers, qualified nurses, administrators, maintenance workers, catering staff and cleaners. The APS indicates that the total number of employees in Adult Social Care has risen over the past decade. In the period 2011-2015, the increase was due to expanding numbers of care workers. In subsequent years, there was some expansion in other roles, though the size of both groups saw a small decline in the period 2019-20, which saw the onset of the COVID pandemic.





Source: Annual Population Survey, 2011-2020 Base: Employees aged 16 and over employed in Adult Social Care. Note: See Table 1 in Chapter 3 for definitions.

Our estimate of the size of the Adult Social Care workforce is lower than that provided by the MAC, who arrive at an estimate of around 1m workers (MAC, 2022: 27). However, their definition extends beyond Adult Social Care to include care workers in any industry sector (ibid., p.137). Our analysis of the APS indicates that there are around 110,000 care workers in employee jobs in other parts of social care (e.g. children's services). In addition, there are an estimated 80,000 care workers in employee jobs in the Health sector and 70,000 outside Health and Social Care. Many of the latter are involved in the public administration of care services, are located in educational settings or are working in private households.

Skills for Care estimate that there were around 1.5m jobs in Adult Social Care in 2012/13, rising to 1.7m in 2020/21 (Skills for Care, 2021: 42). The reasons for the discrepancy between Skills for Care's

estimates and those derived from the APS are not clear, and further work would be required to reconcile these estimates.

4.2 Characteristics of care workers in Adult Social Care

The characteristics of care workers in ASC are summarised in Table 2, which also compares care workers with other occupational groups in ASC. Care workers in ASC are predominantly female (85%), with an average age of 41 years. Two-fifths (40%) have dependent children. Around one-fifth (19%) are from a non-white ethnic group and around one-quarter (23%) are born outside the UK. Around one in seven (13%) have a work-limiting health condition or disability. The level of educational attainment is varied, with one-fifth (20%) having a degree-level qualification and one in twenty (6%) having no educational qualifications. Compared with employees in other caring and personal service occupations in ASC, care workers are more likely to be female, more likely to have been born outside the UK and less qualified, on average.

In terms of job characteristics, there is considerable variation in hours of work between care workers, with 29% working less than 24 hours per week and 11% working 48 or more hours. Wages are relatively low, with mean gross hourly wages of £8.62 (2020 prices). Only Elementary occupations (e.g. cleaners and catering assistants) have a lower mean wage.

The personal and job characteristics of care workers in ASC are compared with those of other caring and personal service occupations (across all sectors) in Table 3. As one might expect, care workers in ASC are similar in many respects to care workers in other settings; the main differences are that care workers in other settings are more highly-qualified and earn higher wages, on average.

In terms of task content, one of the closest comparator occupations is 'Nursing Auxiliary' (commonly referred to as 'Healthcare Assistant'). The similarity of these occupations is apparent from a comparison of their Unit Group descriptors in the UK's *Standard Occupational Classification (2010)* (Table 4). The similarity is also apparent when comparing the skills mentioned in job adverts for the two roles (see Djumileva and Sleeman, 2018). Care workers in ASC are demographically similar to nursing auxiliaries but, again, the latter are more highly-qualified and earn higher wages, on average. Nursing auxiliaries are also more likely to work standard hours.

Table 2: Personal and job characteristics of employees in Adult Social Care

		SOC(2010) Major Group							
						Care	Rest of		All
	SOC1	SOC2	SOC3	SOC4	SOC5	workers	SOC6	SOC9	employees
Share female	0.77	0.81	0.74	0.87	0.55	0.85	0.77	0.82	0.81
Mean age	46.56	44.93	43.52	44.50	47.89	40.83	41.83	44.83	42.33
Share with dependent children	0.30	0.37	0.35	0.31	0.26	0.40	0.35	0.28	0.37
Share white	0.88	0.75	0.90	0.90	0.91	0.81	0.86	0.89	0.83
Share born outside UK	0.14	0.32	0.10	0.11	0.17	0.23	0.18	0.19	0.21
Share with long-term health problem or disability that affects type									
or amount of work	0.10	0.11	0.15	0.13	0.12	0.13	0.15	0.17	0.13
Share with highest qualification at degree-level	0.67	0.83	0.52	0.30	0.12	0.20	0.26	0.08	0.28
Share with highest qualification at A-level	0.21	0.07	0.26	0.33	0.30	0.30	0.31	0.13	0.27
Share with highest qualification at GCSE-level	0.08	0.04	0.16	0.29	0.37	0.33	0.29	0.35	0.29
Share with no GCSEs but another qualification	0.03	0.05	0.04	0.06	0.14	0.11	0.08	0.24	0.10
Share with no qualifications	0.01	0.01	0.02	0.02	0.06	0.06	0.06	0.20	0.06
Share in a job not considered to be permanent	0.01	0.05	0.07	0.07	0.01	0.05	0.06	0.04	0.05
Share usually working less than 24 hours p.w.	0.06	0.18	0.21	0.29	0.22	0.29	0.25	0.51	0.28
Share usually working 24-47 hours p.w.	0.67	0.67	0.72	0.66	0.69	0.59	0.63	0.48	0.61
Share usually working 48+ hours p.w.	0.27	0.15	0.08	0.04	0.09	0.11	0.12	0.02	0.11
Share receiving or offered job-related training in past 13 weeks	0.59	0.61	0.56	0.41	0.45	0.57	0.57	0.39	0.55
Mean gross hourly pay (£/hour)	16.97	14.98	12.87	11.07	9.23	8.62	9.13	7.85	9.85
Coefficient of variation of gross hourly pay (£/hour)	0.54	0.39	0.43	0.56	0.35	0.41	0.45	0.44	0.53
Unweighted base	1,861	2,148	1,231	1,081	1,051	18,262	2,754	2,117	30,863

Source: Annual Population Survey, 2011-2020 (pooled)

Base: Employees aged 16 and over employed in Adult Social Care

Notes: See Appendix A for key to SOC(2010) Major Groups. Unweighted base is the lowest for any cell in the column. Hourly pay rates in 2011-2019 are adjusted to 2020 values using the consumer price index.

Table 3: Personal and job characteristics of employees in selected caring and personal service occupations

	Care	Care		Nursery	Teaching/	Veterinary	
	workers	workers		nurse/child	educational	nurse/	
	in Adult	in another	Nursing	minder/play	support	animal care	Hairdresser/
	Social Care	setting	auxiliary	worker	assistant	services	beautician
Share female	0.85	0.81	0.82	0.97	0.91	0.82	0.89
Mean age	40.83	42.70	41.61	34.63	42.73	32.44	30.40
Share with dependent children	0.40	0.43	0.46	0.64	0.53	0.54	0.67
Share white	0.81	0.85	0.81	0.90	0.91	0.98	0.88
Share born outside UK	0.23	0.16	0.21	0.13	0.10	0.06	0.14
Share with long-term health problem or disability that affects type							
or amount of work	0.13	0.15	0.13	0.09	0.11	0.12	0.09
Share with highest qualification at degree-level	0.20	0.30	0.32	0.30	0.42	0.35	0.11
Share with highest qualification at A-level	0.30	0.29	0.33	0.44	0.32	0.31	0.52
Share with highest qualification at GCSE-level	0.33	0.27	0.24	0.20	0.21	0.26	0.26
Share with no GCSEs but another qualification	0.11	0.09	0.07	0.05	0.04	0.04	0.07
Share with no qualifications	0.06	0.06	0.04	0.01	0.02	0.03	0.03
Share in a job not considered to be permanent	0.05	0.07	0.07	0.08	0.13	0.06	0.04
Share usually working less than 24 hours p.w.	0.29	0.31	0.25	0.36	0.30	0.28	0.40
Share usually working 24-47 hours p.w.	0.59	0.60	0.68	0.61	0.69	0.62	0.57
Share usually working 48+ hours p.w.	0.11	0.09	0.07	0.03	0.01	0.10	0.03
Share receiving or offered job-related training in past 13 weeks	0.57	0.53	0.58	0.48	0.52	0.39	0.35
Mean gross hourly pay (£/hour)	8.62	10.02	10.51	8.40	9.30	9.50	8.12
Coefficient of variation of gross hourly pay (£/hour)	0.41	0.42	0.40	0.45	0.43	0.44	0.54
Unweighted base	18,262	9,835	10,992	8,014	16,778	1,468	3,374

Source: Annual Population Survey, 2011-2020 (pooled)

Base: Employees aged 16 and over

Notes: See Appendix B for key to occupational groups. Unweighted base is the lowest for any cell in the column. Hourly pay rates in 2011-2019 are adjusted to 2020 values using the consumer price index.

	Care workers and home carers	Nursing auxiliaries and assistants
SOC(2010) Unit Group	6145	6141
Description	Care workers and home carers attend to the personal needs and comforts of the elderly and the infirm with care and support needs ('service users') within residential care establishments, day care establishments or in their own homes.	Nursing auxiliaries and assistants assist doctors, nurses and other health professionals in caring for the sick and injured within hospitals, homes, clinics and the wider community.
Typical entry routes and associated qualifications	There are no formal academic entry requirements. In most cases, workers will be required to register with the appropriate statutory body which involves satisfying the registration criteria. This would normally include holding or working towards the appropriate qualification for the job. Entrants must typically be 18 years old and have experience of working in a care environment. Both off- and on-the-job training is available. A wide range of qualifications including NVQs/SVQs covering various aspects of care are available. Background checks including a CRB check are likely to be required.	There are no formal academic entry requirements. Off- and on-the-job training is provided. NVQs/ SVQs in Care are available at Levels 2 and 3.
Tasks	 Assists and enables service users to dress, undress, wash, use the toilet and bathe; Serves meals to service users at table or in bed, and assists with feeding if required; Generally assists with service users' overall comfort and wellbeing; Provides interest and activities to stimulate and engage the service user; Helps with daily activities such as letter writing, paying bills, collecting benefits; Undertakes light cleaning and domestic duties including meal preparation as required; Monitors service users' conditions by taking temperature, pulse, respiration and weight, and contributes to record keeping; Liaises with professional staff in carrying out care plans etc. 	 Performs basic clinical tasks such as: Takes patients' temperature and pulse, weighing and measuring, performing urine tests and extracting blood samples; Prepares patient for examination and treatment; Distributes and serves food, assists patients in feeding and prepares snacks and hot drinks; Assists patients in washing, dressing, toiletry activities and general mobility; Changes bed linen, makes beds and tidies wards.

Table 4: Comparison of SOC(2010) descriptions for care workers and nursing auxiliaries

Source: Office for National Statistics (2010)

5 Year-to-year transitions in employment status

5.1 Introduction

One substantive advantage of the APS over the ASC-WDS is its ability to track employment transitions in full detail. The ASC-WDS contains limited information about the origins of those who enter care work from other sectors, or the destinations of those who leave the sector. The APS, however, interviews employees in successive years, irrespective of their employment status. It is then possible to identify the prior employment status of new entrants to care work, and it is possible to identify the subsequent employment status of those who leave the role.

5.2 Methodology

The analysis reported in this chapter makes use of the longitudinal APS described in Section 3.2. We take all persons aged 16 and over who are employed as care workers in ASC in *year t* or *year t+1*, where t=2011,...,2019.⁵ We then tabulate the employment status of these persons in the two adjacent years, focusing on changes in occupation and industry sector. We also analyse the extent to which those who depart from the role of care worker in ASC see improvements in their working conditions.

Some employees may remain in the same occupation and industry sector but change their employer. The analysis presented in this chapter does not identify those types of transition. However, they are one focus of the later analysis presented in Chapters 6, 7 and 8.

The analysis focuses on the employee's main job. Analyses are weighted to account for the APS sample design and longitudinal attrition, using the weights described in Section 3.2.

5.3 Results

5.3.1 Types of transition

The year-to-year transitions are presented in Table 5. The top row of the table takes all care workers in ASC in *year t* and looks forward one year to examine their employment status in *year t+1*. Around two-thirds (65%) of care workers in ASC in *year t* are still working as care workers in ASC 12 months later. The remaining one-third have transitioned to other roles or settings. Specifically, around one in ten (8%) are still working as employees in ASC, but are no longer employed as care workers; some of these may have moved to managerial or administrative roles. A further tenth have left ASC to work in another area of Social Care (5%) (e.g. children's services) or have moved to work in the Health sector (5%). Around one in twenty (6%) have moved to a job outside of the Health and Social Care sector, and the remaining tenth (11%) are no longer in an employee job. This latter group comprises – in approximately even proportions – individuals who are now self-employed, unemployed, studying, looking after family, unable to work because of illness or disability, and those who have retired.

⁵ We exclude the longitudinal APS data where *t*=2020 because the APS data for 2021 utilise a different occupational classification from that used in earlier years.

			Employ		Unweighted				
		Care	Other	Another			Not in		base
		worker	role in	area of		Outside	employee		
		in ASC	ASC	SC	Health	H&SC	job	Total	
		65	8	5	5	6	11	100	7,079
s in 6)	Care worker in ASC	65							
tatu: nn %	Other role in ASC	6							
ent s colur	Another area of SC	5							
oyme r t (c	Health	4							
mple <i>yea</i>	Outside H&SC	8							
ш	Not in employee job	12							
	Total	100							
	Unweighted base	7,152							

Table 5: Year-to-year transitions in employment status among care workers in Adult Social Care

Source: Annual Population Survey Two-Year Panel, 2011/12-2019/20

Base: Employees aged 16 and over, employed in Adult Social Care in *year t* or *year t+1* Notes: ASC=Adult Social Care; SC=Social Care; H&SC=Health and Social Care. See column 2 of Table 1 for definitions.

These figures imply that the rate of "sectoral wastage" from ASC could be as high as one quarter (26%).⁶ However, it is possible, when using industry classifications at four-digit level, that small variations in the way that an individual describes their work setting may lead to erroneous differences in coding between years; such cases may then be mistakenly categorised as sectoral transitions. Such errors are most likely to affect the distinction between ASC and other parts of Social Care, due to the similarity of these settings.⁷ A more conservative (lower-bound) estimate of sectoral wastage might then only include those care workers who move outside of the Social Care sector: this yields a sectoral wastage rate of one-fifth (21%).

We can examine the destination of this fifth of care workers in more detail. Half remain in work. These comprise around one-fifth who remain in care worker roles, around one tenth who switch to other roles in SOC(2010) Major Group 6, around one tenth who move up into SOC(2010) Major Groups 1-5 and around one tenth who move down to SOC(2010) Major Groups 7-9. No occupations dominate: the most-common single destination is the role of Nursing Auxiliary (SOC(2010) Unit Group 6141), which accounts for most of those who remain in SOC(2010) Major Group 6 but who are no longer care workers (around 2 per cent of those employed as care workers in ASC in *year t*). Others make the transition to Nursing (Unit Group 2231), teaching/educational assistant (Unit Groups 6125, 61236), retail sales (Unit Group 7111) and cleaning (Unit Group 9233) *inter alia*, but none of these destinations accounts for more than half of one per cent of all care workers in ASC in *year t*.

The first column of Table 5 looks backwards to examine the status in *year t* of all those working as care workers in ASC in *year t+1*. This enables us to see where those entering care work are recruited from. The table shows that around one in ten (11%) come from other roles in ASC or other areas of

⁶ This figure is obtained by summing the columns labelled 'Another area of SC', 'Health', 'Outside H&SC' and 'Not in employee job' in Table 5 and accounting for rounding errors.

⁷ In fact, most (85%) of those care workers in ASC in *year t* who are classified as working in "Another area of Social Care" in *year t+1* report (at *t+*1) that they have been in their job for more than 12 months. We do not take account of data on job tenure here. However, these data are used in Chapters 6 and 8.

Social Care. Around one in twenty (4%) come from roles in the Health sector and around one in 12 (8%) come from employee jobs outside Health and Social Care. The remaining 12% enter from self-employment, unemployment or inactivity, with recruits from unemployment making up around two-fifths of these.

Around two-fifths of those coming from employee jobs outside Social Care are coming from care worker positions in other settings. The remainder again come from a wide variety of occupations, with none dominating, but the role of Nursing Auxiliary again accounts for the largest single share. The main difference from the list of destination occupations is that Nursing rarely features here.

One key point that emerges from this analysis is that most of the transitions in and out of care work in ASC are to or from other caring roles (broadly) defined in the Health and Social Care sector. The extent of mobility between ASC and other low-wage sectors such as Retail, Hospitality or Cleaning is very limited. This suggests that the main benchmark for employers seeking to recruit and retain care workers in ASC should be other caring roles in Health and Social Care.

5.3.2 Changes in working conditions

To assess the outcomes of these transitions, we examine four core aspects of employees' working conditions:

- job security (whether the job is permanent or temporary)
- skill investments (whether they received, or were offered, job-related training in the three months prior to the survey interview)
- working hours (whether they worked short hours, standard hours (25-47 hours per week) or long hours)
- wages (gross hourly earnings).

We take all care workers in ASC in *year t* and identify how average working conditions change for care workers making the transitions indicated in the top row of Table 5. The results are shown in Table 6.

Those care workers who remain in ASC see no substantive change in their working conditions (Table 5, column 1). The only statistically significant change is that the share of care workers receiving or offered job-related training falls by two percentage points between *year* t and *year* t+1.

Those who move to other roles in ASC see an increase in their hourly wage of 49 pence, on average; in some cases, this may be the result of promotion to a more senior role (e.g. manager). Those who move to other areas of social care see an increase in the probability of receiving job-related training (+6 percentage points).

The most extensive improvement is experienced by those who move to roles in the Health sector: these workers see an increase in the probability of working standard hours (+11 percentage points) and an increase in mean hourly pay (+95 pence per hour). Further analysis of this group shows that the experience is similar for those who move to care worker positions in Health and for those who move to Nursing Auxiliary (Healthcare Assistant) roles.⁸

Those care workers who moved to roles outside of Health and Social Care saw a worsening of their working conditions overall, with a decline in the share in permanent jobs (-9 percentage points) and a decline in the share receiving job-related training (-11 percentage points). It is possible that some

⁸ The MAC report on Adult Social Care (2022: 48) also shows that roles equivalent to care worker in the NHS offer superior pension provision and longer annual leave entitlements.

of these transitions were enforced, rather than voluntary, although it is not possible in the APS data to distinguish between voluntary and involuntary moves.

This analysis appears to reinforce the proposition that other caring roles in Health and Social Care are the main source of competition for employers seeking to retain care workers in ASC.

	Employment status in year t+1						
	Care	Other	Another				
Changes in working conditions for the average	worker	role in	area of		Outside		
worker between year t and year t+1	in ASC	ASC	SC	Health	H&SC		
Share in a permanent job (ppts)	0.00	-0.03	0.01	-0.02	-0.09		
Share receiving or offered job-related training (ppts)	-0.02	-0.03	0.06	-0.01	-0.11		
Share usually working <=24 hours p.w. (ppts)	0.00	-0.02	-0.03	-0.03	0.03		
Share usually working 25-47 hours p.w. (ppts)	-0.01	-0.01	0.02	0.11	-0.01		
Share usually working 48+ hours p.w. (ppts)	0.01	0.03	0.01	-0.08	-0.02		
Mean gross hourly pay (£/hour)	0.06	0.49	-0.26	0.95	0.36		

Table 6: Year-to-year change in working conditions among care workers in adult social care

Source: Annual Population Survey Two-Year Panel, 2011/12-2019/20

Base: Employees aged 16 and over, employed as care workers in Adult Social Care in *year t* Notes: ASC=Adult Social Care; SC=Social Care; H&SC=Health and Social Care; see column 2 of Table 1 for definitions. Changes in mean gross hourly pay are computed using real (not nominal) values – see notes to Table 2. Bold type identifies changes that are statistically significant from zero at the 10 per cent level.

6 Job tenure

6.1 Introduction

The report has, until this point, focused solely on a year-to-year comparison of the occupational and sectoral classification of the employee. Many of those who change occupation or sector from one year to the next will also change employer. However, changes of employer may also occur among those who remain working as care workers in ASC. Job separations (the term we use to refer to employment transitions that involve a change of employer) are of particular policy interest because of their potential to interrupt the continuity of care for clients, and because labour turnover can have specific resource implications for employers who must find temporary cover and/or hire to fill the vacant position.

The remainder of the report focuses on an analysis of job tenure, job search and job separations among care workers in ASC. This chapter presents a descriptive analysis of patterns of job tenure. Chapter 7 analyses data on job search, and Chapter 8 provides an extensive analysis of the incidence and correlates of job separations.

6.2 Methodology

The analysis of job tenure presented below makes use of the cross-sectional APS described in Section 3.1. Respondents to the APS who are in employment are asked "in which year [and month] did you start working continuously for your current employer?". The responses to this question identify the length of time (in months and years) that the individual has been working for their current employer (APS variable EMPLEN). We refer to this as the employee's job tenure.

We examine the distribution of job tenure for all persons aged 16 and over who are employed as care workers in ASC in *year t*, where *t*=2011,...,2020. As in earlier chapters, we also compare the job tenure of care workers in ASC with that of employees in other roles in ASC, and with the job tenure of employees in other low-wage occupations.

6.3 Results

Figure 3 shows the distribution of job tenure for care workers in ASC, by year. On average, around 22 per cent of care workers in ASC have been with their current employer for less than 12 months. Around two-fifths have been with their current employer for less than two years. This implies a substantial degree of churn in the care workforce of the average employer in ASC. Comparing across years, there is a slight indication of an increase in the rate of churn in the middle of the decade 2011-2020, followed by a similar regression in recent years. The share of employees with low job tenure is smallest in 2020, reflecting the generally low rate of job mobility seen during the period of the COVID-19 pandemic.



Figure 3: Job tenure among care workers in Adult Social Care, by year

Source: Annual Population Survey, 2011-2020 Base: Employees aged 16 or more

Care workers have the lowest tenure, on average, of all occupations in ASC (Figure 4). Tenure is longest, on average, among managers and skilled trades. The low proportion of care workers with tenure of five or more years (around one-third, or 34%) is particularly striking; in most other occupational groups in ASC this share is at least two-fifths.

Figure 4: Job tenure among care workers and other selected occupational groups in Adult Social Care



Source: Annual Population Survey, 2011-2020 (pooled)

Base: Employees aged 16 or more

Note: See Annex A for the definition of occupational groups. Sales occupations (SOC Major Group 7) and Plant, process and machine operatives (SOC Major Group 8) are excluded due to small sample sizes

Comparing the job tenure of care workers in different settings, we see that tenure is shortest, on average, in ASC (Figure 5). Here, again, it is striking that relative few care workers in ASC have job tenure of five or more years.



Figure 5: Job tenure among care workers in various settings

Source: Annual Population Survey, 2011-2020 (pooled)

Base: Employees aged 16 or more. See column 2 of Table 1 for definitions of the settings.

Nevertheless, the distribution of job tenure amongst care workers in ASC is not substantially different from that seen in other low wage occupations, such as nursery nursing, hairdressing or veterinary nursing (Figure 6). The occupations with higher-than-average job tenure are teaching assistant and nursing auxiliary (healthcare assistant). One might infer from Figure 6 that relatively low levels of job tenure (i.e. high levels of job mobility) are a common feature of low-paid, caring roles that are predominantly undertaken in small, private sector workplaces, and that tenure tends to be longer in similar roles that are more commonly located in the public sector. We return to this issue in Chapter 8.



Figure 6: Job tenure among care workers in Adult Social Care and other occupations

Source: Annual Population Survey, 2011-2020 (pooled) Base: Employees aged 16 or more Notes: See Appendix B for key to occupational groups.

7 Job search

7.1 Introduction

The literature on labour turnover sees the process of job separation as a continuum, in which an employee moves through various stages of weakening commitment to their current job before they finally quit (e.g. Mobley, 1977). Active job search can be one indicator of this weakening commitment, although it is recognised that the process of searching for another job does not necessarily imply that the employee will leave: they may find that no better alternative is available.

The overall incidence of job search is then useful as a broad (but imperfect) indicator of the degree of employee commitment to their current employer. Data on job search is also valuable when seekers are asked about the factors that have prompted their job search, as is the case in the APS.

7.2 Methodology

The analysis of job search presented below again makes use of the cross-sectional APS described in Section 3.1. Respondents to the APS who are in employment are asked "Were you looking for a different or additional paid job or business in the week ending Sunday the [date]", where [date] is a reference date just prior to the date of interview (APS variable DIFJOB). Respondents who answered positively were asked why they were looking for another job, with up to three reasons recorded (APS variable: LOOKM11). We examine the incidence and reasons for job search among all persons aged 16 and over who are employed as care workers in ASC in *year t*, where *t*=2012,...,2020. Our series begins in 2012 as the questions on job search were not asked in 2011.

7.3 Results

On average, around one in ten care workers in ASC (105) are looking for a job at any given time. In keeping with the pattern of job tenure, the incidence appears to have been highest in the early-to-middle part of the decade, and has fallen in the latter part of the decade, sitting at 8% in 2020. The decline from 2013 to 2020 is small in magnitude, but is statistically significant at the 1 per cent level. Averaging across the whole period (2012-2020), one finds that the incidence of job search among care workers in ASC is higher than that seen in other, similar caring occupations (Figure 8).

The reasons for job search among care workers in ASC are shown in Figure 9. In a minority of cases, the prompt to search for a new job comes from the temporary nature of the existing position, or by a desire to move on to a different occupation or sector. However, in most cases, job search arises from dissatisfaction with some aspect of the working environment. Dissatisfaction with pay is cited by around one-quarter (26%) of job seekers, a desire for longer hours is cited by one tenth (10%) and a desire for shorter hours by one in twenty (4%). Commuting time is cited by around one in twenty (6%). However, these are not the only aspects of the job to prompt a search for a new role. Around three in ten employees (31%) cite some other, unspecified aspect of their job. No further details are requested in these cases, so it is difficult to speculate on the cause of dissatisfaction. However, evidence from other sources (RESSCW WP1) suggest that a lack of developmental opportunities, the intensity of work and poor working relationships with colleagues and line managers may each play a role *inter alia*.

One can gain further insights into potential sources of dissatisfaction by examining the correlation between working conditions and the actual rate of job separation. This analysis is presented in Chapter 8.



Figure 7: Percentage of care workers in Adult Social Care searching for a different job at the time of interview, by year

Figure 8: Percentage of employees in selected occupations searching for a different job at the time of interview



Source: Annual Population Survey, 2012-2020 (pooled) Base: Employees aged 16 or more

Notes: See Appendix B for key to occupational groups.

Source: Annual Population Survey, 2012-2020 Base: Employees aged 16 or more working as care workers in Adult Social Care



Figure 9: Reasons for job search among care workers in Adult Social Care

Source: Annual Population Survey, 2012-2020 (pooled) Base: Employees aged 16 or more working as care workers in Adult Social Care

8 Job separations

8.1 Introduction

The analysis of job separations follows on naturally from the analysis of job tenure and job search. As noted earlier, job separations are an issue of keen policy interest because of their impact on continuity of care for clients and because of the resource implications for employers in filling newlyvacant positions. In this chapter, we first investigate the incidence of job separations among care workers in Adult Social Care. We then examine the future employment status of those who leave their job. Finally, we analyse the personal, job and employer characteristics that are associated with a higher likelihood of job separation.

8.2 Methodology

The analysis of job separations makes use of the longitudinal APS data discussed in Section 3.2. We take all persons aged 16 and over who are employed as care workers in ASC in *year t*, where t=2011,...,2020. We then identify their employment status in *year t+1* and use the data on employment status and job tenure in *year t+1* to identify those who have either left employment or changed employer over the previous 12 months (i.e. since *year t*). We classify either transition as a "job separation".

The approach is similar to that used for the longitudinal analysis presented in Chapter 5. However, in Chapter 5, we focused on changes in occupation and/or industry across years. Here, we focus on changes of employer (i.e. the end of an employment relationship). Changes in employer are identified deductively from a question that asks: "In which year [and month] did you start working continuously for your current employer?" (APS variable: EMPLEN). In this analysis, employees are therefore categorised as having left the job reported in *year t* if they are found to be in a job in *year t+1* where the reported job tenure is less than 12 months, or if they are not in an employee job *in year t+1*. The focus on job tenure allows us to identify job separations among those who remain in the same occupation and sector across the two years.

As in Chapter 5, the analysis focuses on the employee's main job, because there is no unique job identifier on the dataset and so it is not possible to match jobs with certainty across years. This exclusion criterion affects around 3% of all records. All analyses are weighted to account for the APS sample design and longitudinal attrition, using the weights described in Section 3.2.

Finally, it should be noted that a job separation does not always arise because the employee has left of their own accord (voluntary quits). Job separations also arise when a fixed-term or temporary position comes to an end, or when an employee is dismissed. The APS does not ask all those leaving a job in the previous year why their previous position came to an end. Employees who *started* a new job within the last three months are asked why they left their previous position. Among this group, around one in ten left their previous job because they were dismissed, were made redundant or came to the end of a temporary contract. Around eight in ten reported that they resigned or "left for some other reason" (not specified), with the remainder leaving for health or family reasons. Voluntary quits therefore appear to dominate among those who have completed a job-to-job move in the previous three months. One might then surmise that voluntary quits also dominate among all those who have left a job in the previous year, but the hypothesis cannot be directly tested and it is not possible to focus our analysis of job separations specifically on voluntary quits with the available data.

8.3 Rate of job separation

Figure 10 shows that around one quarter of care workers in ASC leave their job in a given year. The rate shows some variation over time, however, tending to be higher over the period 2014-2019 than in 2011-2013 or 2020.⁹ The middle years of the decade also tend to be those in which the rate of job separation among care workers in ASC is most in excess of the rate of job separations seen elsewhere in SOC(2000) Major Group 6 (indicated by the orange line in Figure 10).



Figure 10: Job separations among care workers in Adult Social Care and other jobs in SOC(2010) Major Group 6, by year

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 Base: Employees aged 16 or more Notes: ASC=Adult Social Care.

8.4 Destinations of those who leave their job

Figure 11 shows the employment situation in *year t+1* for all employees working as care workers in Adult Social Care in *year t*. Around three-quarters are classified – using their reported job tenure in *year t+1* – as remaining with the same employer. A further one in seven (14%) are with a new employer, and the remaining ten per cent are not in an employee job in *year t+1*.

Among those who move to a new employer in *year t+1*, around half remain as care workers. The most common single occupational destination, other than care work, is Nursing auxiliary (SOC(2000) Unit Group 6141). As in Chapter 5, this occupation accounts for most of those who stay in SOC(2000) Major Group 6 but who are no longer employed as care workers. Other occupational destinations for those moving job include nursing (SOC Unit Group 2231), teaching/educational assistance (6125, 6126), retail sales (7111) and cleaning (9233), but none of these four occupations accounts for more than one per cent of all care workers in ASC in *year t*. Similarly, the majority of those who move to a

⁹ The job separation rates for 2014-2019 are each statistically significant at the 10 per cent level from that shown in 2011; the rates for 2012, 2013 and 2020 are not. The low rate of job mobility seen in the economy during the period of the COVID-19 pandemic has already been commented on in Section 6.3.

new employer remain in ASC, with the most common alternative destination being the Health sector. The broad patterns are therefore similar to those seen in Chapter 5, whereby most of movement for care workers in ASC is to other similar roles within the area of Health and Social Care, rather than exiting to other, more-distant occupations or industry sectors.¹⁰



Figure 11: Employment situation in year t+1 for care workers in Adult Social Care

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled) Base: Employees aged 16 and over, employed as care workers in Adult Social Care in *year t*

8.5 Personal, job and employer characteristics associated with job separation

To examine the personal, job and employer characteristics that are associated with job separations among care workers in Adult Social Care, we select all individuals who are aged 16-58 and in an employee job in *year t*. The upper bound on age is imposed to minimise the number of job separations caused by retirement. This yields a sample of around 6,000 observations from care workers in adult social care, originating from around 5,200 individuals.

Job separation is treated first as a binary variable (0=remained with current employer; 1=separated from job), although an analysis which distinguishes between exits to other jobs and exits to non-employment is subsequently presented in Section 8.6. The incidence of job separations in the estimation sample, and the variation in this incidence over time, are very similar to the estimates shown in Figure 10 for the broader population that includes employees aged 59 and over.

We use a probit estimator to identify the independent association between the probability of job separation and various personal, job and employer characteristics within our sample of care workers

¹⁰ There is some disagreement, at the person level, between the data on job tenure and the data on industry sector. Among those care workers in ASC in *year t* who report job tenure of more than 12 months at *year t+1*, around one in eight appear to have moved outside Adult Social Care over the year. As noted in Section 5.3.1, there may be errors in the coding of industry which affect comparisons within-person over time. Individuals may also experience recall errors when reporting job tenure. It is difficult to adjudicate as to which measure is more accurate in such cases.

in ASC. As in all other analyses presented in this report, the analysis is weighted to ensure that the estimates are representative of the population of care workers.

The results of this multivariate analysis of job separation are presented in Table 7. Probit coefficients have been converted to marginal effects in order to show the difference in the probability of job separation associated with a one unit increase in the covariate whilst holding the values of other variables at their mean. For categorical variables, the marginal effect indicates the difference in the probability of job separation between the indicated category and the reference category, whilst holding the values of other variables at their mean. Those marginal effects highlighted in bold are statistically significant from zero at the 10 per cent level or lower. Appendix C presents descriptive statistics on the sample entering the regression.

The regression analysis shows that some personal characteristics are associated with the probability of job separation. For instances, the probability of separation is highest for those aged 20-29, and is higher for those with health problems, those who are unmarried and those without young school-aged children. There are no statistically-significant differences between those without qualifications and those with specific levels of educational attainment. However, further tests show that employees with degrees or A-levels do have a higher probability of separation than those with lower or no qualifications.

Turning to job characteristics, we find that the probability of job separation declines with tenure – a familiar result that reflects state dependence within the job. Focusing on specific working conditions, we find that the probability of job separation is 9 percentage points higher among those on temporary contracts than among those on permanent contracts. It is also higher among those working non-standard hours. Those working fewer than 25 hours per week have a probability of job separation that is 10 percentage points higher than those on standard hours (25-47 hours per week), whilst for those working 48 hours or more per week, the separation rate is 4 percentage points higher, all other things being equal. Job separation is 6 percentage points lower among those who have recently received, or been offered, job-related training.¹¹

The APS does not provide details about the nature of the training received by an employee. However, we can split the sample into workers with low and high tenure to explore whether the association between training and job separation is solely related to "induction training" or whether training for more experienced workers is also associated with a lower probability of job separation. In these regressions (not shown), we find that training has a particularly strong association with the probability of job separation in the first year of an employee's job tenure: employees in the first year of their tenure who receive job-related training have a 10 percentage point lower probability of job separation than those who do not receive training. However, ongoing training also appears to be effective in reducing employee turnover. Among those employees with tenure of more than one year, the receipt of job-related training is associated with a reduction of 5 percentage points in the likelihood of job separation.

The negative correlation between training receipt and job separation may arise from the use of retention clauses which require an employee to pay back part (or all) of the cost of employer-provided training if the employee leaves the job within a certain period. However, we have no evidence on the prevalence of these clauses within ASC. Moreover, stakeholders have highlighted that care workers may sometimes leave for employment in other sectors with better training and

¹¹ Stakeholders have highlighted that care workers may sometimes leave for employment in other sectors with better training and development offers (MAC, 2022: 24).

development offers (MAC, 2022: 24). This points to the positive effect that investments in employee's skills and career development by the current employer can have on employee retention (Winterton, 2007, pp.379-80).

The probability of job separation is lower among those on higher wages. However, the association between pay levels and job separations is quite weak. Log hourly earnings have a standard deviation of 0.5 log points in this sample. Hence, a shift of one standard deviation in log hourly earnings reduces the probability of job separation by 2.5 percentage points. This is around one quarter of the elasticity associated with the shift from a temporary to a permanent contract, and less than half the elasticity associated with the provision of standard working hours or job-related training.

The APS questionnaire includes some measures of alternative working arrangements (e.g. zero hours contracts), and commuting time. The survey does not measure these comprehensively, however: the modular design of the questionnaire and changes in questionnaire content over time mean that these questions are asked only of a subset of respondents. We tested for their inclusion in the model among the subset of cases where these questions were asked, but the coefficients were always non-significant, and so they do not feature in the final model specification.

Finally, it is worth commenting on regional differences in job separation rates. The region dummies in Table 7 show no statistically significant differences from London (the reference category). However, if we look across the full set of regions, the coefficient for Wales is statistically significant from that for Northern Ireland at the 5 per cent level. We shall see later that there are differences in separation rates between travel-to-work areas (TTWAs), but many of those differences appear to wash out at this aggregate level. Regions are, naturally, more homogenous than TTWAs.

	Meff	Std. Err.	t-statistic	p-value
Personal characteristics:				
Female	-0.005	0.020	-0.26	0.79
Age in years:				
16-19	-0.010	0.051	-0.19	0.85
20-29	0.038	0.022	1.77	0.08
30-39 (Ref.)				
40-49	-0.024	0.021	-1.13	0.26
50-59	-0.041	0.023	-1.75	0.08
White	-0.022	0.027	-0.81	0.42
Not born in the UK	-0.004	0.025	-0.17	0.86
Work-limiting health problem	0.064	0.020	3.27	0.00
Married/civil partnership	-0.040	0.016	-2.52	0.01
Age of youngest dependent child:				
No dependent children (Ref.)				
0-1	0.021	0.027	0.80	0.42
2-4	-0.017	0.026	-0.66	0.51
5-9	-0.060	0.024	-2.46	0.01
10-15	-0.037	0.024	-1.56	0.12
Home-owner with mortgage	-0.015	0.015	-0.98	0.33
Highest educational qualification:				
Degree-level	0.025	0.033	0.74	0.46
A-level	0.010	0.032	0.30	0.76
GCSE-level	-0.024	0.032	-0.76	0.45
Other qualification	-0.003	0.037	-0.08	0.94
No qualifications (Ref.)				
Job characteristics:				
Job tenure:				
Less than one year	0.203	0.026	7.95	0.00
1 year	0.184	0.027	6.75	0.00
2-4 years	0.131	0.024	5.44	0.00
5-9 years	0.073	0.026	2.76	0.01
10 years or more (Ref.)				
Managerial or supervisory role	-0.020	0.020	-0.98	0.33
Temporary contract	0.091	0.033	2.77	0.01
Usual weekly hours:				
1-24 hours	0.097	0.016	5.95	0.00
25-47 hours (Ref.)				
48 hours or more	0.040	0.023	1.72	0.09
Any job-related training received or	-0 063	0.015	-1 31	0 00
offered in past 3 months	-0.003	0.015	7.51	0.00
Ln(hourly wage)	-0.046	0.026	-1.81	0.07
Missing data on hourly wage	0.080	0.023	3.46	0.00

Table 7: Marginal Effects from Probit Regression of the Probability of Job Separation among CareWorkers in Adult Social Care

Table 7 continued				
Employer characteristics:				
Private sector employer	0.034	0.024	1.42	0.16
Large workplace (250+ employees)	-0.040	0.028	-1.44	0.15
Resident in urban location	0.032	0.020	1.62	0.11
Region of workplace:				
North East	-0.022	0.040	-0.54	0.59
North West	0.010	0.038	0.25	0.80
Yorkshire and Humberside	0.006	0.040	0.15	0.88
Midlands	0.020	0.036	0.56	0.58
East of England	0.010	0.040	0.25	0.80
London (Ref.)				
South East	0.003	0.038	0.07	0.94
South West	0.016	0.039	0.40	0.69
Wales	0.046	0.038	1.20	0.23
Scotland	0.000	0.038	0.00	1.00
Northern Ireland	-0.062	0.063	-0.99	0.32
Industry sector:				
Residential nursing care (87.10) (Ref.)				
Residential care for learning disabilities et al (87.20)	-0.002	0.019	-0.10	0.92
Residential care for elderly and disabled (97.30)	0.015	0.017	0.91	0.36
Non-residential care for the elderly and disabled (88.10)	0.023	0.029	0.80	0.42
Proxy respondent	-0.011	0.018	-0.60	0.55
Year dummies	Yes			
Number of observations	5,618			
Pseudo-R2 from probit model	0.091			

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled)

Base: Employees aged 16-58, employed as care workers in Adult Social Care in *year t*

Notes: Marginal effects in **bold type** are statistically significant from zero at the 10 per cent level (or lower)

8.6 Characteristics associated with job-to-job moves

The analysis presented in Section 8.5 identifies the characteristics associated with job separation. However, it does not distinguish between the two different types of separation shown in Figure 11, namely: separations involving a switch to another employer (job-to-job moves); and those involving a transition out of employment (e.g. entering full-time study, unemployment or family care). There is particular interest in identifying the role of job and employer characteristics in job-to-job moves, as this helps to identify the key dimensions on which employers in adult social care compete for labour.

To investigate these issues, we run a multinomial probit regression with three possible outcomes: remain in the same job (the baseline outcome); move to a job with another employer; and exit employment.¹² The regression sample and list of personal, job and employer covariates are the same as in the analysis presented in Section 8.5.

Table 8 presents the results of this multinomial probit analysis. Again, the probit coefficients are converted to marginal effects. Here, they show the association between the characteristic in question and the relative probability of being in each of the three states. For instance, the first row in column (1) of Table 8 shows whether being female is associated with a higher/lower probability of switching to another job, relative to the probability of remaining in the same job (the baseline state). If the gender differential in the probability of switching to another job is the same as the gender differential in the probability of remaining in the same job, this coefficient will be zero. Positive coefficients indicate that the characteristic is associated with a higher probability of being in the given state (relative to the baseline state); negative coefficients indicate that the characteristic is associated with a higher probability of set state is associated with a lower probability. Again, the marginal effects highlighted in bold are statistically significant from zero at the 10 per cent level or lower.

Our focus is on column 1 of the table, which shows the characteristics associated with job-to-job moves. We see that some personal characteristics are relevant. For instance, the probability of moving to another job (relative to staying in the same job) is lower for older workers. It is higher for those with a work-limiting health problem – possibly indicating that some employees change employers to find a work setting that can better accommodate their health situation. Job-to-job moves are less likely for those who are married and for those with young school-aged children. Other literature has indicated the limitations on job mobility for those with dependent children (particularly women) (e.g. Petrongolo and Ronchi, 2020).

The main advantage of this analysis, however, is to show more clearly the extent to which terms and conditions are associated with the probability of moving to another employer. Here, we see that the relative probability of job-to-job moves is around 16 percentage points higher for those on temporary contracts and around 12 percentage points higher for those working short hours, all other things equal. The relative probability is around 8 percentage points lower for those who have received or been offered job-related training.

Hourly earnings do not have a statistically significant association with the relative probability of switching employer. Instead, higher pay reduces the probability of an employee exiting to non-employment. This suggests that the main influence of wage levels in the sector may be to shape the employee's incentive to work, rather than to prompt movement between employers. However, we

¹² We use a multinomial probit (MNP) in preference to a multinomial logit (MNL) as the MNP does not require an assumption that the alternatives are independent from one another (see Cameron and Trivedi, 2009: 503). In our case, the three alternative states cannot be seen as fully independent, since one would expect that the decision to switch to another job or remain in the same job is nested within the more-general decision to remain in or leave employment.

explore the role of wages in more detail in the next section, where we also take account of the level of wages on offer elsewhere in the local labour market. Table 8 provides one indication that the local labour market is relevant in shaping job moves, because it shows that moves are more likely in urban labour markets (region dummies being otherwise jointly non-significant). Urban labour markets may see a higher rate of job-to-job moves for a number of reasons: they may offer a higher number of alternative jobs; or they may offer better transport options that allow employees to reach a wider set of jobs; or high living costs may push workers to relocate to other areas, switching jobs as a consequence.¹³ Again, the relevance of the local labour market is explored further in Section 8.7

Finally, in Table 8 we see no statistically-significant differences between industry sectors in the relative probability of job-to-job moves. Nevertheless, such job moves are more likely among care workers working in the private sector than those working in public sector settings. The relevance of this factor is explored further in Section 8.8 when we compare rates of job separation among care workers in ASC with those of other occupations.

¹³ Stakeholders have commented that care providers in urban areas struggle to retain workers due to high housing costs, with workers relocating to areas where accommodation is more affordable (Migration Advisory Committee, 2022, p.21).

States:												
1. Remain in same job		Relativ	e probab	ility of	Rela	tive pro	bability c	of		Relativ	ve probal	oility of
2. Move to another job			2 vs. 1			3 vs.	1				3 vs. 2	
3. Exit employment												
	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value
Personal characteristics:												
Female	0.006	0.035	0.18	0.86	-0.022	0.030	-0.73	0.47	-0.028	0.023	-1.20	0.23
Age in years:												
16-19	-0.038	0.086	-0.44	0.66	0.013	0.074	0.18	0.86	0.052	0.056	0.92	0.36
20-29	0.041	0.037	1.10	0.27	0.073	0.031	2.33	0.02	0.032	0.025	1.32	0.19
30-39 (Ref.)												
40-49	-0.059	0.037	-1.60	0.11	-0.012	0.031	-0.40	0.69	0.046	0.025	1.87	0.06
50-59	-0.078	0.041	-1.91	0.06	-0.043	0.034	-1.29	0.20	0.034	0.027	1.26	0.21
White	-0.009	0.047	-0.19	0.85	-0.060	0.039	-1.53	0.13	-0.051	0.030	-1.70	0.09
Not born in the UK	0.003	0.043	0.08	0.94	-0.018	0.037	-0.49	0.62	-0.021	0.028	-0.76	0.45
Work-limiting health problem	0.067	0.034	1.97	0.05	0.112	0.028	3.96	0.00	0.045	0.022	2.08	0.04
Married/civil partnership	-0.053	0.027	-1.97	0.05	-0.063	0.023	-2.72	0.01	-0.010	0.019	-0.56	0.58
Age of youngest dependent child:												
No dependent children (Ref.)												
0-1	-0.016	0.046	-0.36	0.72	0.054	0.038	1.43	0.15	0.071	0.029	2.45	0.01
2-4	-0.005	0.045	-0.11	0.92	-0.050	0.037	-1.34	0.18	-0.045	0.029	-1.56	0.12
5-9	-0.083	0.041	-2.01	0.04	-0.094	0.038	-2.48	0.01	-0.011	0.029	-0.37	0.71
10-15	-0.040	0.039	-1.02	0.31	-0.077	0.036	-2.14	0.03	-0.037	0.028	-1.31	0.19
Home-owner with mortgage	0.001	0.026	0.02	0.98	-0.050	0.023	-2.16	0.03	-0.051	0.018	-2.84	0.01

Table 8: Marginal Effects from Multinomial Probit Regression of the Probability of Job Separation among Care Workers in Adult Social Care

Table 8 continued

		Relative probability of			Rela	Relative probability of				Relative probability of			
			2 vs. 1			3 vs	. 1			3 vs. 2			
	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value	
Highest educational qualification:													
Degree-level	0.060	0.058	1.03	0.30	0.009	0.047	0.19	0.85	-0.051	0.037	-1.36	0.18	
A-level	0.019	0.056	0.34	0.73	0.008	0.046	0.17	0.86	-0.011	0.037	-0.31	0.76	
GCSE-level	-0.034	0.055	-0.61	0.54	-0.036	0.045	-0.80	0.42	-0.002	0.036	-0.06	0.95	
Other qualification	-0.006	0.064	-0.10	0.92	-0.005	0.053	-0.09	0.93	0.001	0.042	0.03	0.98	
No qualifications (Ref.)													
Job characteristics:													
Job tenure:													
Less than one year	0.346	0.045	7.68	0.00	0.267	0.037	7.16	0.00	-0.080	0.031	-2.53	0.01	
1 year	0.317	0.048	6.56	0.00	0.231	0.039	5.99	0.00	-0.086	0.033	-2.61	0.01	
2-4 years	0.203	0.043	4.70	0.00	0.188	0.035	5.41	0.00	-0.015	0.030	-0.50	0.62	
5-9 years	0.106	0.046	2.29	0.02	0.108	0.038	2.83	0.01	0.002	0.033	0.07	0.95	
10 years or more (Ref.)													
Managerial or supervisory role	-0.046	0.035	-1.30	0.19	-0.012	0.029	-0.39	0.69	0.034	0.023	1.46	0.15	
Temporary contract	0.159	0.056	2.85	0.00	0.109	0.047	2.30	0.02	-0.050	0.035	-1.43	0.15	
Usual weekly hours:													
1-24 hours	0.123	0.028	4.42	0.00	0.164	0.024	6.80	0.00	0.041	0.019	2.19	0.03	
25-47 hours (Ref.)													
48 hours or more	0.061	0.039	1.54	0.12	0.051	0.034	1.50	0.13	-0.009	0.026	-0.36	0.72	
Any job-related training received or	-0 084	0 025	-3 /1	0.00	-0 103	0 022	-4 77	0.00	-0 018	0.017	-1 09	0.28	
offered in past 3 months	-0.004	0.025	5.41	0.00	-0.105	0.022	4.77	0.00	0.010	0.017	1.05	0.20	
Ln(hourly wage)	-0.054	0.039	-1.37	0.17	-0.075	0.039	-1.93	0.05	-0.021	0.027	-0.76	0.45	
Missing data on hourly wage	0.111	0.038	2.90	0.00	0.120	0.035	3.45	0.00	0.009	0.026	0.34	0.73	

Table 8 continued

	Relative probability of		Rela	Relative probability of				Relative probability of			
	2 vs. 1				3 vs	. 1		3 vs. 2			
Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value
0.092	0.042	2.20	0.03	0.022	0.035	0.64	0.52	-0.070	0.028	-2.51	0.01
-0.069	0.048	-1.45	0.15	-0.055	0.041	-1.35	0.18	0.014	0.032	0.43	0.67
0.058	0.033	1.77	0.08	0.036	0.030	1.19	0.24	-0.022	0.023	-0.97	0.33
-0.032	0.070	-0.46	0.65	-0.024	0.058	-0.42	0.68	0.008	0.047	0.18	0.86
0.016	0.066	0.23	0.81	0.015	0.053	0.28	0.78	0.000	0.044	-0.01	0.99
0.022	0.069	0.32	0.75	0.002	0.058	0.03	0.98	-0.021	0.046	-0.45	0.65
0.038	0.063	0.60	0.55	0.024	0.052	0.47	0.64	-0.014	0.042	-0.32	0.75
0.027	0.070	0.38	0.70	0.007	0.058	0.13	0.90	-0.020	0.047	-0.41	0.68
0.002	0.067	0.02	0.98	0.007	0.054	0.12	0.90	0.005	0.045	0.11	0.91
0.019	0.069	0.27	0.79	0.026	0.057	0.45	0.65	0.007	0.046	0.15	0.88
0.090	0.066	1.36	0.17	0.047	0.054	0.87	0.39	-0.043	0.044	-0.98	0.33
-0.002	0.067	-0.03	0.98	0.004	0.055	0.08	0.94	0.007	0.045	0.15	0.88
-0.125	0.110	-1.14	0.25	-0.081	0.090	-0.90	0.37	0.044	0.075	0.59	0.56
-0.006	0.033	-0.17	0.86	-0.001	0.029	-0.02	0.98	0.005	0.022	0.22	0.82
0.010	0.029	0.36	0.72	0.037	0.025	1.45	0.15	0.026	0.020	1.35	0.18
0.044	0.049	0.91	0.37	0.024	0.044	0.54	0.59	-0.020	0.033	-0.61	0.54
	Meff 0.092 -0.069 0.058 -0.032 0.016 0.022 0.038 0.027 0.002 0.019 0.090 -0.002 -0.125 -0.006 0.010 0.044	Relativ Meff SE 0.092 0.042 -0.069 0.048 0.058 0.033 -0.032 0.070 0.016 0.066 0.022 0.069 0.038 0.063 0.027 0.070 0.002 0.067 0.019 0.069 0.090 0.066 -0.002 0.067 -0.125 0.110 -0.006 0.033 0.010 0.029 0.044 0.049	Relative probability 2 vs. 1 Meff SE t-stat. 0.092 0.042 2.20 -0.069 0.048 -1.45 0.058 0.033 1.77 -0.032 0.070 -0.46 0.016 0.066 0.23 0.022 0.069 0.32 0.038 0.063 0.600 0.027 0.070 0.38 0.002 0.067 0.02 0.019 0.069 0.27 0.090 0.066 1.36 -0.002 0.067 -0.03 -0.125 0.110 -1.14 -0.006 0.033 -0.17 0.010 0.029 0.36 0.010 0.029 0.36	Relative probability of 2 vs. 1 Meff SE t-stat. p-value 0.092 0.042 2.20 0.03 -0.069 0.048 -1.45 0.15 0.058 0.033 1.77 0.08 -0.032 0.070 -0.46 0.65 0.016 0.066 0.23 0.81 0.022 0.069 0.32 0.75 0.038 0.063 0.60 0.55 0.027 0.070 0.38 0.70 0.092 0.677 0.02 0.98 0.019 0.069 0.27 0.79 0.090 0.066 1.36 0.17 -0.002 0.067 -0.03 0.98 -0.125 0.110 -1.14 0.25 -0.006 0.033 -0.17 0.86 0.010 0.029 0.36 0.72 0.044 0.049 0.91 0.37	Relative probability of z vs. 1 Relative probability of z vs. 1 Meff SE t-stat. p-value Meff 0.092 0.042 2.20 0.03 0.022 -0.069 0.048 -1.45 0.15 -0.055 0.058 0.033 1.77 0.08 0.036 -0.032 0.070 -0.46 0.65 -0.024 0.016 0.066 0.23 0.81 0.015 0.022 0.069 0.32 0.75 0.002 0.038 0.063 0.60 0.55 0.024 0.027 0.070 0.38 0.70 0.007 0.021 0.067 0.02 0.98 0.007 0.019 0.069 0.27 0.79 0.026 0.090 0.066 1.36 0.17 0.047 -0.002 0.067 -0.03 0.98 0.004 -0.125 0.110 -1.14 0.25 -0.081 -0.006 <t< td=""><td>Relative probability of 2 vs. 1Relative pro 3 vs.MeffSEt-stat.p-valueMeffSE0.0920.0422.200.030.0220.035-0.0690.048-1.450.15-0.0550.0410.0580.0331.770.080.0360.030-0.0320.070-0.460.65-0.0240.0580.0160.0660.230.810.0150.0530.0220.0690.320.750.0020.0580.0380.0630.600.550.0240.0520.0270.0700.380.700.0070.0580.0020.0670.020.980.0070.0540.0190.0690.270.790.0260.0570.0900.0661.360.170.0470.054-0.0220.033-0.170.86-0.0010.0290.0100.0290.360.720.0370.0250.0140.0490.910.370.0240.044</td><td>Relative probability of 2 vs. 1 Relative probability of 3 vs. 1 Meff SE t-stat. p-value Meff SE t-stat. 0.092 0.042 2.20 0.03 0.022 0.035 0.64 -0.069 0.048 -1.45 0.15 -0.055 0.041 -1.35 0.058 0.033 1.77 0.08 0.036 0.030 1.19 -0.032 0.070 -0.46 0.65 -0.024 0.058 -0.42 0.016 0.066 0.23 0.81 0.015 0.053 0.28 0.022 0.069 0.32 0.75 0.002 0.058 0.03 0.022 0.069 0.32 0.75 0.002 0.058 0.03 0.027 0.070 0.38 0.70 0.007 0.058 0.13 0.002 0.067 0.02 0.98 0.007 0.054 0.12 0.019 0.069 0.27 0.79 0.026</td><td>Relative probability of 2 vs. 1 Relative probability of 3 vs. 1 Meff SE t-stat. p-value Meff SE t-stat. p-value 0.092 0.042 2.20 0.03 0.022 0.035 0.64 0.52 -0.069 0.048 -1.45 0.15 -0.055 0.041 -1.35 0.18 0.058 0.033 1.77 0.08 0.036 0.030 1.19 0.24 -0.032 0.070 -0.46 0.65 -0.024 0.58 -0.42 0.68 0.016 0.066 0.23 0.81 0.015 0.53 0.28 0.78 0.022 0.069 0.32 0.75 0.002 0.58 0.03 0.98 0.033 0.60 0.55 0.024 0.55 0.44 0.54 0.59 0.022 0.067 0.02 0.98 0.007 0.54 0.12 0.90 0.010 0.066 1.36 0.17</td><td>Relative probability of zvs. 1 Relative probability of zvs. 1 Meff SE t-stat. p-value Meff 0.092 0.042 2.20 0.03 0.022 0.035 0.64 0.52 -0.070 -0.069 0.048 -1.45 0.15 -0.055 0.041 -1.35 0.18 0.014 0.058 0.033 1.77 0.08 0.053 0.28 -0.42 0.68 0.008 0.016 0.066 0.23 0.81 0.015 0.53 0.28 0.78 0.001 0.022 0.69 0.32 0.75 0.002 0.58 0.03 0.98 -0.011 0.027 0.707 0.38 0.707 0.054 0.12 0.90 0.071 0.002 0.667 1.60 0.</td><td>Relative probability of 2 vs. 1 Relative probability of 3 vs. 1 Relative probability of 3 vs. 1 Meff SE t-stat. p-value Meff SE 0.092 0.042 2.20 0.03 0.022 0.035 0.64 0.52 -0.070 0.028 -0.058 0.033 1.77 0.08 0.036 0.030 1.19 0.24 -0.022 0.023 -0.032 0.070 -0.46 0.65 -0.024 0.058 -0.42 0.68 0.008 0.047 0.016 0.066 0.23 0.81 0.015 0.058 0.03 0.98 -0.021 0.046 0.022 0.069 0.32 0.75 0.002 0.058 0.13 0.90 0.005 0.041 <!--</td--><td>Relative probability of relative probability of relatity of relativ</td></td></t<>	Relative probability of 2 vs. 1Relative pro 3 vs.MeffSEt-stat.p-valueMeffSE0.0920.0422.200.030.0220.035-0.0690.048-1.450.15-0.0550.0410.0580.0331.770.080.0360.030-0.0320.070-0.460.65-0.0240.0580.0160.0660.230.810.0150.0530.0220.0690.320.750.0020.0580.0380.0630.600.550.0240.0520.0270.0700.380.700.0070.0580.0020.0670.020.980.0070.0540.0190.0690.270.790.0260.0570.0900.0661.360.170.0470.054-0.0220.033-0.170.86-0.0010.0290.0100.0290.360.720.0370.0250.0140.0490.910.370.0240.044	Relative probability of 2 vs. 1 Relative probability of 3 vs. 1 Meff SE t-stat. p-value Meff SE t-stat. 0.092 0.042 2.20 0.03 0.022 0.035 0.64 -0.069 0.048 -1.45 0.15 -0.055 0.041 -1.35 0.058 0.033 1.77 0.08 0.036 0.030 1.19 -0.032 0.070 -0.46 0.65 -0.024 0.058 -0.42 0.016 0.066 0.23 0.81 0.015 0.053 0.28 0.022 0.069 0.32 0.75 0.002 0.058 0.03 0.022 0.069 0.32 0.75 0.002 0.058 0.03 0.027 0.070 0.38 0.70 0.007 0.058 0.13 0.002 0.067 0.02 0.98 0.007 0.054 0.12 0.019 0.069 0.27 0.79 0.026	Relative probability of 2 vs. 1 Relative probability of 3 vs. 1 Meff SE t-stat. p-value Meff SE t-stat. p-value 0.092 0.042 2.20 0.03 0.022 0.035 0.64 0.52 -0.069 0.048 -1.45 0.15 -0.055 0.041 -1.35 0.18 0.058 0.033 1.77 0.08 0.036 0.030 1.19 0.24 -0.032 0.070 -0.46 0.65 -0.024 0.58 -0.42 0.68 0.016 0.066 0.23 0.81 0.015 0.53 0.28 0.78 0.022 0.069 0.32 0.75 0.002 0.58 0.03 0.98 0.033 0.60 0.55 0.024 0.55 0.44 0.54 0.59 0.022 0.067 0.02 0.98 0.007 0.54 0.12 0.90 0.010 0.066 1.36 0.17	Relative probability of zvs. 1 Relative probability of zvs. 1 Meff SE t-stat. p-value Meff 0.092 0.042 2.20 0.03 0.022 0.035 0.64 0.52 -0.070 -0.069 0.048 -1.45 0.15 -0.055 0.041 -1.35 0.18 0.014 0.058 0.033 1.77 0.08 0.053 0.28 -0.42 0.68 0.008 0.016 0.066 0.23 0.81 0.015 0.53 0.28 0.78 0.001 0.022 0.69 0.32 0.75 0.002 0.58 0.03 0.98 -0.011 0.027 0.707 0.38 0.707 0.054 0.12 0.90 0.071 0.002 0.667 1.60 0.	Relative probability of 2 vs. 1 Relative probability of 3 vs. 1 Relative probability of 3 vs. 1 Meff SE t-stat. p-value Meff SE 0.092 0.042 2.20 0.03 0.022 0.035 0.64 0.52 -0.070 0.028 -0.058 0.033 1.77 0.08 0.036 0.030 1.19 0.24 -0.022 0.023 -0.032 0.070 -0.46 0.65 -0.024 0.058 -0.42 0.68 0.008 0.047 0.016 0.066 0.23 0.81 0.015 0.058 0.03 0.98 -0.021 0.046 0.022 0.069 0.32 0.75 0.002 0.058 0.13 0.90 0.005 0.041 </td <td>Relative probability of relative probability of relatity of relativ</td>	Relative probability of relatity of relativ

Table 8 continued

		Relative probability of			Rela	Relative probability of				Relative probability of		
			2 vs. 1			3 vs	. 1				3 vs. 2	
	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value
Proxy respondent	-0.015	0.031	-0.48	0.63	-0.019	0.027	-0.70	0.48	-0.004	0.020	-0.19	0.85
Year dummies	Yes				Yes				Yes			
Summary statistics for the full re	gression:											
Number of observations	5,618											
Wald Chi2 test (165)	556.42											
Prob > chi2	<0.01											

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled)

Base: Employees aged 16-58, employed as care workers in Adult Social Care in year t

Notes:

a. The model is estimated across three states: remained in current job (base category); moved to another employee job; not in employment.

b. Marginal effects are shown as relative probability of being in the indicated state in *year t+1* relative to the probability of remaining in the current job. Marginal effects **in bold type** are statistically significant from zero at the 10 per cent level (or lower)

8.7 The influence of outside options on job-to-job moves

In the analyses presented in Sections 8.5 and 8.6, pay has a weak association with the probability of job separation – at least relative to other job-related amenities, such as an open-ended contract or the provision of job-related training. However, one limitation of those analyses is that they take limited account of the quality of jobs on offer to the employee outside their current firm. These 'outside options' are only proxied via variables which describe the region in which the employee is located, and the analyses do not explicitly measure the level of the employee's wage relative to the wages on offer in other jobs in the local labour market.

One might not expect the 'outside wage' to be particularly salient if the prospects of gaining a wage hike through a job-to-job move are low. This might be the case if the distribution of wages in the local area is narrow, or if the number of suitable jobs is small. However, there is anecdotal evidence of care workers moving for relatively small wage increments (Moriarty et al, 2018), and so the issue is worthy of investigation.

We investigate this issue by identifying the average wage for care workers in adult social care, and the number of such jobs, in each Travel to Work Area (TTWA), by year. These variables are entered into the analysis of job separations shown in Table 8 in order to examine the potential importance of outside options.

The ONS classification of TTWAs divides the UK into around 220 fairly self-contained geographical areas, using data on commuting patterns. We prefer TTWAs to Government Office Regions as commuting data from the *Quarterly Labour Force Survey* indicates that the median commute for a care worker in ASC lasts only 15 minutes.¹⁴ The labour market for care workers is therefore very local. TTWAs may themselves be too large to proxy the local labour market in some cases; however, there is a practical limit to the level of disaggregation that can be used due to sample sizes.

The APS contains a consistently-defined TTWA classification (APS variable: TTWA9D) only for a subset of the years in our sample: 2012, 2013 and 2016-2020.¹⁵ The analysis of job separations using outside options therefore relies on this subset of years. In each TTWA, in each of these seven years, we estimate the total number of employee jobs held by care workers in ASC. We take the natural logarithm of this value to correct the skewness in the distribution, and then use this logged value to proxy the *quantity* of outside job options available to employee *i* in TTWA *a* in year *t*. We focus on care worker jobs since these are the single most-common destination for care workers undertaking job-to-job moves (see Section 8.4).

We also estimate the average (mean) log gross hourly wage earned by care workers in ASC in the TTWA in each year. We compute the distance between the sampled employee's wage and this local average (in log points). This distance measure is used to proxy the *quality* of job options available to employee *i* in TTWA *a* in year *t*. Positive values indicate that care worker jobs in the local area generally pay more than the employee's current job; negative values indicate that the outside options generally pay less. We use only those TTWAs in which the average wage for care workers is computed on at least 10 observations, to limit the effects of sampling error. The sample of 5,618

¹⁴ Data on commuting times is available from the October-December quarter of the *Labour Force Survey* (variable TRVTME). We pool these data from the Labour Force Surveys of 2017, 2018 and 2019 and compute the median commuting time among care workers in ASC.

¹⁵ We explored the possibility of using the *Annual Survey of Hours and Earnings* (ASHE). However, ASHE and the APS share a common classification of TTWAs in only a handful of years (2016-2020).

observations in Table 8 reduces to a sample of 2,690 observations. The sample comprises care workers from an unbalanced panel of 92 TTWAs across the 7 years of data (a total of 412 TTWA*year cells). Standard errors are clustered by TTWA*year to account for aggregation bias (Moulton, 1990).

Table 9 presents the results of this analysis. The focus is again on the first set of columns, which show the association between different job characteristics and the probability of moving to another job. There is no statistically-significant association between the relative probability of moving employer and either the number of care worker jobs in the TTWA or the distance between the employee's current wage and the mean wage offered by other care worker jobs in the TTWA. The association between the level of the care worker's current wage and the probability of switching employer also remains non-significant. In contrast (and as in Table 8), there are statistically significant associations with the type of contract, hours worked and provision of training. The probability of moving to another job is around 16 percentage points higher for those on temporary contracts than those on permanent (open-ended) contracts, around 12 percentage points higher for those in recent receipt of job-related training.

We explored the sensitivity of our results to using the mean wage residual in the TTWA, estimated from a wage equation that included the personal characteristics shown in Table 7. This approach focuses on the idiosyncratic component of the wage after accounting for differences in job-holders' personal characteristics (age, ethnicity, country of birth, health status, marital status, parental status and educational attainment). It may represent a better indication of the wage hike that an individual employee could obtain on moving to another job. However, the results using this measure were not qualitatively different from those using the mean wage.

We also explored the sensitivity of the results to a more expansive definition of outside options which included all jobs in the TTWA within SOC(2000) Major Group 6, since those who leave care work for other occupations commonly move to other professions in this part of the occupational hierarchy (see Section 8.4). Again, we experimented with the mean wage among such jobs and the mean wage residual. But again, there was no statistically-significant association between the probability of job separation and either measure, nor with the number of jobs in SOC(2000) Major Group 6 in the TTWA.

Although we do not find any statistically significant association with the quantity or quality of jobs in the local area, this is not to say that local area factors are unimportant. When we focus only on those care workers who remain in their existing job or move to another job (i.e. excluding those who move to inactivity), and run a regression using the covariates shown in Table 8 and the sample years that offer consistently-defined TTWAs (2012/13, 2013/14 and 2016/17-2020/21), we find that there are statistically-significant differences in job separation rates across TTWAs. Specifically, replacing the 11 Government Office Regions with 205 TTWA identifiers raises the R-squared of the regression from 0.07 to 0.16, and the set of TTWA identifiers are jointly significant at the 1 per cent level (F(205,3040)=45.09; p<0.01). So there appear to be local factors which influence job separation rates, even though we are unable to discern what these factors are.

It could be that the provision of non-wage amenities (e.g. training) varies in a substantive way across local areas. This could potentially be investigated via a similar methodology to the one used above, but we leave this for further work as we have already provided robust evidence to indicate that non-wage amenities such as job security and training are relevant to the job separation decision.

Another salient factor may be the provision of transport links that make it easier for employees to switch between different jobs. Our analysis of outside options does not take any account of the extent to which employees may actually be able to access alternative job opportunities in the local labour market. One approach which does take these factors into account is that of Caldwell and Danieli (2021). In their analysis of employees in the German labour market, they compute an outside options index based on an estimate of each employee's probability of switching to each alternative job in the local labour market as a function of their skills, preferences and commuting costs. Estimating such a model requires a rich dataset and is computationally intensive, however, and we leave it for further work.

Table 9: Marginal Effects from Multinomial Probit Regression of the Probability of Job Separation among Care Workers in Adult Social Care, including outside options

States:												
1. Remain in same job		Relativ	e probab	ility of	Rel	ative pr	obability	of		Relativ	ve probal	oility of
2. Move to another job			2 vs. 1			3 v:	s. 1				3 vs. 2	
3. Exit employment												
	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value	Meff	SE	t-stat.	p-value
Temporary contract	0.158	0.074	2.15	0.03	0.133	0.061	2.17	0.03	-0.026	0.047	-0.54	0.59
Usual weekly hours:												
1-24 hours	0.124	0.044	2.83	0.01	0.171	0.032	5.29	0.00	0.048	0.031	1.55	0.12
25-47 hours (Ref.)												
48 hours or more	0.069	0.055	1.25	0.21	0.065	0.043	1.50	0.13	-0.004	0.038	-0.10	0.92
Any job-related training received or offered												
in past 3 months	-0.124	0.035	-3.51	0.00	-0.108	0.030	-3.59	0.00	0.016	0.024	0.67	0.51
Ln(hourly wage)	-0.134	0.207	-0.65	0.52	-0.081	0.180	-0.45	0.65	0.052	0.121	0.44	0.66
Outside options:												
Ln(number of care worker jobs in the TTWA)	-0.030	0.022	-1.34	0.18	-0.024	0.018	-1.32	0.19	0.006	0.018	0.32	0.75
Distance between employee's log hourly												
wage and mean log hourly wage for care												
workers in the TTWA	-0.115	0.212	-0.54	0.59	-0.026	0.174	-0.15	0.88	0.088	0.128	0.69	0.49
Other control variables included (see Table 7)	Yes				Yes				Yes			
Summary statistics for the full regression:												
Number of observations	2,690											
Wald Chi2 test (108)	604.92											
Prob > chi2	<0.01											

Source: Annual Population Survey Two-Year Panel, 2012/13, 2013/14 and 2016/17-2020/21 (pooled)

Base: Employees aged 16-58, employed as care workers in Adult Social Care in year t

Notes:

a. The model is estimated across three states: remained in current job (base category); moved to another employee job; not in employment.

b. Marginal effects are shown as relative probability of being in the indicated state in *year t+1* relative to the probability of remaining in the current job. Marginal effects **in bold type** are statistically significant from zero at the 10 per cent level (or lower)

8.8 Accounting for differences in job separation rates between care work and other low-wage occupations

In this final analytical section of the report, we seek to account for differences in job separation rates between care work and other low-wage occupations. Figure 6 in Section 6 showed that job tenure (i.e. length of time working for the current employer) is somewhat lower among care workers in ASC than among employees in some other low-wage occupations, such as nursing auxiliaries (healthcare assistants). As expected, one can observe an inverse pattern in job separation rates. Figure 12 shows that care workers in ASC have a similar job separation rate to nursery nurses and veterinary nurses. However, their job separation rate is 9 percentage points higher, on average, than that of teaching assistants and 10 percentage points higher than that of nursing auxiliaries.



Figure 12: Job separation rates among care workers in Adult Social Care and in other selected lowwage occupations

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled) Base: Employees aged 16-58 in *year t*

Notes: See Appendix B for key to occupational groups.

Further investigation shows that the composition of separations (i.e. the share that involve a change of employer versus a move to non-employment) is similar among care workers in ASC, teaching assistants and nursing auxiliaries. In other words, the substantive difference is in the overall job separation rate, rather than in the prevalence of any one particular type of separation.

We investigate the possible reasons for these differences by, first, running a probit regression of the probability of job separation among the sample of employees in the occupations shown in Figure 12. We run the regression without controls, generating the raw job separation differentials shown in Figure 12 above. We then control for differences in observable personal, job and employer characteristics between the various occupational groups, using the covariates that were included in the analysis presented in Table 8. The results are presented in Table 10.

The substantial raw differences in job separation rates between care workers in ASC and nursing auxiliaries or teaching assistants (shown in column 1 of Table 10) are much reduced in size after we

control for differences in observables, and now extend to only one or two percentage points (column 2). Indeed, the 1 percentage point difference in job separation rates between care workers and teaching assistants is not statistically significant from zero and the two percentage point difference between care workers and nursing auxiliaries is only significant at the 10 per cent level (p=0.09).

		fference		With controls				
	Meff	SE	t-stat.	p- value	Meff	SE	t-stat.	p- value
Hairdresser/beautician Nursery nurse/	0.046	0.019	2.42	0.02	-0.002	0.016	-0.14	0.89
childminder/playworker	0.001	0.013	0.12	0.91	-0.006	0.011	-0.50	0.62
Veterinary nurse/ animal care services Care worker in ASC (Ref.)	0.005	0.026	0.20	0.85	-0.026	0.020	-1.28	0.20
Care worker in another								
setting	-0.024	0.013	-1.92	0.06	0.004	0.012	0.32	0.75
Teaching/educational								
support assistant	-0.089	0.010	-9.16	0.00	-0.009	0.012	-0.76	0.45
Nursing auxiliary	-0.095	0.011	-8.78	0.00	-0.021	0.013	-1.71	0.09
Number of observations	23,308				23,308			
Pseudo-R [∠]	0.014				0.110			

Table 10: Differences in job separation rates between selected occupations, before and aftercontrolling for differences in observable characteristics via probit regressions

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled) Base: Employees aged 16-58, employed in the specified occupations in *year t*

Notes: See Appendix B for key to occupational groups. Marginal effects **in bold type** are statistically significant from zero at the 10 per cent level (or lower)

To identify which observable characteristics are contributing most to these raw differentials, we use the decomposition method of Oaxaca-Blinder (Blinder, 1973; Oaxaca, 1973). We first decompose the difference in job separation rates between care workers in ASC and nursing auxiliaries, then we decompose the difference between care workers in ASC and teaching assistants. In both cases, we use the non-linear decomposition for binary dependent variables proposed by Yun (2004) and compute the two-fold decomposition using the coefficients from a pooled model over both groups as the reference.

Table 11 presents the results of the decompositions. The lower part of the table decomposes the explained component of the difference into those parts accounted for by different sets of characteristics. We see that the main factors which explain the differences in job separation rates between care workers and these two occupations are related to the work setting.

Specifically, around two-thirds of the difference in job separation rates between care workers and nursing auxiliaries (healthcare assistants) can be explained by the greater propensity of nursing auxiliaries to work in public sector organisations and in large workplaces. Employees in general tend to be less likely to leave public sector organisations than private sector organisations, and tend to be less likely to leave large workplaces than smaller ones. Table 12 shows that the majority of nursing

auxiliaries work in such settings, whereas this is the case for relatively few care workers. These differences in work setting are therefore important contributors to the differences in job separation rates between the two groups. When care workers are compared with teaching assistants, one finds a similar story, although here differences in the size of workplace are less salient because (unlike nursing auxiliaries) few teaching assistants work in very large workplaces. Instead, the greater propensity for teaching assistants than care workers to work for public sector employers is the dominant contributor to the differences in job separation rates between the two occupations. Here, it accounts for around three percentage points of the nine percentage-point difference.

The importance of these factors can be stated in another way by noting that, if the percentage of care workers working in the public sector and in larger workplaces were to be equivalent to that seen among nursing auxiliaries, then the 9.5 point difference in job separation rates between those two occupations would be reduced to just 3.7 percentage points. And if the percentage of care workers working in the public sector were to be equivalent to that seen among teaching assistants, then the 8.9 point difference in job separation rates between those occupations would be reduced to 6.0 percentage points. These are substantial reductions.

	Care	workers	in ASC v	Care workers in ASC vs.				
	Nu	Teaching assistants						
	Meff	SE	t- stat.	p- value	Meff	SE	t- stat.	p- value
Raw difference	0.095	0.011	8.90	0.00	0.089	0.010	9.31	0.00
Explained (differences in characteristics)	0.091	0.008	11.13	0.00	0.066	0.011	5.98	0.00
Unexplained (differences in coefficients)	0.004	0.012	0.36	0.718	0.023	0.013	1.74	0.08
Explained due to:								
Personal characteristics (inc								
education)	-0.004				0.008			
Household characteristics	0.003				0.014			
Job tenure	0.020				0.021			
Other job characteristics	0.014				-0.005			
Private sector employer	0.039				0.029			
Large workplace (250+								
employees)	0.019				0.000			
Other workplace								
characteristics	0.000				-0.002			
System variables and year								
dummies	0.000				0.000			
Number of observations	9,321				11,940			

Table 11: Oaxaca-Blinder decomposition of differences in job separation rates between care workand other selected occupations

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled) Base: Employees aged 16-58, employed in the specified occupations in *year t*. Notes: See Appendix B for key to occupational groups.

Table 12: Differences in selected employer characteristics between care workers in ASC, nur	sing
auxiliaries and teaching assistants	

Cell %s	Care workers in ASC	Nursing auxiliaries	Teaching assistants
Private sector employer	89	30	14
Large workplace (250+ employees)	7	56	8
Number of observations	6,015	3,888	6,562

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled) Base: Employees aged 16-58, employed in the specified occupations in *year t*. Notes: See Appendix B for key to occupational groups.

The main conclusion that we draw from this analysis is that concentration of care work in small, private sector employers has an important influence on the rate of job separations. What is it about these settings that might encourage employees into greater levels of job mobility than is seen in other, similar occupations?

One possibility is that larger workplaces and public sector organisations offer stronger internal labour markets (job ladders) which provide greater opportunities for advancement whilst staying within the same firm. There is an extensive literature on the role of internal labour markets in reducing labour turnover (see Farris, 2004, for one review). Another possibility is that these types of work setting offer different levels of unmeasured job amenities: for instance, there may be higher levels of organisational justice, or differences in the extent of employee involvement. Again, both factors have been shown to reduce labour turnover in other studies (e.g. Daileyl and Delaney, 1992; Freeman, 1980).

We cannot explore all of these hypotheses with our data. However, our data do offer some indication that opportunities for wage progression differ between the three occupations that we have been discussing here, and that these differences in opportunities for wage progression may be related to the work setting. In other words, that differences in the strength of internal labour markets across the occupations and settings may have some relevance in explaining differences in job separations.

To explore this point, we run an OLS regression of each employee's hourly earnings on a measure of their tenure with their current employer, after controlling for differences in personal characteristics (gender, age, ethnicity, migrant status, health status, marital status, parental status and educational attainment). In these regressions, we find that nursing auxiliaries and teaching assistants appear to have substantively higher wage returns to long tenure than care workers in ASC. Figure 13 shows the elasticity of hourly warnings with respect to job tenure from these regressions. Care workers in ASC with tenure of 2-4 years have earnings that are almost no different from those of care workers in their first year of tenure. Wage progression among care workers seems only to occur after 5 or more years of tenure, and care workers with 10 or more years of tenure are still earning less than 10 log points more than those in their first year. Among teaching assistants, however, tenure of 5-9 years is associated with a wage differential of around +7 log points and tenure of 10 or more years is

associated with a differential of around +14 points. Among nursing auxiliaries, the figures are around 12 points and around 18 points respectively.



Figure 13: Returns to tenure among care workers in ASC, nursing auxiliaries and teaching assistants

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled) Base: Employees aged 16-58, employed in the specified occupations in *year t*. Notes: See Appendix B for key to occupational groups.

We show the relevance of public sector settings in delivering higher wage returns to tenure for employees in low-wage caring and personal service occupations in Table 13. Here, we include employees from each of the occupations included in Table 10. We pool this set of employees and run an OLS regression of their log hourly earnings on their job tenure and an indicator of whether the employee works for a public sector employer, after controlling for the same set of personal characteristics that have been included in previous regressions. We interact the public sector dummy with the indicator of job tenure to explore whether returns to tenure are higher in public sector workplaces. The regression results shown in Table 13 confirm this is the case. Across these occupations, employees with tenure of 5-9 years in public sector organisations have wages that are 4.6 log points higher than the wages of employees with equivalent tenure in private sector organisations. For employees with tenure of 10 years or more, the differential is 6.0 log points in favour of those working in public sector organisations.

Loa hourly wages	Coeff	SE	t-stat	p-value
Job tenure:				<u> </u>
Less than one year (Ref.)				
1 year	0.015	0.015	0.97	0.33
2-4 years	0.012	0.013	0.94	0.35
5-9 years	0.046	0.015	3.13	0.00
10 years or more (Ref.)	0.096	0.014	6.95	0.00
Public sector workplace	0.072	0.018	4.00	0.00
Public*tenure of 1 year	-0.020	0.023	-0.83	0.41
Public*tenure of 2-4 years	0.013	0.021	0.61	0.54
Public*tenure of 5-9 years	0.040	0.021	1.90	0.06
Public*tenure of 10+ years	0.060	0.020	3.02	0.00
Controls for personal characteristics	Yes			
Number of observations	24,005			
R-squared	0.108			

Table 13: Returns to tenure in selected low-wage occupations

Source: Annual Population Survey Two-Year Panel, 2011/12-2020/21 (pooled)

Base: Employees aged 16-58, employed in the specified occupations in *year t*. Occupations included: care worker; nursing auxiliary; nursery nurse; teaching assistant; veterinary nurse; hairdresser. Notes: See Appendix B for key to occupational groups.

Notes: Includes controls for educational attainment, other personal characteristics and household characteristics. Coefficients **in bold type** are statistically significant from zero at the 10 per cent level (or lower)

These results all suggest that differences in work setting are a key factor explaining the lower rates of job separations seem among nursing auxiliaries and teaching assistants when compared with care workers.

At the same time, our analysis has not revealed any significant relationship between the rate of job separation and the quality or quantity of outside options (see Section 8.7). However, as we have noted, we are limited in our ability to identify the relevance of outside options, not least because of our inability to account for differences in the accessibility of different jobs to any job seeker, and the limits to which we can identify small local labour markets with our data. That element of our analysis – on the relevance of outside options – may seem to lack a clear conclusion. However, the results on the importance of non-wage terms and conditions (job security, working hours and training) and on the relevance of the work setting seem clear and robust.

These findings imply that efforts should be put into creating greater opportunities for career progression among care workers. Currently, tenure with the same employer does not bring any substantial wage gains. As a result, there are likely to be limited economic incentives to staying with the same firm.

9 Summary and conclusions

9.1 Background to the research

Adult Social Care (ASC) is characterised by high vacancy levels and high rates of staff turnover. Existing estimates suggest that around one third of care workers leave their employer each year. Such high rates of labour turnover have potentially adverse implications for the continuity and quality of care, and generate costs for employers, who must engage time and money in the recruitment, induction and training of new staff. Low wages – and poor job quality more generally – are thought to be a key factor in explaining high rates of labour turnover in ASC, but there is a dearth of evidence that situates social care within the broader, low-skilled labour market – much of which faces similar challenges.

We contribute to the literature through an analysis of the Office for National Statistics' *Annual Population Survey* (APS) over the period 2012-2020. We seek to identify the factors associated with staff turnover, including the relevance of outside options elsewhere in the labour market. We also make comparisons with similar low-wage occupations, assessing how care work may differ from other occupations where job separation rates are notably lower.

In our analysis, we define care workers as employees classified to Unit Groups 6145, 6146 and 6147 of the *Standard Occupational Classification (2010)* and Adult Social Care settings as those in Classes 87.10, 87.20, 87.30, 88.10 of the *Standard Industrial Classification (2007)*.

9.2 Changes in economic activity

We begin by examining changes in the economic activity of care workers over a 12-month period. We find that around two-thirds (65%) of care workers in ASC in *year t* are still working as care workers in ASC 12 months later. A further quarter have transitioned to other roles or settings, whilst around one in ten have left employment. The rate of "sectoral wastage" (the share of employees leaving Social Care for another sector or non-employment) is around one fifth.

Most of the transitions in and out of care work in ASC are to or from other caring roles in the Health and Social Care sector. The extent of mobility between ASC and other low-wage sectors such as Retail, Hospitality or Cleaning is very limited. This suggests that the main benchmark for employers seeking to recruit and retain care workers in ASC should be other caring roles in Health and Social Care.

Those care workers who remain in ASC tend to see no substantive change in their working conditions over a 12-month period. However, those who move to other areas of social care tend to experience an increase in the probability of receiving job-related training, whilst those who move to roles in the Health sector tend to experience an increase in the probability of working standard hours and an increase in hourly pay.

9.3 Job separations

Around one in ten care workers in ASC are looking for a different job at any given time. The incidence of job search among care workers in ASC is higher than that seen in other, similar caring occupations. In a minority of cases, the prompt to search for a new job comes from the temporary nature of the existing position, or by a desire to move on to a different occupation or sector. However, in most cases, job search arises from dissatisfaction with some aspect of the working environment: pay, hours, commuting time or some other, unspecified aspect of the job.

Around one quarter of care workers in ASC leave their job in a given year. Around one in seven move to a new job with a different employer, whilst one in ten exit employment. We use regression analysis to identify the independent association between the probability of job separation and various personal, job and employer characteristics among care workers in ASC. The rate of job separations is higher among younger workers aged 20-29 than among older workers, and is higher for those with health problems, those who are unmarried and those without young school-aged children.

A number of job characteristics are also associated with the probability of leaving one's job. The probability of job separation is 9 percentage points higher among those on temporary contracts than among those on permanent contracts. It is also higher among those working non-standard hours. Job separation is 6 percentage points lower among those who have recently received, or been offered, job-related training, indicating the role that investments in employee's skills and career development can play in supporting employee retention. The probability of job separation is also lower among those on higher wages, but the association between pay levels and job separations is relatively weak when compared with other job characteristics.

We find that job characteristics are generally more important in shaping the probability of moving to another employer than they are in shaping the probability of exiting employment altogether. In other words, they are relevant to an employee's choice of job within the labour market. However, again, contract type, working hours and the provision of training appear more important than relative pay in this regard.

Job separation rates do vary across local labour markets, however it has not been possible to detect the reasons for these variations in our analysis. The wages on offer in other similar jobs in the local labour market are not significantly associated with the probability of job separation in our analyses.

We show that job separation rates among care workers are similar to those seen among other lowwage caring occupations, such as nursery nursing or veterinary nursing. However, the rates among care workers are around 10 percentage points higher than those seen among nursing auxiliaries and teaching assistants, who are also at a similar level in the occupational hierarchy. Differences in the work setting seem to account for much of these disparities. In particular, around two-thirds of the difference in job separation rates between care workers and nursing auxiliaries can be explained by the greater propensity of nursing auxiliaries to work in public sector organisations and in large workplaces.

We propose that one reason for the lower rates of turnover seen in these types of setting is that they tend to have stronger internal labour markets that offer greater opportunities for advancement whilst staying within the same firm. We provide evidence in support of this hypothesis by showing that the wage returns to tenure for employees in low-wage caring and personal service occupations are higher in the public sector than in the private sector.

These findings imply that efforts should be put into creating greater opportunities for career progression among care workers, for instance by seeking to replicate the types of career ladders available to workers in similar occupations in the health sector. Currently, tenure with the same employer does not bring any substantial wage gains for care workers in ASC. As a result, there are likely to be limited economic incentives to staying with the same firm.

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Appendix A

SOC(2010) Major Groups

Major Group	Description
1	Managers, directors and senior officials
2	Professional occupations
3	Associate professional and technical
4	Administrative and secretarial
5	Skilled trades
6	Care workers and other caring and personal service occupations
7	Sales and related occupations
8	Process, plant and machine operatives
9	Elementary occupations

Appendix B

Occupation	SOC(2010) Unit Groups
Nursing auxiliaries	6141
Nursery nurse, childminder or play worker	6121-6123
Teaching or educational support assistant	6125, 6126
Veterinary nurse or animal care services	6131, 6139
Hairdresser or beautician	6221, 6222

Appendix C

Descriptive statistics for the regression sample used in Section 8.

	Unweighted number	Weighted
	of observations	proportion
Job separation:		
No	4,383	0.77
Yes	1,235	0.23
Personal characteristics:		
Female	4,809	0.84
Age in years:		
16-19	80	0.02
20-29	993	0.27
30-39 (Ref.)	1,267	0.24
40-49	1,534	0.25
50-59	1,745	0.22
White	4,785	0.81
Not born in the UK	1,059	0.23
Work-limiting health problem	816	0.14
Married/civil partnership	2,536	0.39
Age of youngest dependent child:		
No dependent children (Ref.)	3,269	0.55
0-1	451	0.10
2-4	555	0.12
5-9	652	0.12
10-15	691	0.11
Home-owner with mortgage	1,988	0.28
Highest educational qualification:		
Degree-level	1,141	0.20
A-level	1,779	0.31
GCSE-level	1,901	0.34
Other qualification	494	0.10
No qualifications (Ref.)	303	0.05
Job characteristics:		
Job tenure:		
Less than one year	1,158	0.23
1 year	816	0.16
2-4 years	1,547	0.28
5-9 years	1,020	0.17
10 years or more (Ref.)	1,077	0.15
Managerial or supervisory role	1,017	0.18
Temporary contract	235	0.04

Table continued

	Unweighted number	Weighted
	of observations	proportion
Usual weekly hours:		
1-24 hours	1,582	0.29
25-47 hours (Ref.)	3,433	0.59
48 hours or more	603	0.11
Any job-related training received or offered in past 3		
months	3,461	0.60
Ln(hourly wage)	4,726	2.16
Missing data on hourly wage	892	0.15
Employer characteristics:		
Private sector employer	4,906	0.90
Large workplace (250+ employees)	378	0.07
Resident in urban location	4,394	0.80
Region of workplace:		
North East	469	0.05
North West	691	0.12
Yorkshire and Humberside	421	0.08
Midlands	714	0.18
East of England	314	0.10
London (Ref.)	228	0.07
South East	532	0.12
South West	507	0.10
Wales	728	0.05
Scotland	899	0.11
Northern Ireland	103	0.02
Industry sector:		
Residential nursing care (87.10) (Ref.)	1,893	0.35
Residential care for learning disabilities et al (87.20)	1,306	0.23
Residential care for elderly and disabled (97.30)	1,975	0.35
Non-residential care for the elderly and disabled (88.10)	445	0.07
Proxy respondent	1,347	0.25
Number of observations	5,618	5,618