NIHR Policy Research Programme report: investigating variation in pay in adult social care

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1. Short form lay summary

This research investigated variations in pay for adult social care workers in England. It explored how local conditions, such as unemployment, and local authority fees and processes for buying care affect pay variations. Finally, it investigated how pay variations affect workers, for example, leaving their jobs or developing skills. The research involved: working with data provided by Skills for Care; surveying organisations that provide adult social care; interviewing managers of care organisations and care workers themselves.

Pay for adult social care workers is low with limited variation within and across roles. Most care workers receive a similar hourly pay rate, often at or only a little more than the National Living Wage; most senior care workers receive a similar hourly rate of pay, often only marginally higher than the care worker rate. In many cases, most care providers offer only one pay rate to each group. To maximise pay rates, few pay enhancements are offered, e.g. unsocial hours payments. Further, very few providers offer pay scales that recognise qualifications and/or experience, which creates few opportunities for care workers to increase their pay and limited incentive to gain qualifications. Low pay is also linked to lower retention. Other terms and conditions of employment are basic. Care providers argue that the fees they receive from local authorities are too low to allow them to pay more.

Policy implications include: increasing government investment in adult social care to raise local authority fees and care worker pay; changing the way care is commissioned and/ or introducing regulation to ensure fee increases lead to higher pay and create more stability; introducing pay structures to recognise qualifications and experience; and improving other terms and conditions of employment. Stable and flexible working patterns are also important. Leadership development to support implementing pay systems and create strong working environments are needed.

2. Executive summary

2.1 Background

In adult social care, pay stands at or just above the National Living Wage (NLW). Low pay is frequently cited as a barrier to the effective retention of adult social care workers: SfC (2023) data show that pay is a main driver of turnover and Vadean and Saloniki (2021) and Moriarty et al. (2018) evidence that better pay and employment conditions can improve staff retention. *People at the Heart of Care* (DHSC, 2022) and *Next Steps to Put People at the Heart of Care* (DHSC, 2023b) are white papers published by the previous government and intended to reform adult social care and address workforce issues, yet they are largely silent on the issue of pay. A recent House of Commons committee report argues that this absence means that important retention factors are not addressed (HoC, 2024). The recently elected Labour Government has committed to the implementation of a sector-wide Fair Pay Agreement (Labour_Party, 2024), and this presents a vital opportunity to create much-needed change.

Less than 20% of the ASC workforce is employed by local authorities on their standard terms and conditions of employment. Over 80% of the workforce is employed by independent, that is, private or voluntary, sector care providers who have autonomy in their pay setting decisions. Yet little is known about these pay setting processes. For example, how basic hourly rates are arrived at, how/whether local authority fees impact on pay rates, whether there are pay differentials across levels of experience and seniority, how pay levels are balanced with wider terms and conditions of employment and what other forms of reward are used. Better understanding is needed to inform policy that addresses independent sector providers pay practices.

The research provides a robust evidence base on pay and retention, identifying factors important to both and drawing out policy implications for issues to be addressed to build workforce capacity. Ultimately, this will serve both to improve employment quality and the quality of adult social care. A better functioning ASC sector will also support a more effective NHS (SfC, 2024, Hemmings et al., 2024).

2.2 Study aims

The National Institute of Health and Care Research (NIHR) commissioned this research as part of its Policy Research Programme with the aim of exploring variation in pay in adult social care. It set the follow research questions (RQ):

- RQ1: What pay and reward systems are used across adult social care (ASC)?
- RQ2: What skills-based and experience-based pay systems are used? How do these link to progression of staff?
- RQ3: How much of the variation in models and systems of pay and reward is explained by local authority (LA) background factors and variation in LA fees?
- RQ4: What are the underlying causal drivers for differences in pay and reward in ASC?
- RQ5: Are some models of pay are linked to better retention or higher skill levels?

2.3 Methods

The research focuses on direct care workers, that is, care workers and senior care workers. It comprises three work packages (WP). WP1 used Skills for Care's (SfC) Adult Social Care-Workforce Dataset (ASC-WDS). SfC supported with data access, preparation, linking and advice. Regression models were used to estimate the influence of provider and worker attributes, local conditions and local authority commissioning on pay levels, and the relationships between pay and retention. WP1 analyses covered March 2015 to March 2023. WP2 comprised a provider survey of pay and reward systems designed to generate data not contained in ASC-WDS and received 467 responses. It was linked to WP1 to enhance analyses, although only 70 responses could be linked. WP3 comprised qualitative interviews with 22 providers around their pay decisions and 20 care workers to explore their perspectives on pay, and all are based in the independent sector. All research instruments were co-designed with both the Steering and Public and Patient Involvement (PPI) Groups. The Steering Group comprised around 20 members and included representatives from sector and HR policy bodies, Department of Health and Social Care, trade unions, Local Government Association and Association of Directors of Adult Social Services (ADASS) and academics. The PPI Group had six members that included those with lived experience, care workers and a care provider. One member of the PPI Group also sat on the Steering Group.

2.4 Key findings, including headline messages relevant to policy makers

Findings show that care workers are low paid with limited pay variation, that is, most are paid at or a little above NLW levels, with senior care workers earning only a small amount more. Variation has also reduced over recent years. Findings offer important insights both into why there is little variation and what causes the variation that does exist. They show that pay is important for retention, and that several other factors are also important influences on retention.

2.4.1. How do local authority fees and other local conditions influence pay?

WP1 analyses suggest that most local conditions, including local authority fee levels, have statistically significant but small effects on pay. This may, however, result from aggregate level data that does not support fine-grained analysis at provider level. Survey and interview data evidence an important role for local authority fee levels and commissioning practices in pay setting, pay rates and income (in)stability. That is, fees are low and do not cover the cost of care, creating financial pressures that drive low pay rates and basic terms and conditions of employment. Working across local authorities that offer different fee levels also creates complexity in pay setting processes.

- *Policy implication: increased investment from government is needed to increase local authority fee rates that support higher care worker pay and better terms and conditions of employment.*
- *Policy implication: a national fee structure could reduce complexity and support a strategic approach to pay setting*

Framework/spot commissioning and the frequent use, particularly in home care, of minute-by-minute commissioning exacerbate the difficulties of low pay for care workers. Providers have uncertain revenue flows and offset this risk via use of zero-hours contracts which creates income insecurity for care workers. In home care, both local authority fees and commissioning practices impact in ways that are perceived to be problematic for pay/ income. Minute-by-minute commissioning also underpins, in certain providers, the practice of call cramming, which both intensifies worker experiences and reduces care quality. Some providers adopt strategies of providing mainly/wholly self-funded care to underpin more secure income flows and offer higher pay rates, which could threaten sector strategies to support people to live at home better and for longer.

- *Policy implication: local authority commissioning processes should create more stable income flows to support guaranteed-hour contracts/shift work, improving income stability and reducing work intensification*

Government funding is fragmented and uncertain. This works against strategic, long-term investment in pay.

- *Policy implication: longer-term, stable funding is needed to support a strategic approach to pay setting.*

2.4.2 What pay and reward systems are used?

Pay systems for independent sector care workers typically offer a flat rate for care workers, at or little above the NLW, and a slightly higher flat rate for senior care workers, although a small number of providers use pay scales (discussed below). As already noted, pay is low and there is limited variation within the care worker group and differentials across care worker/senior care worker groups are small. Further, both forms of variation have reduced over recent years, which may result from local authority fee rates not having kept pace with inflation. Many providers seek to maximise these flat rates and offer few other enhancements. Pay rates do not reflect the level of responsibility inherent in care work and small differentials create limited incentive to progress to more senior roles. Higher basic pay rates are needed but, as care work is positioned as a low-skilled occupation, care workers have limited bargaining power. A sector-wide minimum wage could address this, supported by increased funding to avoid adverse consequences, e.g. increased reliance on zero-hours contracts.

- *Policy implication: higher basic pay rates are needed that reflect care work's level of responsibility.*
- *Policy implication: bigger differentials between care worker and senior care worker pay rates must be offered*
- *Policy implication: pay increases must be properly funded*

Other terms and conditions are at mainly statutory minimum levels and disparity with local government and healthcare terms and conditions is apparent, with repeated calls for greater parity. There is use of other financial and non-financial rewards, which are valued but mainly low cost. These can compensate, to a limited extent, for low pay and basic terms and conditions.

- *Policy implication: improved basic terms and conditions of employment are needed*

2.4.3 What skills- and experience-based systems are used and how do they link to worker progression?

In the independent sector, there is limited use of skills- and experience-based pay systems and increments for gaining qualifications and experience, where they exist, are small, sometimes only a few pence per hour. Providers attribute this to funding constraints and lack of affordability linked to inadequate local authority fees. Qualifications and experience thus have limited impact on pay. The recently published adult social care workforce strategy in England models the costs of implementing NHS Agenda for Change (AfC) Band 2 and Band 3 structures for the care workers and evidences that the costs of this will be outweighed by savings generated over a 15 year period (SfC, 2024). There are also limited career opportunities, which reduces motivation to gain qualifications. Without an appropriate pay structure that rewards gaining qualifications, together with improved terms and conditions, career pathways are in isolation unlikely to position adult social care work as an attractive occupation.

- *Policy implication: pay structures that offer incremental progression and support career pathways and progression are needed; this will also increase the status of care work.*

2.4.4 What drives differences in pay and reward in the sector?

Local authority providers pay more than voluntary sector providers, who pay more than private sector providers. This results from the local authority terms and conditions offered by local authority-run providers being more generous than those in the independent sector, and from private sector providers having a profit motive which is absent in voluntary sector providers. There are repeated calls to move towards local government and/ or NHS terms and conditions in the independent sector. Commissioning or other regulation, for example, legislation or collective bargaining, is needed to ensure that investment in increased local authority fees flows to increasing pay and terms and conditions in independent sector providers.

- *Policy implication: independent sector pay and terms and conditions should reflect those offered in local government and the NHS*
- *Mechanisms are needed to ensure increased investment in social care flows to improving care worker pay and terms and conditions*

Pay also varies by region and demographics, with women, ethnic minorities and non-British nationals receiving lower pay. Independent sector providers have pay setting responsibilities and the absence of robust pay systems may result in unfair practices or discrimination.

- *Policy implication: pay monitoring against protected characteristics is needed to embed fair pay processes*

Pay is also impacted by factors not captured in the ASC-WDS but identified through regression modelling and in the survey and interviews. These include: provider pay policies and worker attributes. Substantial emphasis is placed on personal qualities, reflected in use of mechanisms like values-based recruitment, which reflects the difficulties created by labour shortages. Focusing on personal attributes alone, however, sits in tension with the aspiration to build career pathways and change the perception of care work as low-skilled.

- *Policy implication: recruitment processes must ensure that personal qualities sit alongside, not replace, qualifications and experience. Pay structures and career pathways could support this.*

Pay strategies, as noted above, are the main drivers of pay differences. Leadership is key here as this determines how organisational resources are used. Most workers are also based in SMEs, which typically have less sophisticated HR policies and practices than larger firms. These conditions increase the importance of non-skill-based practices in pay determination.

- *Policy implication: leadership development is needed to support implementation of fair and effective pay and reward systems*

2.4.5 Are some models of pay and reward are linked to better retention or higher skill levels?

Pay and reward models have very limited impact on skills. Turning to retention, WP1 analyses show that pay has a positive but small role to play. This may result from limited pay variation making causal relationships hard to identify. Job switching analyses evidence that moving jobs within the sector generally leads to higher pay and better working conditions, suggesting that working conditions are also important for retention. Interview and survey data are also unequivocal that pay is important for retention and again note an important role for working conditions. For example, staffing shortages, work intensification and minute-by minute commissioning with reliance on zero-hours contracts in home care have negative effects on retention. Improved terms and conditions of employment, particularly sick pay, are also needed. Taken together, this suggests that small pay increases are

unlikely to have great effect on retention given other pressures in the role and that substantial pay increases alongside improved terms and conditions and working conditions are required.

- *Policy implication: substantially improved pay, terms and conditions, particularly sick pay, and working conditions are needed to improve retention*
- *Policy implication: reducing reliance on zero-hours contracts will improve retention*

Worker age, experience, on-the-job training, permanent contracts, and provider quality, measured by CQC ratings, are found to influence length of service, and play a role in staff retention. Gaining qualifications has no clear impact on retention. Length of service varies significantly by ownership, provider type, job title, and region. Retention also varies by protected characteristics, with women, ethnic minorities and non-British nationals having shorter length of service. Patterns of retention by worker demographics may link to the similar patterns identified above for pay and again highlight the need for robust pay and employment systems.

- *Policy implication: offering training and permanent contracts will improve retention*

Retention is also impacted by factors not captured in the ASC-WDS and identified in the survey and interviews. Care workers, for example, suggest the following are significant in retention: the satisfaction of caring, flexible working, variety and autonomy in their roles and career opportunities. Personal circumstances and convenient working times are also highlighted as significant factors in retention. WP2 survey data places weight on flexible working, health and well-being support, and training opportunities in retention. These data suggest that, while pay is important to retention, the demanding nature of care work is more important in care workers leaving their jobs. Pay is thus balanced with several other factors in determining a worker's decision on whether to leave their job.

- *Policy implication: flexible working patterns that meet worker need, health and well-being support services and career progression will improve retention*
- *Policy implication: adequate workforce capacity is central to avoiding the workload pressures that create turnover*

As noted above, switching jobs within the sector generally leads to higher quality employment environments, suggesting that these are a key factor in retention. Interview data support this. Leadership is vital in creating this positive environment and a strong workplace culture: being a good place to work is important, and this ranges from high CQC ratings to robust induction training, from financial forms of reward such as counselling to non-financial forms of reward including recognition schemes. Providers are, however, clear that these strategies are only effective when pay is at a minimum acceptable level.

- *Policy implication: induction training focused on socialisation will improve retention*
- *Policy implication: financial and non-financial rewards can improve retention once pay is at a minimum acceptable level*

Many care workers, however, express dissatisfaction at the support received from their managers and do not feel valued, suggesting that leadership can be improved. New provider entrants to the sector, some with financial backgrounds, have created new ways of working, suggesting that diversification of leadership experience may drive innovation.

- *Policy implication: leadership development is needed to support with creating the strong cultures that improve retention*

2.5 Conclusions and recommendations for further research

This research builds an important evidence base on the role of pay in adult social care, with important policy implications. Pay is low and varies little in adult social care work, creating limited differentials within and between roles and offering limited incentives to gain and reward for qualifications and experience. This is accompanied by basic terms and conditions of employment and limited career opportunities, against a backdrop of this skilled and challenging work being undervalued and under-rewarded. Recent policy reports chime with the findings of this research, arguing that a national approach to addressing pay and terms and conditions in the sector, involving government, employers and unions, is needed (SfC, 2024). The scale of change is significant and this approach might be iterative (Hemmings et al., 2024). Yet change is essential: care work is important work and there is an urgent need to build workforce capacity, not just to address current recruitment and retention challenges, but also to build the future workforce needed to care for England's ageing population. Doing this and delivering more effective social care will also underpin a better-functioning NHS system.

This research offers important insights that inform policy actions to begin the process of delivering this change. These centre on improving pay and developing incremental pay scales that support career pathways and better terms and conditions of employment that offer closer alignment to NHS/ local authority terms and conditions. Fundamental to these are higher local authorities fees and more stable commissioning processes that support more strategic approaches to pay. Regulation, in the form for example of legislation or collective bargaining, will be required to ensure that higher fees flow to improving pay and terms and conditions. The wider employment relationship could also be improved though effective recruitment, induction, reward, flexible working and diversity and inclusion processes. Leadership development programmes to support these are important

It is nevertheless acknowledged that further research is needed. First, further detailed statistical exploration of the relationships between fees/commissioning practices is needed, which will require building datasets that include both provider-level local authority fee data and the proportions of state-versus self-funded care offered at provider level. Second, more investigation is needed of provider-level pay practices, generating data that more effectively links to the ASC-WDS. Finally, statistical analysis of care worker perspectives on pay will be of benefit and again linking these to the ASC-WDS will offer further insights into their relationships with pay and retention.

2.6 Dissemination plans

Findings will be disseminated in two ways. First via academic workshops/conferences and journal articles. Second, via communication and public engagement activities. These include feedback to research participants, a report suitable for a policy audience with associated events, e.g. workshops with key stakeholders, outputs for the public and care recipients, and media coverage.

2.7 Expected influence/impact on the relevant policy field, service providers and wider stakeholders, and on current practice.

As a fast-track policy project, impact is yet to be delivered, although the forthcoming policy report has already been cited in a publication on pay in the sector. Over time, it is anticipated that the research will impact on pay policy in the sector, for example, informing the establishment of a sector-wide Fair Pay Agreement including wider terms and conditions of employment, on leadership development, and on implementation of guaranteed hours/shift working in home care.

3. Description of the research

In adult social care, pay stands at or just above the National Living Wage (NLW). Low pay is frequently cited as a barrier to the effective retention of adult social care workers: SfC (2023) data show that pay is a main driver of turnover and Vadean and Saloniki (2021) and Moriarty et al. (2018) evidence that better pay and employment conditions can improve staff retention. *People at the Heart of Care* (DHSC, 2022) and *Next Steps to Put People at the Heart of Care* (DHSC, 2023b) are white papers published by the previous government and intended to reform adult social care and address workforce issues, yet they are largely silent on the issue of pay. A recent House of Commons committee report argues that this absence means that important retention factors are not addressed (HoC, 2024). The recently elected Labour Government has committed to the implementation of a sector-wide Fair Pay Agreement (Labour_Party, 2024), and this presents a vital opportunity to create much-needed change.

Less than 20% of the ASC workforce is employed by local authorities on their standard terms and conditions of employment. Over 80% of the workforce is employed by independent, that is, private or voluntary, sector care providers who have autonomy in their pay setting decisions. Yet little is known about these pay setting processes. For example, how basic hourly rates are arrived at, how/whether local authority fees impact on pay rates, whether there are pay differentials across levels of experience and seniority, how pay levels are balanced with wider terms and conditions of employment and what other forms of reward are used. It is important that policy addresses pay to influence independent sector provider pay practices.

The research provides a robust evidence base on pay and retention. It identifies factors important to both and draws out policy implications for issues to be addressed to build workforce capacity. Ultimately, this will serve both to improve employment quality and the quality of adult social care. A more effective ASC sector will also enable better functioning of the NHS (SfC, 2024, Hemmings et al., 2024).

3.1 Research Questions

The National Institute of Health and Care Research (NIHR) commissioned this research as part of its Policy Research Programme and set the follow research questions (RQ):

- RQ1: What pay and reward systems are used across adult social care (ASC)?
- RQ2: What skills-based and experience-based pay systems are used? How do these link to progression of staff?
- RQ3: How much of the variation in models and systems of pay and reward is explained by local authority (LA) background factors and variation in LA fees?
- RQ4: What are the underlying causal drivers for differences in pay and reward in ASC?
- RQ5: Whether some models of pay are linked to better retention or higher skill levels?

3.2 Methodology and methods

The research focuses on direct care workers, that is care workers and senior care workers. It comprises three work packages (WP). In brief, WP1 used Skills for Care's (SfC) Adult Social Care-Workforce Dataset (ASC-WDS), covering the period from March 2015 to March 2023. SfC supported with data access, preparation, linking and advice. Pay and retention models were used to estimate the influence of worker and provider characteristics, local conditions, and local authority commissioning on pay practices, and the relationships between these and the workforce outcome of retention. WP2 comprised a survey of provider pay and reward system design to generate data not contained in ASC-WDS. It was linked to WP1 to enhance analyses, albeit only a small number of providers were matched across the two datasets. Local authority and independent sector providers are contained in the WP 1 and 2 analyses, but in both local authorities account for less than 10% of each sample and the majority in each are private sector providers. WP3 comprised qualitative interviews with 22 providers around their pay decisions and 20 care workers to explore their perspectives on pay, and all were based in the independent sector. More detail is provided in what follows. WP1 analyses separate care workers from senior care workers, but WP2 and WP3 use the term 'care worker' to include both groups, unless otherwise specified. All research instruments were co-designed with both the Steering and Public and Patient Involvement (PPI) Groups.

3.2.1 Work package 1

This is one of the first UK studies to use regression techniques relevant to linked employer-worker data to precisely estimate the impact of different worker, provider, and local authority level variables on variation in pay, as well as the impact of different variables on length of service and training. The use of techniques designed for linked employer-worker data helped not only control for fixed/ stable characteristics of workers and providers in the regressions but also capture those effects and use them for subsequent decomposition of pay and retention variations. The inclusion of multiple fixed effects should remove any probability of omitted variable bias.

The study examined a sub-population of ASC providers in England who supplied workforce data to the ASC-WDS from March 2015 to March 2023. The study was thus longitudinal, although in places it used pooled effects for comparison. Care worker and senior care worker hourly pay and average length of service with an ASC provider were modelled as functions of worker and their provider characteristics and local conditions, including local authority ASC fee levels (Figure 1). The main objective of WP1 was to understand whether and how variations in worker and provider characteristics, as well as local conditions, explain variations in worker basic hourly pay and length of service with their providers. The unit of analysis was worker-year, making the total observations workers × years.

3.2.1.1 Data sources

The study used annual ASC-WDS data from March 2015 to March 2023. ASC-WDS is a longitudinal dataset of employers and workers, with each worker linked to their employer via unique global identifiers. Participation in ASC-WDS is voluntary for the independent sector (with over 50% submitting data annually) and mandatory for local authorities. The ASC-WDS data were linked to the ASC Finance Return and other local authority-level annual datasets to gather information on average local authority ASC fees, total ASC expenditure, local authority average gross pay levels, unemployment rates, age-standardised mortality ratios, population size, median age, local authority tax base, median house prices, and the number of benefit recipients. Data on local authority commissioning practices, including block/framework spot commissioning were also sought. The initial plan was to work via the Association of Directors of Adult Social Services (ADASS) to survey

all 153 local authorities, but this was not possible. A survey was thus circulated via researcher networks, e.g. the national home care commissioner group, but response rates were so low that analysis was not feasible. As an alternative, data from a Unison survey on local authority commissioning practices were used, though these were limited to home care services and were from 2013, meaning the data may be dated. Analysis explored whether services were commissioned on a block, framework, or spot basis. Block commissioning describes an arrangement where local authorities contract for a particular volume of care with a provider, who then draws down against that block across an agreed period. Framework arrangements require providers to tender to provide care for local authority care packages/placements evidencing that they meet particular quality standards, but bids for care packages/placements are made on a case-by-case basis. In spot commissioning, providers simply bid for packages/placements on a case-by-case basis. Commissioning can be on a block, framework or spot basis, or a combination of these.

3.2.1.2 Descriptive data

The ASC-WDS data included records from 26,230 ASC providers and 1,024,020 care workers and senior care workers in England over the 2015-2023 period, totalling 2,997,799 observations (workers x years). Incomplete records and those with obvious data entry errors were excluded from the analysis. Data for 2023 were also excluded from regression analyses because local conditions data were only available up to 2022. Pay data not updated within a year were also excluded. After these exclusions, 690,222 observations (316,938 workers and 9,739 providers) with complete and accurate records remained on all included variables.

Table A1 in Appendix 1 provides unweighted statistics on the ASC sector and workforce status, also highlighting differences between the characteristics of all providers in the ASC-WDS (ASC sample) and providers with complete records on all worker characteristics (estimation sample). These statistics cover the period 2015-2023 and include only care workers and senior care workers, and so are not directly comparable to SfC's latest analyses that cover the period 2022/2023. Briefly, 84.5% of workers are women, 81.7% are British, 80.7% are White, 10.5% are Black/African/Caribbean or Black British, and 6.1% are Asian or Asian British. According to SfC estimates for 2023, 84% senior care workers and 82% care workers are women, 77% are British nationals, and 74% workers are from White ethnic background. The average worker age is 42.2 years (43.2 and 43.9 years respectively for care workers and senior care workers in latest SfC estimates), with 8.1 years of ASC experience. Of the job roles, 90.9% are care workers and 9.1% are senior care workers. 53.1% of workers hold ASC-relevant qualifications and 74.9% received annual training over the study period. 49.2% of roles are full-time, 42.3% are part-time, with an average of 23.9 contracted hours per week. 87.1% of roles are permanent, 10.1% are agency or pool/bank staff, and 32.1% of the workforce is on zero-hours contracts. 39.4% of workers are employed at small providers (10-49 employees), 48.4% at medium providers (50-249 employees), and 7.8% at large providers (250+ employees). 35.9% of workers are in adult home care services, 27.8% in care home services without nursing, and 18.3% in care home services with nursing.

In the final estimation sample, there are relatively more British and White workers compared to the total ASC-WDS data (85.88% versus 81.75% British and 84.89% versus 80.74% White). The sample also includes a higher percentage of workers with ASC-relevant qualifications (61.10% versus 53.17%). Additionally, 91.12% of workers in the estimation sample are on permanent contracts compared to 87.07% in the ASC sample. Thus, the results may not fully generalise to the entire ASC provider population. However, the analyses remain valuable due to the large proportion of ASC providers in England covered. For instance, the final estimation sample is similar to the total ASC-WDS data on most other characteristics reported in Table A1. Furthermore, providers with complete

worker records in ASC are found to be similar to the total registered ASC provider population with the Care Quality Commission (Vadean and Saloniki, 2023).

3.2.1.3 Data analysis

Drivers of pay and length of service: multi-level fixed effects regressions were used to test the impact of workforce characteristics, provider characteristics, and local conditions (Figure 1) on worker hourly pay, length of service with an employer, and annual training incidence. The regression analyses examined whether differences in worker, provider, and local characteristics are associated with variations in average hourly pay, length of service, and the likelihood of training. While drawing conclusions about the impact of one variable on another, regression analyses control for confounding variables that could affect the relationship between the variables in question.

Worker outcomes such as pay and length of service can be influenced by various worker, provider, local authority and national-level factors (Torres et al., 2018). These factors include time-varying characteristics like worker age, experience, provider size, vacancy levels, local unemployment rates, and local pay rates, as well as fixed or stable characteristics like worker gender, ethnicity, country of birth, innate ability, personality traits, provider sector, and location. Variables such as age, gender, and ethnicity are measured (observed) in the ASC-WDS, while others like workers' attributes, innate abilities, provider building quality, HR practices, profit margins, and location are not reported (unobserved) in the ASC-WDS. Factors with limited variation, such as job role and region, are treated as time invariant.

To accurately estimate the impact of various factors on workers' pay and length of service, all relevant factors must be included in the regression model. Only factors unrelated to any included variables can be excluded (Baltagi, 2015). However, many unmeasured variables may be correlated with observed ones. For example, innate abilities directly affect hourly wages and indirectly influence educational attainment (Germinario et al., 2022). Not controlling for workers' innate abilities would bias the estimate of educational qualifications on pay, leading to omitted variable bias. Additionally, measured variables such as age, experience, and qualifications are likely correlated. For instance, if a regression model includes only age, its coefficient may partly capture the effect of experience. This can lead to misleading conclusions about the impact of age on pay and length of service.

Fixed effects regressions are powerful statistical techniques that capture the combined effects of all factors, measured or not, that remain constant over time, while also measuring the impact of traditional factors such as worker age, experience, qualifications, provider size, and vacancy rates on pay and length of service. Provider-level variables, such as staff-to-resident ratio and the percentage of nurses among total staff, were included to capture the effects of work burden and the potential impact of nursing staff on care workers' pay and length of service. The presence of nurses might mean care workers provide less complex care. Conversely, higher nurse pay, driven by competition from the NHS, might reduce care workers pay.

Using linked employer-worker data allowed inclusion of both worker and provider fixed effects in the regression models, thus avoiding bias from time-invariant omitted variables. These multilevel fixed effects regressions are recommended for leveraging the rich nature of linked employer-employee datasets (Abowd et al., 1999, Addison et al., 2023). Some pay and length of service regressions also included local authority-level fixed effects. All models included time fixed effects to control for variables constant across providers but varying over time, to deal with time shocks such as national minimum wage laws and the impact of COVID-19.

In the second stage of the regressions, the estimated worker and provider fixed effects were regressed on the measured stable characteristics of workers and providers. This allowed estimation of the impact of worker gender, ethnicity, British nationality, region of work, and provider sector, service type, and ownership type on worker hourly pay and length of service with an employer. For comparison, pooled ordinary least squares (OLS) and correlated random effects models, as used in Vadean et al. (2024) were also estimated. These models estimate fewer parameters and are more efficient (lower standard errors) (Wooldridge, 2019). However, they may produce biased estimates if omitted time-invariant variables are correlated with the included variables. As a rule of thumb, if the coefficients of these models differ from those of the fixed effects regression, the latter should be relied upon (Baltagi, 2015).

In previous studies on worker retention, the outcome of interest is defined as job separation, represented as a binary indicator: 0 for stayers and 1 for leavers (Vadean and Saloniki, 2023). A worker is classified as a leaver if they either worked for another provider one year later or left the sample while their provider remained. Here, length of service (in years) with a provider as a measure of retention was used for two reasons. Firstly, when the outcome is a binary indicator, fixed effects cannot be included, as the outcome for always-stayers does not change. Secondly, those who never switch jobs during the sample period do not contribute to the regression results as their dependent variable remain constant over the sample period. Thus, such analyses are only applicable to those who switch jobs during the sample period. Lastly, such non-linear regressions do not allow for further variance decomposition exercises.

Decomposition of pay and length of service variation: after identifying the impact of various factors on pay and length of service, the observed variations were decomposed into components determined by fixed worker attributes, stable provider characteristics, and other time-varying factors related to workers, providers, and local authorities. This analysis clarified the contributions of different factors to differences in pay and length of service, and identified the proportion of variations that remain unexplained. More details of the estimation steps are provided in the Technical Note in Appendix 1.

Figure 1: Multi-level fixed effects regressions model

Time-varying worker factors:

Age, experience, contracted hours, distance to work, sick days

Employment (permanent, temporary, other), job status (full-time, part-time, neither), disability (yes, no), training (yes, no)

ASC qualification level

Time-fixed/stable worker factors:

Job role (care worker, senior care worker), gender, ethnicity, nationality, region of work

Unmeasured fixed worker attributes

Time-varying provider factors:

Numbers of leavers, starters, vacancies, staff size, nurses as % of total staff, staff to resident ratio

Time-fixed/stable provider factors:

Sector (private, LA, voluntary), service, (nursing, residential, home care, …,), ownership (chain, single) Residents (with/without dementia, physical disabilities, learning disabilities , … ,)

Unmeasured fixed provider attributes

Local factors:

Council ASC fee, total ASC expenditure, median age, mortality rate, unemployment rate, average pay, pay at 20th & 30th percentiles, median house price, recipients of different benefits, index of multiple deprivation

Unmeasured time-varying factors

Outcome variables:

Basic hourly pay

Length of service with employer (years)

Training incidence

Impacts of within-sector job switching: for workers who switched employers within the sector and had pre-post job switch data available, a comparative before-after or differences-in-differences analysis was conducted (Roth et al., 2023). Workers who stayed with the same provider for all nine years served as the comparison group. This analysis helps determine the benefits workers gained when they changed jobs, which may influence their decision to switch. In this analysis, time is defined relative to the job switch year. An event variable is created, taking a value of zero at the time of the job switch, and positive (negative) values in the post (pre) job switch years for those who switched jobs. Binary indicators were then created for each value of the event variable (Clarke and Tapia-Schythe, 2021). This event design method is recommended for before-after analyses where the timing of job switches varies among workers (Goodman-Bacon, 2021).

3.2.2. Work package 2

A researcher-designed survey was used to gather data on provider pay and reward practices not contained in the ASC-WDS. SfC emailed a survey link to all 18,000 providers who submit data to the ASC-WDS and 467 completed surveys were received. Provider details are provided in Appendix 2. In summary, providers were located across England and most were single establishments, with smaller numbers being part of a local (12%) or national (16%) chain. 96% were small or medium-sized enterprises (SMEs, 10-249 employees) and there was a fairly even split across residential/nursing and home care. 74% were private sector providers, with 9% from local authorities and 1% from the voluntary or third sector, with the balance categorising themselves as 'other'. 74% had a 'good' Care Quality Commission (CQC) rating. Data should not be regarded as representative, being from a self-selected group of participants who, analysis suggests, were likely to be engaging in more sophisticated pay and reward practices than is typical. Nevertheless, descriptive statistics from these data offered useful insights into pay and reward practice in the sector. Further analyses linked WP1 and WP2 data.

3.2.3 Work package 1 and 2 linked analyses

Regression analyses linked WP1 and WP2 to explore how much variations in pay and tenure were explained by the WP2 survey variables on provider pay and reward practice.

3.2.3.1 Data Sources

Using ASC-WDS data 2022–2023, hourly pay and tenure were used as dependent variables with control variables including worker-level and provider-level variables, such as age, gender, ethnicity, region, contract type (whether on a zero-hours contract or not), employment type, and ASC qualification. Data on provider pay and reward policies not covered by the ASC-WDS were taken from WP2.

Multiple imputation (MI) with the predicted mean matching method addressed the missing values in the survey data. After removing duplicates, the sample size reduced to 462 providers. Survey data were merged with WP1 employer-worker linked data once the imputation process was completed. The final sample size was further reduced by the merging process to 70 providers where the CQC identification numbers (IDs) in the two databases matched. This small number of matches resulted from difficulties with the CQC IDs, as many providers input CQC numbers that could not be identified. Future attempts to link primary survey data to the ASC-WDS should use the SfC ID number to avoid these difficulties and enable more efficient matching across datasets.

Composite variables were generated from WP2 questions. Response categories were predominantly of categorical format. All categorical variables were converted into binary form and used to create a composite scale of multiple variables (see Appendix 3). For the pay practices analyses, the composite scale variables were institutional influences, economic and competitive factors, social responsibility, and high investment/ strategic use of reward. For the tenure analyses, the composite scale variables encompassed work-life balance, control over work, good HR practices, high investment/ strategic use of rewards, worker voice/ pluralist/ involvement agenda, public relations/ stakeholder business case, external competition, and the nature of care work.

3.2.3.2 Analysis

To analyse pay and tenure, two sets of regressions were performed. The dependent variables in both cases were continuous variables. To account for potential within-cluster (provider) correlation and increase the reliability of the inference, standard errors were clustered at the provider level.

3.2.4 Work package 3

In-depth interviews using Teams or WhatsApp software were conducted with 22 independent sector care providers and 20 independent sector care workers to gain their views on pay, reward and retention. For providers, there were 18 from the private sector, two from charities and two local authority spin out companies, and fice that offered learning disability services, eight that offered residential and nursing services, eight that offered home care services and one that offered most services. For workers, two were senior care workers and 18 were care workers, with six working in home care, five in residential and nursing care and services in learning disability/ supported living/ day care services. Various networks were used to gain access to participants and their views are not intended to be representative, albeit care was taken to ensure they were drawn from these different services and sectors. Rather, participants made contributions on, for example, innovations or good practice or specific challenges faced. That said, there was a high consistency of views expressed around matters such as local authority commissioning, pay rates and retention pressures. Care workers were invited to interview using Facebook and other networks. £20 vouchers were used to incentivise care worker participation which did create some fraudulent participation. This was quickly identified and rigorous identification checks, together with a requirement that participants must have their cameras on avoided any further difficulties.

Participants were asked a range of questions that centred on pay and terms and conditions of employment. Care providers were additionally asked about wider matters including fee rates and commissioning processes, market competition and recruitment and retention challenges. Analysis identified themes relevant to the aims of the research based initially around the research questions and then on issues that emerged from the interviews. These are referred to as 'interview data' and quotes are labelled P1-P22 for care providers and CW1-CW23 for care workers. Details are provided in Appendices 4 and 5. In summary, there were eighteen private sector providers, with two local authority spin out and two charity providers offering home care, residential/nursing care and learning disability provision. 11 were SMEs, and most of the larger providers employed a few hundred workers, with only four providers employing over 1000 workers. There were a range of ownership models including private, family, employee owned and charity. There was also a range of funding models from wholly state-funded (3), through a mixture of state/self-funded (18) to wholly self-funded (1). For care workers, there were 13 women and 7 men, 2 senior care workers and 18 care workers and a range of services covered.

3.2.3 Limitations

The research has several limitations. The results in WP1 are based on a sub-sample of those workers and providers that have complete data on the included variables (or some data is imputed for a few local authority level variables). Although the ASC-WDS data and this estimation sample are broadly similar (Table A1 in Appendix 1), the sample here may not be fully representative of the total ASC labour market. Further, the ASC-WDS does not contain variables that support investigation of all factors that create pay and retention variation, as is outlined in the findings. While a provider survey and care provider/worker interviews are used here to address these gaps, a more detailed, national level dataset would be beneficial. Those workers or providers who appear for only one year in the ASC-WDS are also excluded. Future work could study the characteristics of such workers and providers to determine why they might leave the sector. Analyses also excluded those providers (less than 1%) that have not experienced any turnover over the study period. The impact of local authority fees cannot be accurately estimated (and is likely underestimated) because data is held at aggregate not provider level and, further ASC-WDS does not capture whether/what proportion of a given providers care recipients or are state-funded. Further, variables like qualifications and job role are not inherently time-variant or invariant. In the two-stage regressions, a decision is needed whether to include them in the first or second stage. Given that most job roles in the data were care workers with

minimal job role changes, job role was treated as time-invariant. Lastly, these analyses do not explore the possibility of differences in slope parameters across sectors or worker types. For example, if experience is rewarded differently in various sectors or services, the coefficient for experience should vary accordingly. However, given the small overall impact of time-varying factors, such analyses are unlikely to make a significant difference.

WP2 and WP3 data are drawn from providers interested in the topic of pay and may not be representative of the provider group. Indeed, analysis suggests that these providers are likely to be offering a better employment package than is typical. WP2 also draws on a relatively small sample, although large enough to offer robust data. Finally, the linked WP1/2 analysis sample is very small and regression analyses are thus limited.

3.3 Findings

This section presents the findings for each of the work packages. The later discussion uses these to address the research questions.

3.3.1 Work package 1

WP1 produced findings on whether and how variations in worker and provider characteristics, and local conditions, explain variations in worker hourly pay and length of service with their providers.

3.3.1.1 Trends in pay and workers retention

Figure 2 illustrates the pay levels and pay gap 2015-2023. These are unweighted and unadjusted summary statistics intended to provide a brief overview before regression analyses. The next section provides a brief comparison with data from SfC's 2023 report and differences are seen as these data are weighted and for the 2022-23 period only. In March 2023, the average hourly rate for care workers was £10.56, compared to £7.63 in 2015 and £9.16 in 2020. This places the average pay £1.06 above the National Living Wage (NLW, £9.50) and £0.66 above the UK's Real Living Wage (RLW, £9.90) in 2023 (see Figure A1 and Table A2 in Appendix 1). The proportion of care workers earning less than the real living wage (RLW) more than halved over nine years, with 24% earning below RLW in 2023. However, in the private sector, 35% still earned less than RLW in 2023. Pay at the 10th percentile consistently mirrored the national minimum wage, indicating that the lowest 10% of care workers earn between the NLW and the apprentice rate. This is possibly due to apprenticeships or being aged 16 to 18, although it is recognised that not all care workers receive the NLW. The pay gap for care workers between the 90th and 10th percentiles decreased from £2.57 (39.5%) in 2015 to £2.20 (23.2%) in 2023 whereas the inter-quartile range dropped from £1.48 in 2015 to £1.00 in 2023.

For senior care workers, the average hourly rate was £11.63 in March 2023, up from £8.59 in 2015 and £10.22 in 2020. Senior care workers earned £2.13 above the NLW and £1.73 above the UK's RLW in 2023. The proportion earning less than RLW decreased significantly over the study period, with only 7% below RLW in 2023. The pay gap between the 90th and 10th percentiles for senior care workers decreased from £4.40 (65.5%) in 2015 to £3.53 (35.3%) in 2023, while the inter-quartile range decreased from £1.87 to £1.57 over the same period.

Table A2 in Appendix 1 provides comprehensive details on the level and trends in pay, length of worker service with an employer, provider turnover rate (the proportion of care workers who leave annually), and vacancy rates for care workers and senior care workers (also see Figure A1). Briefly, based on the unweighted sample, average hourly pay in local authority providers was £5.08 (66.6%) more than in the private sector in 2015, narrowing to £4.51 (40.9%) in 2023. Pay is relatively higher in home care compared to residential care. Pay is consistently lower in the Northeast and highest in London, followed by the Southeast. Senior care workers have longer length of service than care

workers (7.43 versus 5.42 years in 2023). Our unweighted estimates suggest that care worker turnover increased from 24% in 2015 to 35% in 2020, then dropped to 32% in 2023. Staff turnover was 15% in local authority providers versus 31% in the private sector in 2023. Care worker turnover is typically more than double that of senior care workers (32% versus 16% in 2023). Private sector turnover is roughly double that of local authorities, though vacancy rates are similar (8% versus 7% in 2023). The vacancy rate for care workers increased from 4% in 2015 to 10% in 2023. Workers in local authority providers had 11.2 years of experience on average, compared to 7.5 years in the private sector. It is also worth noting that most workers travelled less than 6 miles to work and nearly 88% worked in SMEs.

*Figure 2: **Trends in pay (pay gap) of care workers and senior care workers***
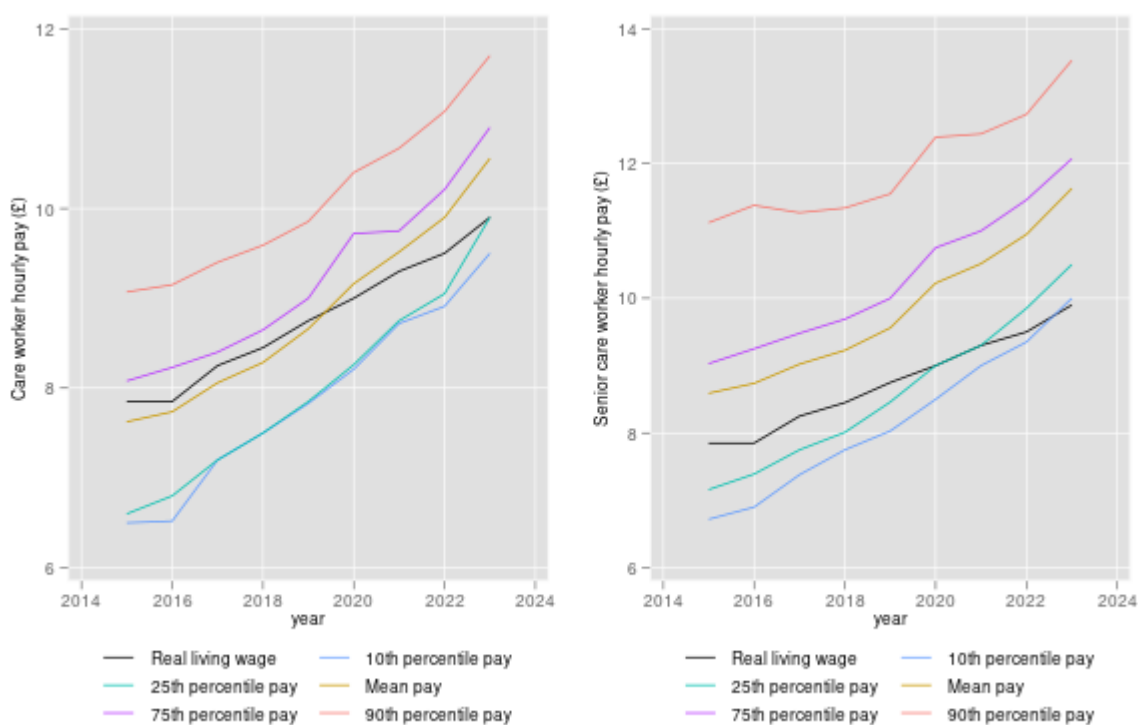
Among other things, the regression analyses below explore whether the differences between local authorities and private sector pay rates is because of differences in their workers characteristics or, at least partly, because local authorities pay rates.

These analyses largely align with findings in SfC's (2023) annual report. For instance, SfC reports a mean hourly pay of £11.35 for care workers in local authorities and £10.34 in the independent sector (private and voluntary) in March 2023. Given that independent providers comprise 79% of the sector, this results in an average pay of £10.55 (compared to our reported £10.56). SfC estimates senior care workers' mean hourly pay at £11.75, slightly higher than the estimate here of £11.63 in 2023. SfC also reports a pay gap of 19% (difference between pay at the 90th and 10th percentiles) in the independent sector. The reported pay gap here for care workers of £2.20 (23.2%) decreases to £1.96 (20.6%) when excluding local authority providers. SfC estimates annual turnover rates of 15.4% in local authorities and 30.4% in the independent sector for 2022/23, closely matching estimates here of 16% and 30%, respectively. Similarly, data here show a 5% vacancy rate for senior care workers and 10% for care workers, compared to SfC's estimates of 5.6% and 11.8%, respectively. This demonstrates that the

data cleaning process, including the removal of obvious errors, and not using any weights did not result in major discrepancies between these data and SfC estimates.

In the regression analyses, dependent variables are the natural logarithm of real hourly pay (in 2015 prices), the natural logarithm of length of service or tenure in years (defined as the number of years with an employer), and the incidence of training (a binary indicator with a value of one if the worker attended any training during the year, zero otherwise). Independent variables include all worker, provider, and local characteristics (Figure 1), along with worker, provider, and year fixed effects. Results for the hourly pay and length of service regressions are reported in percentages. Thus, regression coefficients indicate the percentage change in the dependent variable with a one-unit change in the independent variable, e.g., a coefficient of 2.5 for a hypothetical variable X should be interpreted as a 2.5% increase in the dependent variable when independent variable X increases by one unit.

3.3.1.2 Drivers of basic hourly pay

The first stage regression results with fixed effects for workers and providers are shown in Figure 3, while detailed regression outcomes are presented in Table A3 in Appendix 1. Hourly pay increased with worker age, experience, ASC qualification, with non-zero hours contracts and permanent contracts. An additional year of age increased hourly pay by 0.84% (£0.07), an additional year of experience increased it by 0.13% (£0.01), workers with level 3 to 5 ASC-relevant qualifications earned 1.78% (£0.14) more than those without, zero-hours contract workers earned 1.69% (£0.13) less than those on non-zero-hours contracts and temporary contract workers earned 0.91% (£0.07) less than permanent workers. Training had a negative immediate impact on pay, workers with reported training were paid 0.5% less hourly pay than workers with no reported training.

Figure 3: ***Time-varying drivers of hourly pay and length of service (selected coefficients)***
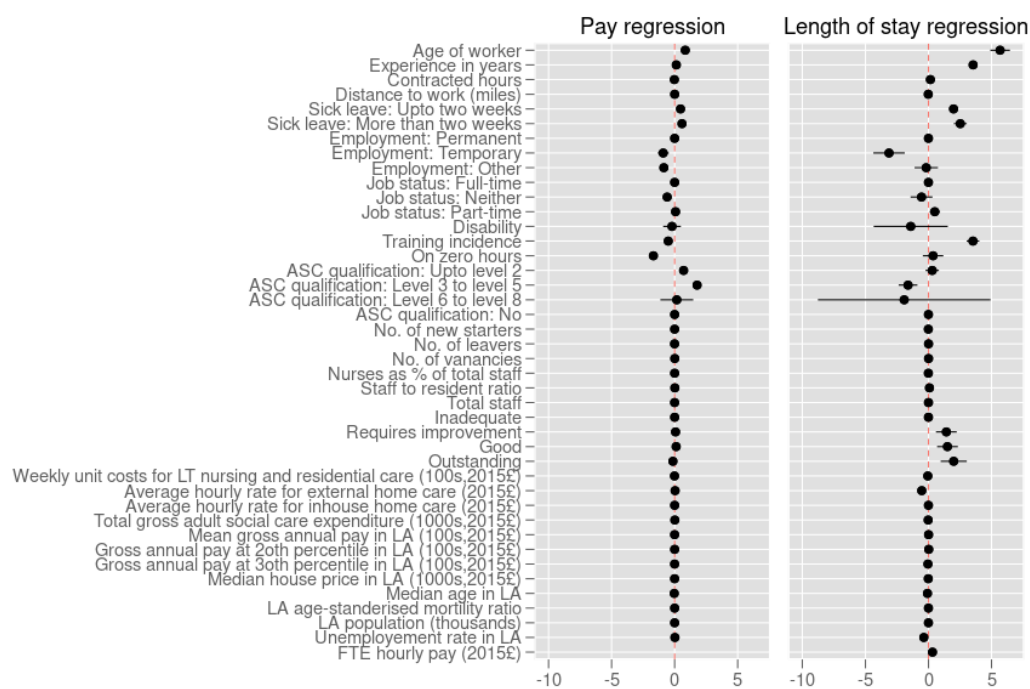
Note: The regression results in Figure 3 control for workers, providers and time fixed effects, and any provider-specific linear time trend.

Most provider time-varying factors and local conditions had statistically significant effects, albeit very small (often less than 0.1%). For instance, a £1,000 increase in local authority-level gross adult social care expenditure raised pay by just 0.02%, and an additional vacancy increased hourly pay by only 0.01%. Notably, year fixed effects prominently influenced pay as shown in Table A3. Real hourly pay was 4.4% higher in 2020 and approximately 5.0% higher in 2021 compared to 2015, but by 2022, it showed no significant difference, likely influenced by rising inflation rates. This suggests that the rising demand for care workers and government COVID-19 packages led to pay increases during the pandemic.

Weekly average unit fees for nursing and residential care at the local authority level, as well as hourly fees for home care, did not appear to greatly impact hourly pay rates, that is, while effects are positive they are small in magnitude. The coefficients of the local authority fee rates are statistically significant in the OLS and correlated random effects regression, but they become very small in magnitude and, in some cases, lose statistical significance after controlling for workers' and providers' fixed effects (Table A3 in Appendix 1). This indicates that the OLS and correlated random effects estimates of the local authority fee rates on pay and length of service might suffer from omitted variables bias (for example, providers with certain types of clients or facilities may receive better fees than others), leading to misleading conclusions (more details in the next paragraph). Additionally, it is important to note that these effects cannot be accurately measured without longitudinal data on care home-level fee rates. While no known other research analyses the impact of local authority fee rates on pay, Vadean et al. (2024) examined the effect of local authority fee rates on job separation using SfC 2016-2022 data. They evidence mixed effects, perhaps because of omitted variable bias, but suggest that, at most, a £1 increase in hourly home care fees could decrease the separation rate by just 0.00074%, with no effect on those switching jobs within the sector (See Table A3, in Vadean et al., 2024). It is thus important to note the difficulties in measuring these effects without longitudinal data on provider-level fee rates. Proportions of state- versus self-funded care by provider can also impact. The ASC-WDS lacks information on whether providers offer state-funded care and its proportion each year, although ONS estimates of self-funder proportions at local authority level could be used for control purposes (ONS, 2023b, ONS, 2023a). For providers with no state-funded care recipients, the coefficient of local authority fee rates must be zero. Moreover, local authority average fees can change due to changes in care recipient composition, even if the fee received by providers remains unchanged. Therefore, future research on the pay impact of local authority fee rates should use provider-level fee data and consider the actual number and types of funded care recipients for accurate estimates of the effect of local authority fees on pay.

Significant pay differences arose from provider sector and service type and worker job title or measured fixed attributes (second stage regression results in Tables A4 and A5 in Appendix 1). Care worker hourly pay was 7.5% less than senior care workers, women received 0.25% less, Black, or Black British workers received 0.92% less, Asians or Asian British received 0.83% less compared to White workers, and British nationals received 0.76% more than non-British nationals. Everything else being equal, pay was 2.54% higher in London and 1.24% in the East and 2.43% lower in the Northeast compared to the East Midlands (reference category). Additionally, local authority providers paid 14.7% more and voluntary sector providers pay 3.1% more than private sector providers, after controlling for all other workers and provider differences. These results align closely with SfC (2023) and further explanation is presented in the discussion section. Further, homes without nursing paid 2% more, home care paid 5.4% more, and adult day care services paid 2.5% more than care homes with nursing (reference category). The higher pay rate in the home care might reflect the fact that some providers include the cost of travel into their basic pay calculations (see later provider data in WP2 and WP3 on this) and/or compensating differential as home care jobs may be relatively more demanding.

The impact of commissioning practices on home care worker pay was examined using the 2013 Unison survey. The hypothesis was that block contracts would lead to higher pay by ensuring consistent provider income over time. Analysis found that pay was 3% lower in local authorities using framework or spot contracts compared to those using a mix of block and spot contracts. Additionally, pay was 3% higher in local authorities commissioning 15-minute visits (see Table A6 in Appendix 1). These findings should be treated with caution, given that the survey data is from 2013 and linked to ASC-WDS data from 2015 to 2017.

Figure 4 breaks the total variation in log hourly pay into components explained by various measured and unmeasured worker and provider characteristics (see also Table A7 in Appendix 1). It shows that 40.5% of pay differences stemmed from fixed worker attributes, indicating some workers consistently earn more regardless of skills, experience, or tenure. Of this, 5.59% was due to gender, ethnicity, region, nationality, and job role (care worker or senior care worker). The remaining 34.87% was due to other fixed but unmeasured attributes, discussed later. That is, if workers were identical in their fixed characteristics, overall pay variation would be 40.5% lower.

Provider fixed differences account for 37.5% of pay variation, suggesting some providers consistently pay better irrespective of worker skills. Of this, 15.58% was due to sector, service type (residential, nursing, home care), ownership (single vs. chain), and resident types. The remaining 21.97% arose from unmeasured factors like provider location, management, HR practices, and pay policies and profit margins. Time-varying characteristics of workers, providers, and local authorities explained 8.51% of pay differences, leaving a residual variation of 13.48%.

Figure 4: Decomposition of pay variance
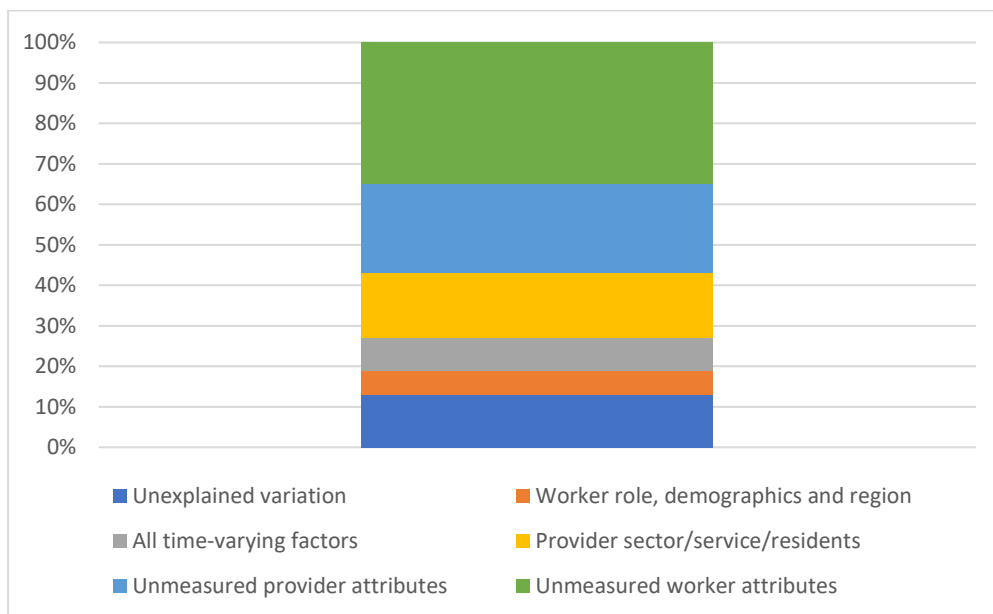
Quantile pay regressions were also estimated at the 20th and 80th percentiles of the pay distribution to assess whether the impact of different factors such as qualification and experience is different for low versus high-paid workers. Results of quantile regressions are reported in Table A8 in Appendix 1. The positive pay impact of age is relatively stronger for highly paid workers, whereas experience benefits low to median pay level workers. The negative pay impact of being on a temporary contract is stronger for those at the lower pay distribution (their pay is 1.5% lower, whereas those at the median level of pay receive 1% lower compared to permanent workers). Similarly, the negative pay impact of part-time

jobs falls more heavily on low-paid workers. Low-paid workers also face more pay loss if on a zero-hours contract compared to high-paid workers. On the other hand, low-paid workers benefit less from getting ASC relevant qualifications compared to median or high-paid workers. Workers with level three to five qualifications and at the 20th percentile of pay distribution receive 0.5% more, at the 50th percentile receive 1.6% more, and at the 80th percentile receive 2.9% more than workers with no ASC qualification. Overall, low-paid workers seem to benefit less from new skills but face relatively more pay losses for any negative labour market experience such as working temporarily, part-time, or zero-hours contracts.

Key Findings of pay analyses
- *Traditional skill measures have a limited impact on pay: Experience, qualifications, permanent contracts, and non-zero-hours contracts only marginally increase hourly pay by a few pence.*
- *Worker and provider fixed attributes, characteristics, or constraints (mostly not measured in the ASC-WDS) explain more than 70% of pay variance. This implies that worker attributes or soft skills, providers pay policies and other long-term barriers/facilitators are major factors in pay determination.*
- *Ethnic minorities, non-British workers, and women generally receive lower pay than their white British counterparts, despite having the same measured skill set.*
- *Pay is lower in the private sector compared to local authorities and voluntary providers, even for workers with similar skills and demographics.*

3.3.1.3 Drivers of retention

The first stage regression results with fixed effects for workers and providers are shown in Figure 3, with detailed results in Table A9 of Appendix 1. All explanatory variables are included with a one-year lag, so the coefficients measure the percentage change in length of service from a one-unit change in an independent variable in the previous year. A £1 (in 2015 prices) increase in hourly pay increased average length of service by 0.35% (0.02 years), indicating that pay has only a small effect on retention in these analyses. While these results are not directly comparable to the wage elasticity of labour supply estimates in Vadean et al. (2024), and those results rely on assumptions including steady state and equal separation and recruitment, they report factors affecting job separation used here for comparison. For example, a £1 increase in log hourly wage (in 2022 prices) reduces overall job separation by a maximum of 0.49 and within ASC job separation by 0.17 (See Vadean et al., 2024, Table A3). This means that a £1 increase in hourly wage decreases the job separation rate by 0.0017 to 0.0049.

An additional year of age increased length of service by 4.29% (0.26 years) and additional year of experience increased length of service by 3.55% (0.22 years). Further findings included that workers with reported training had 3.51% (0.21 years) higher length of service whereas temporary contract workers have 2.61% (0.16 years) lower length of service. Workers in outstanding CQC-rated providers had 2.01% (0.12 years) higher length of service, and those in good-rated providers had 1.47% (0.09 years) higher length of service than those in inadequate-rated providers. ASC-WDS/survey data linked analyses supported this, as both higher CQC ratings and higher workplace performance indicators were associated with better retention, as were offering benefits to improve worker and organisational performance, enhance organisational reputation and address investor concerns (where applicable).Training, working conditions and workplace environment thus appear to have an important effect on retention.

New ASC qualifications had no clear impact on length of service. This aligns with Vadean et al. (2024), which found no statistically significant association between worker separation and

qualifications. However, further interrogation revealed that workers with higher-level ASC qualifications during the sample period had longer tenures (e.g., those with level 3 to 5 ASC qualifications had a 21.3% higher average length of service than those without ASC qualifications).[1] This could mean that ASC qualifications either prevent workers from leaving the sector or that workers intending to stay in the sector are more likely to gain these qualifications. The number of contracted hours also had a small positive impact on retention, while the effect of zero-hours contracts was unclear.

The effects of most provider time-varying factors and local conditions were minimal (often less than 0.1%). For example, a one-unit increase in the staff-to-resident ratio increased length of service by only 0.08%. The local unemployment rate was negatively associated with length of service. A similar result emerged in Vadean et al. (2024), which found no or a positive association between local unemployment and job separation (Table A3). Generally, higher unemployment might encourage workers to stay in their current roles due to fewer job opportunities. However, the negative relationship here might indicate that workers leaving ASC significantly contribute to local unemployment. Length of service has consistently increased over the years (year fixed effects in Table A9), suggesting that many workers are not changing jobs annually.

Significant retention differences resulted from provider sector and service type and worker job title or measured fixed attributes (second stage regression results in Tables A10 and A11 in Appendix 1). Everything else being equal, a care worker's length of service was 18% lower than that of a senior care worker. Length of service was also lower for Black or Black British workers (10.22%), Asian or Asian British workers (2.44%), and workers of mixed ethnicities (5.07%) compared to White workers. British nationals had a longer length of service than non-British nationals, and women had a shorter length of service than men. Regionally, length of service was substantially lower in London (by 25%), the South (Southwest 15%, Southeast 10%), and Eastern region (by 21%) compared to the East Midlands (reference category), but higher in the Northeast (by 7%) and Yorkshire & Humber (by 5%). Length of service was 1.5% higher in local authority-run providers than in private sector providers. Despite lower pay rates, length of service was 21.1% higher in chain-owned providers than in single-ownership providers. Length of service was 19.1% higher in home care services, 31.8% higher in adult community care services, and 17.3% higher in day care services than in care home services with nursing (base category).

Table A12 in Appendix 1 reports the impact of commissioning practices on differences in workers length of stay. Everything else being equal, length of stay remained 4.2% lower in local authorities relying on spot contracting compared to the reference category (combinations of block and spot contracting). Like pay, length of stay is 9.4% lower in local authorities with a combination of framework and spot contracts. However, there are only three councils with such contracting practices. Despite the better pay, length of stay is 3.1% lower in local authorities commissioning the 15-minute visits.

Figure 5 decomposes the variation in the length of service with an employer into variations explained by the different measured and unmeasured worker and provider characteristics (also see Table A13 in Appendix 1). It shows that 34.43% of the differences arise from fixed worker attributes, indicating that some workers stay longer regardless of skills, experience, or tenure. Of this, 2.75% was due to gender, ethnicity, region, nationality, and job role (care worker or senior care worker). The remaining 31.68% was due to other fixed but unmeasured attributes, discussed later. The discussion section offers possible reasons for these differences.

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[1] E.g., ASC qualifications increases the intercept of the tenure curve but not the slope.

Provider fixed differences accounted for 19.66% of the overall pay variation, explaining retention differences between providers for workers with the same skills and experience. Of this, 4.59% was due to sector, service type (residential, nursing, home care), ownership (single vs. chain), and resident types, while 15.07% was due to unmeasured factors. All time-varying worker, provider, and local authority characteristics (including year fixed effects) explained 39.80% of pay differences, leaving a residual variation of 6.10%.

Figure 5: Decomposition of length of service variance

Legend:
- Worker role, demographics and region
- Provider sector/service/residents
- Unmeasured provider attributes
- Unmeasured worker attributes
- All time-varying factors
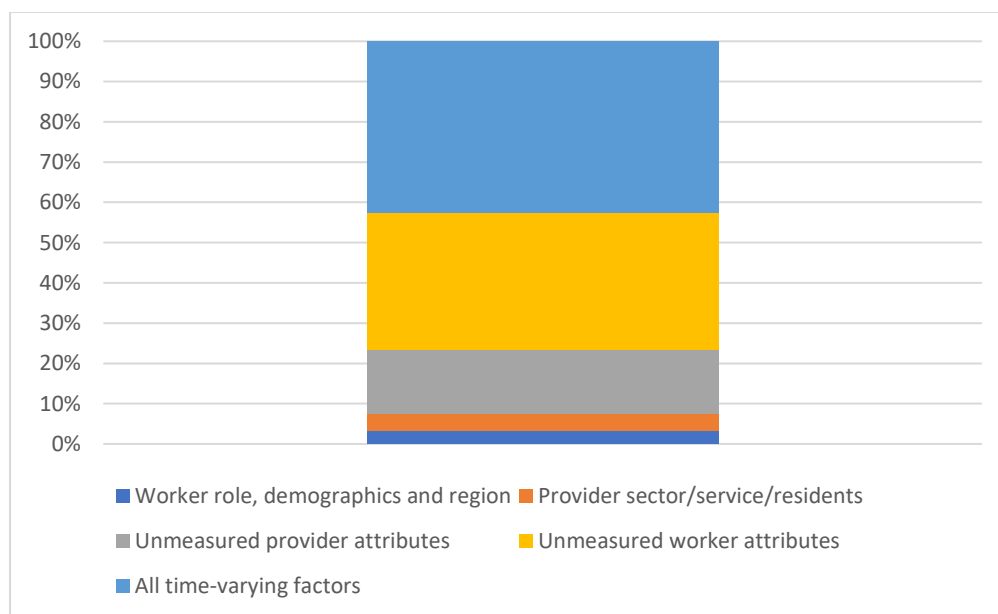
Key Findings of retention analyses

- *Pay has a positive but limited impact on retention (£1 increase in hourly pay increases average length of service by 0.35%), suggesting only substantial pay rises could improve retention if not accompanied by other changes.*
- *On-the-job training, permanent contracts, better staff to resident ratio, and provider quality (measured by CQC rating) play a significant role in staff retention.*
- *Fixed attributes, characteristics, or constraints of workers and providers (mostly unmeasured) explain around 54% of retention variance. Drawing on WPs below and other research, this suggests that worker perceptions of the sector, family commitments, the nature of care work, and provider-level long-term factors not observed in WP1 (e.g., management practices, location, worker facilities) may help to explain retention.*
- *Retention is lower among ethnic minorities, non-British workers, and women. Along with lower pay for these groups, this suggests potential discriminatory practices in the sector.*

3.3.1.4 Analysis of training

The probability of receiving training (any training incidence) increased with worker length of service with the employer (Table A14 in Appendix 1). An additional year of service increased the probability of training by 2.5%. Experience also increased the probability of receiving training. ASC qualifications, type of job contract (permanent versus temporary, full-time versus part-time, or zero-hour contract), and provider CQC rating had no impact on the probability of training. Large providers are more likely to train their workers compared to small providers.

The probability of training incidence was 1.1% lower for Black or British Black individuals and 1.1% higher among Asian or British Asian individuals compared to their White counterparts. Training

incidence was higher among workers from the Northeast (11.4%), Southeast (6.7%), London (5.9%), and Yorkshire & Humber (4.2%), whilst lower among workers from the Northwest (-7.1%) and West Midlands (-4.2%) compared to the East Midlands. Training incidence also substantially differed by the sector and service type of providers (Table A15 in Appendix 1). Workers in the local authority sector had a 4.0% higher probability of receiving training compared to independent sector workers. Similarly, workers in chain-owned providers had a 6.2% lower probability of training than workers in single ownership providers. Overall, the region and types of services the providers offer seem to be the key drivers of training, rather than worker characteristics such as their qualifications and type and duration of contract.

3.3.1.5 Impact of within-sector job switch

For workers who switched employers within the sector, a before-and-after comparative analysis was conducted (Figure 6). Workers who remained with the same employer for all nine years served as the comparator group. The analyses control for workers age, experience, and adult social care qualifications. The results are summarised below:

- Job switchers experienced a 2% increase in hourly pay on average.
- There was an 8% increase in their contracted working hours.
- Job switchers moved to employers with a 44% higher staff-to-resident ratio.
- These employers had 32% higher CQC ratings on average.

This suggests that switching jobs within the sector generally leads to better pay, more hours, and higher quality employment environments. The pre-mobility coefficients in Figure 6 suggest that workers with fewer contracted hours and those working for low-quality providers are more likely to switch jobs. This suggests that the working environment provided by employers is a key factor in workers' decisions to stay in their roles.

Figure 6: Effects of within-sector job switching
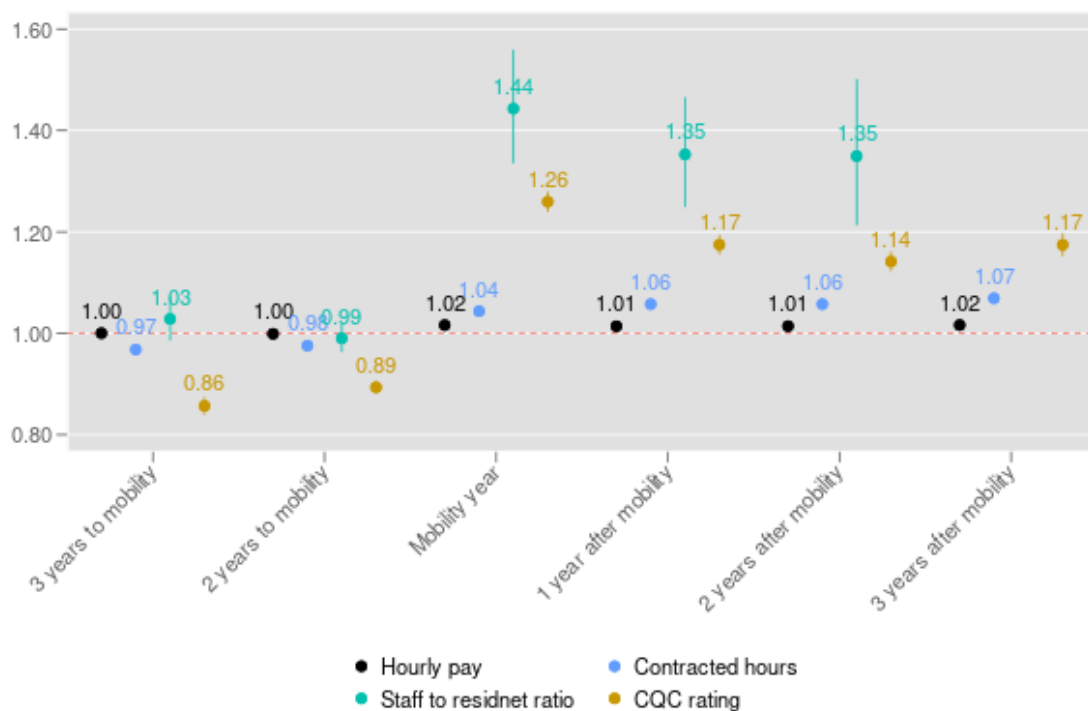
3.3.2 Work package 2, work package 1 and 2 linked and work package 3 data analyses

Here data from WP2, the WP1 and 2 linked analyses and WP3 are used in combination to develop build on the key findings from WP1 and extend understanding. The first section examines pay and the second examines retention.

3.3.2.1 Drivers of pay

3.3.2.1.1 Pay levels

Interview data confirmed WP1 findings that pay is low and, importantly, also evidenced that this creates dissatisfaction and financial pressures. Care workers, for example, were clear that their pay was inadequate, particularly for the difficult nature of their role and the level of responsibility they held. One described the pay as '*diabolical*' and another said that '*this is the most underpaid job there is for the level of work involved'*, pointing out that they could be responsible for, amongst other things, administering medication. Many argued that their job did not provide an adequate income and their quality of life was poor. Two care workers relied on universal credit and others suggested that they could only cope because they were part of a dual income household. Some told of having a second job to '*make ends meet'* and others were in debt. Those working in home care expressed particular concern:

> *Most care staff are paid minimum wage if you're lucky. If you work in [home care], it's below minimum wage. You have got your fuel cost [and they] never pay back the full cost, but you're running costs on your car. You don't get travel time; you're paid by the minute because that's what the [local authority] wants and it's absolutely ridiculous. CW22*

Providers acknowledged the pressures that low pay created, exacerbated by cost-of-living pressures, as starkly evidenced in these care worker quotes. Five providers offered Employer Salary Advance Schemes, where wages could be drawn down early, and another was exploring doing so. A further two had informal mechanisms for early wages draw down or other forms of financial support. Most had seen significant uptake of these systems, around one quarter in one provider. Many providers expressed concern about the need for these systems, worrying that pay rates were too low if care workers were struggling to manage, and recognised the concern that early payment could exacerbate financial pressures at a later stage. One care worker described their financial pressures thus:

> *I kind of live month to month….Yeah, particularly like with being recently, being off work because of my back with injury at work, and then I only get [Statutory Sick Pay]. I've used up all my savings up again. Yeah, we haven't been on holiday for a while, abroad or anything CW6*

3.3.2.1.2 Local authority fees

Care delivered by local authority-run providers comprises less than 20% of all adult social care. Here, workers are employed by the local authority and engaged on their standard terms and conditions, which providers noted were far more generous than those offered in the independent sector. For example, WP1 above found that local authority providers pay 14.7% than private sector providers. Holiday, pensions and sick also significantly exceed statutory minimum levels.

The vast majority of care delivery is commissioned by local authorities from independent sector care providers who receive fees from local authorities for this. Here, care providers employ the care workers and are responsible for pay setting, and a high proportion of fees are spent on worker pay and reward. WP1 analyses did not evidence a strong effect for local authority fee levels on pay rates, but as noted earlier, this might result from aggregate-level data that does not support fine-grained analysis. Survey data suggest, however, that just over half of providers felt that fees had a significant impact on pay (Figure 7) and, in interviews, independent sector providers universally argued that local

authority fees a significant influencing factor on pay rates. They felt strongly that local authority fees are at levels that support pay rates only at or marginally above the NLW.

Supporting this, a number of providers referred to the Fair Cost of Care exercise, which required providers to submit data on their costs of care and was intended to underpin adult social care charging reforms planned for autumn 2023 (Curry, 2022). These reforms were deferred by the previous government until autumn 2025 and no action was taken on the data gathered (DHSC, 2023a). A Care England (2023) analysis of the data, however, showed a gap of £218 per week for residential care and £231 per week for nursing care between provider-calculated costs of care and local authority fee levels, and many providers argued that this was an under-estimate. This was also the case in home care, where providers suggested that local authorities fees could be up to £10 per hour less than the UK Home Care Association recommended rate (UKHCA, 2023). Nearly all providers suggested that their businesses would not be viable if reliant solely on state-funded care recipients and that some self-funders were needed. Self-funding care recipients thus frequently cross-subsidised the care of those who were state-funded and some providers adopted a strategy of offering care mainly/wholly to those who were self-funding. Providers called for increased local authority fees to support higher pay and some argued that these should be ring-fenced to achieve this:

> *If we said to commissioners, 'I'd be willing to pass on 100 per cent of any fee increases onto the staff in the frontline to put them on £15 an hour.' P20*

Mechanisms to ensure that higher fees are used to increase pay may be needed for two reasons. Firstly, higher fees could be used to increase profit margins in private providers rather than pay. Second, they could be used to improve care recipient satisfaction, for example, better environments or staffing ratios, that are lower cost than raising worker pay.

Providers argued that financial pressures meant that, over recent years, increases to local authority fee rates had not always covered increases to NLW, meaning that differentials between higher pay rates and NLW had been eroded. While a number of providers aspired to pay the RLW, fee levels often did not support this. Survey data showed that, while just over a quarter of local authorities encouraged payment of the RLW, only 12% of those uplifted fees to enable this, which increased pressures still further. Providers also noted the difficulty of working across more than one local authority where fee rates could be very different. Some adopted one pay rate for care workers, irrespective of the varying rates, while others paid different rates to workers in different authorities. Most providers felt that they had little influence over fee levels, although one provider had undertaken a significant exercise to calculate their cost of care and used this as a basis for negotiating fees with several local authorities. This was, however, unusual.

A recent House of Commons Committee (2024) report referred to as 'fragmented and uncertain' funding and this was also cited as a significant concern. Providers noted that local authority fee settlements were annual and often announced only shortly in advance of the financial year. Additional government funding streams to tackle particular issues were also often made available, but again these were '*last minute*' and short term, which did not allow for longer term planning around pay:

> *If we knew in 12 months' time what was coming [additional funding]… we would just organise ourselves differently…. I know this is about structure, government structure, but those funds, in some cases we could end up with £500 [per care worker] from that local authority and then £50 from that one, which again, doesn't make any sense… So… anything that allows us to plan. And the same would apply in a perfect world for [local authority] fees because… people are waiting for what the fee settlement might be… before they make changes to their pay rates. So every year it's unpredictable and every year you can fall further and further behind. P19*

From a provider perspective, local authority fee levels and funding flows were thus important influences on pay, meaning many struggled to offer more than the NLW and pay variation was limited.

3.3.2.1.3 Local authority commissioning practices

Providers also noted the negative effect of commissioning practices on pay. While statistical data limitations mean that WP1 findings associating block/framework combined commissioning with higher pay than framework/spot commissioning must be treated with some caution, they suggest that block commissioning is associated with higher pay. Block commissioning guarantees fee income for a specified period of time, which enables a planned approach to pay, but has become increasingly uncommon. Providers interviewed whose services were commissioned on a block basis included two local authority spin outs and one who was jointly NHS/LA commissioned for complex care recipients (P1, P3, P13). Block commissioning was otherwise absent/limited in residential/nursing care, and only then available to larger providers. It was almost completely absent in home care. Two providers, however, argued that block commissioning was only desirable with an appropriate fee level. One preferred spot commissioning for complex care, where better rates could be negotiated (P19) and the other argued that spot commissioning meant that higher rates could be negotiated for one-to-one care (P10).

Framework and spot commissioning dominated and, with both, fee income could vary substantially, particularly in home care, creating instability of both provider and care worker income. For example, home care providers were often paid minute-by-minute for the actual care delivered and fees stopped immediately, or very soon after, a care recipient went into hospital or passed away. Providers linked this fee instability to use of zero-hours contracts:

> *If there's evidence of 2% of all home care that's on block [commissioning], I'd be surprised. Home care is traditionally…. framework agreements. We traditionally employ zero-hour workers to fulfil those contracts. P9*

> *There was one week where I lost four [care] packages, which is 200 hours of work. If I'd guaranteed my staff 1,400 hours of work, and then I'm paying out 200 and I haven't got that work, I'm in a loss and it can take time to regain those hours back. If [local authority] stopped commissioning on a minute-by-minute basis…. I would more than happily offer [guaranteed hour] contracts to my staff members. I think it would make the culture and the industry so much more settled, so much more inviting and welcoming and secure. P14*

While care workers on zero-hours contracts experienced only slightly lower pay (WP1 suggests 0.13p per hour; 1.69%), importantly they experienced significant income insecurity. With minute-by-minute commissioning, a number told of how they worked with systems where they used their phones to swipe a barcode on a care recipient's care plan on arrival and departure and were only paid for the time spent with that person. If, for example, the care recipient asked them to leave early, the care worker would be paid only for the time spent rather than the time scheduled:

> *Since this April, when this barcode [system] came in…. Now if it's only half an hour call [instead of 45 minutes], you're done and dusted, you close your call. We used to still get full amount of money for that call. However, that's been replaced by a barcode now. CW13*

The earlier quote from CW22 also noted the financial pressures created by minute-by-minute commissioning. Survey data indicated that around half of home care providers paid only for time spent with a client, rather than time scheduled. Care workers could then receive substantially less than anticipated and, once travelling costs were factored in, be left out of pocket.

Another concern from framework/spot commissioning was 'call cramming' or 'call clipping'. This describes the practice of cutting visits short to fit more in and means workers can increase their pay and mitigate their low hourly pay rates. Providers interviewed were clear that they did not engage in these practices, and many had systems for ensuring that care worker visits were for the required amount of time. They were, however, concerned at the detriment they experienced as their pay rates became comparatively unattractive:

> *There is a way of being paid when you work for the stuff that's done by the local authorities where if you're in there for 15 minutes, you get paid for 30 and if you're in there for 18 minutes, you get paid for 45 or whatever it is. So, they're actually cramming in six visits into an hour and getting paid as though they've been there for two hours. And they're getting that pay. So, I couldn't even compete with them, it's completely corrupt....P15*

> *Through that boosting of revenue and pay, [other providers] can hold onto their staff above the competition. And they can also lower their charge rates to keep them winning work.... P9*

Participants suggested that there was general awareness of this in the sector, but a reluctance from local authorities to address it, either because it was to their financial benefit or because they lacked the resources to do so. Survey data suggested that only 13% of providers had had their performance against their contract evaluated in the past year. As noted in the above quotes, call cramming allows for higher earnings despite low local authority fees and pay rates, again making statistical relationships between the two difficult to identify. Work intensification results, however, which could reduce retention.

There were exceptions to the use of zero-hours contracts in home care. One provider, with a finance background who had entered the sector fairly recently, took a '*moral stand*' on offering guaranteed-hours contracts, arguing:

> *It felt completely unfair to me that someone could start work on a Monday and not know at least the minimum they were going to go home with by the end of the week, that just feels completely unfair. And what it felt like to me... was, basically everybody who had the broader shoulders, who should be taking on this risk, was abdicating it down to the person with the narrowest shoulders who couldn't. So local authority doesn't [absorb the risk], so you get employers don't want to take it, staff have to take it. It felt nonsense. P12*

However, guaranteed hours could still be organised so that a care worker working for two hours in the morning, two hours at lunch time and two hours in the evening was paid only at for these contact hours and not during the waiting times. Payment for shifts, for example, from 7am-2pm or 2pm-9pm, was seen to be a preferable arrangement but beyond the financial means of many providers. Despite this, two home care providers had implemented shift work systems. P15 worked with all self-funded care recipients and was able to charge fees that supported this. A second, again a recent entrant to the sector with a finance background, had managed to introduce a shift system even with wholly state-funded care recipients:

> *I just had this theory that, with the resources available, we could pay for care workers for the full time they're out at work. And that was from the minute they logged in to their first call to the minute they logged out of their last call. And it started off gradually, and we did lose money to start with. But we got it working, and there's reconciliations coming out of our ears. And it just transformed it. You know, people stayed with us.... And in essence, what we do is, if they've got a cancelled call or somebody's in hospital and it's within their shift, we ask them to utilise their time to make a difference.... We call it "going above and beyond". So it's not just what's in the care plan. It's actually being responsive to people's needs. P8*

This provider had developed operational systems to enable shift work and argued that it was possible, although noted that they had the scale of operation to achieve this. Most other, mainly smaller, home care providers argued that local authority commissioning practices meant zero-hours contracts were inevitable unless fee rates and/or block commissioning was increased. Income instability resulted for care workers.

3.3.2.1.4 Local conditions

Similar to WP1, some local conditions appeared to have some effect, but there were few consistent patterns. Skills for Care (2023) data show most leavers move to another care provider, and this was supported by interview data. Survey data, however, suggested that most leavers went to other sectors, moving within care being the second most common destination. The NHS, with its more generous terms and conditions, and retail and hospitality, with often higher pay rates or jobs that were perceived to be less stressful, were the other two common destinations for leavers, but this varied by locality. Providers also referred to higher pay rates in some of these sectors and a number benchmarked against them when considering their own pay rates.

3.3.2.1.5 Worker attributes

WP1 evidenced that 35% of unexplained pay variance resulted from worker attributes. That is, experience and qualifications increase pay by only a few pence per hour and some workers consistently receive better pay regardless of skills, experience, or length of service. Pay variation here is most likely to be related to personal attributes. According to one report, providers often prioritise personality over specific experience or qualifications (GMCA, 2023) and a friendly nature and positive attitude are often key recruitment criteria (Rubery et al., 2011). In interviews, a number of care providers talked about using values-based recruitment and lowering barriers to entry to bring in people with the desired values and a willingness to learn, irrespective of qualifications or experience. Staffing shortages were a significant factor, as providers struggled to recruit staff but this may also result from a general lack of provider training in recruitment and selection skills (Rouse et al., 2023). Care workers themselves reported having little influence over pay, although one had managed to negotiate a pay rise because of staffing shortages. As noted earlier, however, they had limited bargaining power. While personal attributes are unarguably important in delivering good care, emphasis on these rather than qualifications and experience sits in tension with aspirations to introduce career pathways and raise the status of the occupation.

3.3.2.1.6 Provider pay policies

WP1 also evidenced that 22% of unexplained pay variance resulted at provider level, that is, some providers consistently offer better pay regardless of worker skills, experience, or length of service. Differences are likely to result from provider pay strategies, as existing research shows that these account for two thirds of pay variation and that only one third of variation occurs within a provider on the basis, for example, of worker skills, experience, or length of service (Machin and Manning, 2004). Pay strategies result from provider philosophies, discussed in what follows, including how to tackle the government under-funding of care discussed earlier (Care_England, 2023), whether privately owned with a need to generate a profit, and how to make pay competitive. Figure 7 shows that the biggest influences on pay rates according to survey data were changes to NMW/NLW, followed by local authority fee levels. Gaining qualifications was also an influencing factor, although this is perhaps atypical given the sample make up, as were changes to RLW. Individual performance and changes to NHS terms and conditions were less influential.

Figure 7: Provider views on influences on factors that influence pay (n=467)
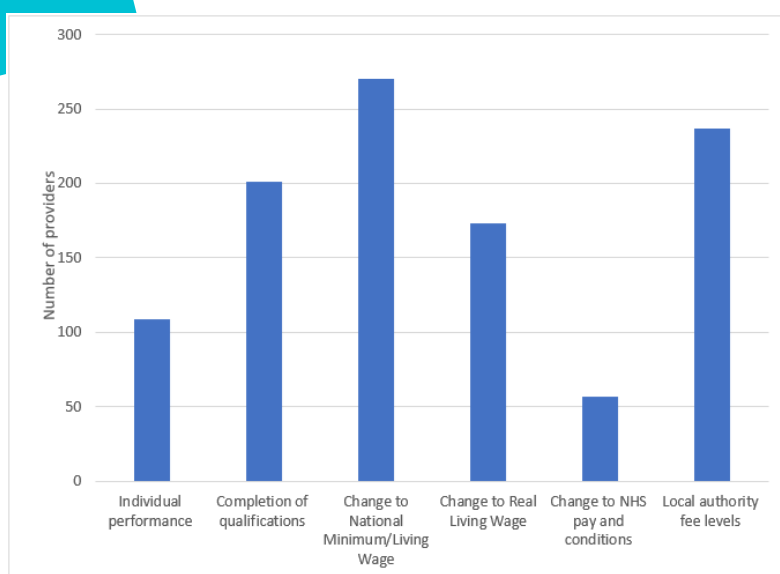
Interview and survey data illustrate the differing strategies adopted. WP1/2 linked analyses showed that provider strategies that might be described as socially responsible were linked to increased pay. These included recognising a staff association/trade union for pay negotiating and indicating that this influenced pay; offering benefits in response to employee or trade union demands; and offering benefits to improve mental and physical well-being of care workers.

As noted earlier, local authority fee rates constrained pay rates. Pay rates were often higher where care was mainly/wholly self-funded. One provider who paid care workers £12.50 per hour noted that they could only do so as they provided mainly self-funded care and did not have to deal with the '*low rates of local authorities*' (P5). Parchment and Houghton (2024) also found that providers of mainly/wholly self-funded care had better pay rates. Indeed, as noted earlier, some providers adopted a strategy of supporting mainly/wholly self-funded care recipients to support higher pay rates:

> *[Care recipients are] 95% self-funded, private pay. And I think that's... a benefit, we don't have the constraints of working with big local authority contracts. We set our client rates based on what we know that the National Living Wage is going to be. We typically put our carers pay up around 9% each year. Last year the average pay increase was 9%. The year before the average pay increase was about 18%. We did a huge piece of work to make sure people were paid appropriately. P11; pay rate of £11.70ph*

Further, WP1 analyses show that voluntary sector pay rates are 3.1% higher than private sector rates, suggesting that private provider profit margins reduce pay rates. Given this, higher fees may not be used to increase pay, and commissioning processes or other forms of regulation, such as legislation or collective bargaining, may be needed (see also Atkinson et al., 2016). A small number of private sector care providers recognised this:

> *So, I think we've got to sit down and say, okay, we've got an investment of x billion a year into adult social care, how do we pull that in a way, within a restructured commissioning process, that allows... not actually allows, forces employers to pay the staff more. P10*

Pay strategies were of two types: some providers adopted pay scales while others offered a flat rate of pay.

Pay scales: Eight of the providers interviewed operated pay scales (Table 1). Five increased pay where workers gained adult social care-relevant Qualification and Curriculum Framework (QCF) Level 2 or 3 qualifications, as did 44% of providers surveyed; one linked increased pay to competency building; and one to either qualifications or experience. The other provider's pay scale was driven by local authority fee rates that differed across location. The number of providers operating pay scales reported here is likely to be higher than for providers more widely given, as noted earlier, the make-up of the interview and survey samples and the limited variation reported in WP1.

Table 1: Pay scales and basis for progression

Provider number	*Care worker pay scales*	*Senior care worker pay scales*	*Basis for progression*
P6	£14.50 - £16.00	£16 - £18.25	Competency based
P7	£10.54 - £11.70	£11.92 - £14.21	Pay scales relate to location of work and not qualifications/experience
P9	£10.75 - £10.93	£11.45 - £11.80	Gaining QCF2 and QCF3
P10	£10.42 - £11.50	£11 - £11.90	Gaining QCF2 and QCF3
P14	£10.75 - £10.95	N/A	Gaining QCF2 and QCF3
P17	£10.50 - £11.00	£11.50	Gaining QCF2 and QCF3
P19	£10.47 - £12.50	£11.37 - £13.00	Ideally qualification but sometimes on experience
P20	£10.80 – £11.40	£11.80 – £12.30	Gaining QCF2 and QCF3, but also then take on more responsibility e.g. leading shifts

Pay increments for gaining qualifications and/or experience were small, supporting WP1 analyses:

> *We establish rates based on education or [relevant] QCF certification. Anyone that's got no certification will come in at £10.75…. Level 2 qualified carers get 10p extra, so £10.85 …. And a Level 3 will get £10.95. P14*

Similarly, P17 offered an extra 25p per hour for gaining Level 2 and Level 3 qualifications, and P20 10-15p per hour for each qualification gained. The largest increments, and pay rates, were in P6 which had mainly self-funded care recipients. One provider was unable to offer increments based on qualifications due to a shortage of suitably qualified staff, instead linking them to experience (P19). Care workers expressed concern that pay did not reflect their experience, particularly where greater experience meant that they worked with more complex care recipients. They argued that pay should be differentiated to reflect this:

> *I think with experience there should be some increase in pay…. Somebody who's got advanced dementia [skills] and how to calm situations, conflict resolution and avoid stressful situations and things like that…. that doesn't come from a 5 day care certificate course, that comes from years of experience and knowing how to ask the right questions. CW22*

> *I've seen people in this company… they're here for nearly nine years and this company gives them a status of senior carers. They have no differentiation between…me in the job for the first week. They're getting the same pay, getting the same treatment, same everything CW13*

Flat pay rates: 14 providers interviewed offered a single flat rate of pay for care workers and a slightly higher flat rate for senior care workers, again supporting WP1 analyses. They noted the difficulties in recruiting senior care workers, given limited pay differentials across the two roles, and again attributed this to affordability. Care workers argued that more senior roles were stressful and pressured, and the extra responsibility involved was not worth it for the small pay increase:

> *You can't really get much further [than supervisor], which is only an extra 40p, and you have a lot to do. You've got to do support, care and you've obviously got to do everyone's rotas and you've got to be there for everyone, on call, etc. It's just not worth jumping that ladder for an extra 40p an hour. CW15*

Faced with endemic staff shortages and high levels of labour market competition, a number of providers adopted a strategy of maximising this flat rate:

> *I just put everything I could into the hourly pay because that seems to make more of a difference [to recruitment and retention]. P12*

Survey data show that 58% of providers set this flat rate of pay with reference to NLW, although one third indicated that their rate was already above this. Higher flat rates resulted from market competition and some providers, as noted earlier, carried out informal or formal benchmarking to understand market rates across not just social care, but other sectors such as retail and hospitality. A flat rate set as high as possible meant that some providers offered no other enhancements, such as unsocial hours payments, and again that pay was not linked to qualifications or experience:

> *We've set our rate at the Real Living Wage for everybody, we then can't afford to put enhancements on top. P18*

Care workers were largely unaware of NLW and RLW rates but made comparisons with colleagues and other sectors. They expressed frustration at pay levels, as noted earlier, and particularly in relation to retail and hospitality pay rates, especially given the demanding nature of their roles:

> *We're on 11p an hour more than someone working in McDonald's, shall we say. And when you're having to have CPR training and stoma training and PEG training and wheelchair use and hoists and it's a whole array of things. And then people's lives are in your hands while you've got them, especially those that can't see, that haven't got any mobility. And it's a lot to gain their trust for them to be able to put their trust in you. And you have to work really hard to get that and it's just shocking. It's shocking. CW11*

Enhancements and other payments: ten providers offered some pay enhancements e.g. for evening, weekend, and bank holiday working, but these were modest. Care workers confirmed that, while they might often work additional hours, enhanced rates for these were rare. Some senior care workers noted that any overtime they worked was paid at care worker rates. Survey data painted a mixed picture on other payments. While over 80% of providers paid care workers for time spent on induction training and paid for uniforms, only just over one half paid for DBS checks, with others having systems where workers could reclaim payment if they remained in employment for a specified period (see Table A16 in Appendix 6). Care worker data confirmed this, and some resented the extra financial burden imposed and others suggested that the promised reimbursements were not received. In home care, most providers also paid mileage allowance, although a small number included it in the hourly rate (Figure 8). This may explain the WP1 finding that home care is higher paid than other sectors, as this practice artificially inflates pay rates. This may also create difficulties in identifying local authority fee/pay relationships. Interview data show that these allowances varied widely, from the HRMC-allowable rate of 45p per mile to only 23p per mile. A few providers paid cycling and walking rates, but most did not, and some but not all reimbursed bus fares. As noted in an earlier

quote, for those working in home care, the pressures of running a car given high fuel costs were apparent and often not fully reimbursed.

How do you compensate for travel costs/travel time (%)?
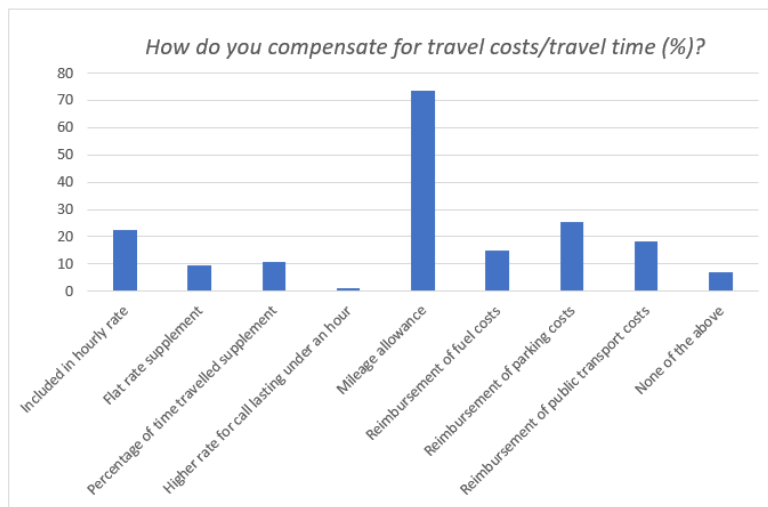
Other terms and conditions of employment: sick pay, holiday entitlements and pension provision were mainly at statutory minimum levels. Providers felt this was problematic:

> *The question is how can we add back in above statutory terms and conditions? So, if you've got [pay] secured and get funding for that, then the fight is for better conditions, isn't it? So can you pay more on pensions? Can you pay more on sick pay? Sick pay is probably the one that our staff ask for the most because… care workers work a really hard job. They work a lot of hours. And… typically, they are an older workforce. Therefore, you've got more underlying health conditions, and there's no capacity for us to offer any enhancement to the sick pay. P2*

Care workers also expressed concern over sick pay provision. While many were not clear on their entitlements, a number suggested that they only received sick pay after a few days' absence meaning that they had to work while unwell. There were a couple of exceptions to this where, dependent on length of service, one care worker received one month of full pay when ill and another a week. Care workers argued that enhanced sick pay was important to retention.

Care providers were equally concerned about pension provision:

> *Why.. don't we have access to some form of defined benefit pension scheme?... Everyone that we deal with, NHS, CQC, local authority, they all have defined benefit pension schemes. Why don't we? The answer is that we're…. private providers. But it just sticks with me. P10*

Care workers recognised that pension entitlements were at minimum levels and some opted out because of the cost. For some, however, it was a push factor out of the sector:

Benefits-wise, the only thing we get is pension, on the lower end, to be honest. That's one of the reasons why I'm leaving actually. CW6

Care provider interviews also evidenced that holiday entitlements were the statutory minimum required, although just over a quarter of those who completed the survey suggested that they offered additional leave. Care workers again recognised that their holiday entitlements were basic, although many were

not sure how many days that was. Leave entitlements seemed less important than having, for example, to work on weekends and bank holidays.

Other forms of reward: a number of providers offered other forms of financial and non-financial reward, which are covered later in discussions of retention. These were largely low cost and offset low pay to only a limited extent:

> *It challenges your imagination because we do pay extra… for certain things. But we're at the end of what we think we can do. We're virtually at the end of what we think we can do to supplement what really is a poor wage. P20*

There was a widespread aspiration to offer a better employment deal and parity with the NHS was frequently raised, with '*the dream is that…. social care is on a par with NHS' (P2)* and that:

> *You have to have parity of esteem with the NHS… It is virtually impossible to tell the staff that they've got that when they don't get paid the same as NHS workers. And I just think at a fundamental level you don't value care the same as the NHS if you're prepared to support an income stream that only allows you to pay them £3 an hour less. P12*

This aligns with the recent House of Commons Committee (2024) report that calls on DHSC to determine how to address the disparity between NHS and adult social care pay and terms and conditions.

3.3.2.1.7 Pay rates by protected characteristics

As evidenced in WP1, pay was lower for women, a number of British ethnic minority groups and non-British nationals, despite having similar skills and qualifications. These figures suggest unfair pay practices and possibly even discrimination. Yet 90% of survey participants said that they did not monitor pay by any protected characteristic (Table 2), meaning that these patterns are neither identified nor addressed.

Table 2: Monitoring by protected characteristic

For equality reasons, you monitor pay rates by the following (yes)	(n)	%
Sex	50	10.7
Gender Identity	44	9.4
Ethnic background	47	10.1
Disability	43	9.2
Age	50	10.7
Sexual Orientation	40	8.6
Religion or belief	40	8.6
Not applicable	391	89.5

3.3.2.2 Drivers of retention

3.3.2.2.1 Pay and retention

WP1 analyses suggest that pay rates have only a small effect on retention. This is not, however, supported by the job switching analyses reported earlier and survey and interview data presented here. WP1 analyses also evidence that turnover is 15% in local authority providers versus 31% in the private sector, which may result from the higher pay and more generous terms and conditions they offer. Survey data show that providers saw pay as the second most common cause of people leaving after the demanding nature of the work (Figure 9). The next two most common causes of turnover were convenient working times (also identified by Rubery et al., 2011) and family responsibilities (identified by SfC, 2023 as the leading cause of turnover). Both are discussed under worker priorities below.

Care workers leave because:

Figure 9: Provider perspectives on why care workers leave (n=467)
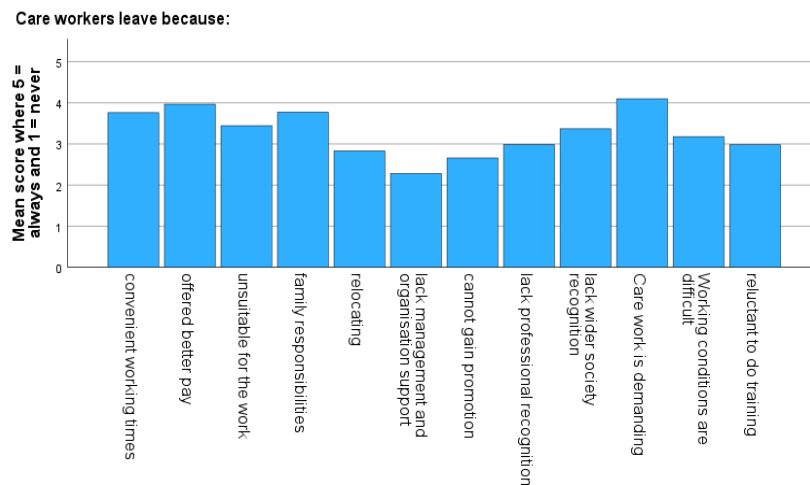
Survey data also identified pay increases as the most effective retention mechanism, followed by health and well-being support, flexible working, and training and promotion opportunities (Figure 10). The emphasis on pay's importance in retention was supported in interview data:

> *We believe it's the thing that gets people to stay. It's one of those things, I think it's a dissatisfier when you get it badly wrong, but it has to be a minimum standard on which you then build everything else. Without it you can be flexible, you can invest in learning and everything else, but if the pay is rubbish, they walk off… to a retailer…. So for us it's a foundation for everything else that we're doing. P19*

One provider, providing mainly self-funded care with higher than state-funded fees, had changed its fee structure so that care recipients were charged even when in hospital, offering more secure revenue flows. This had allowed them to increase pay, at the cost of around £700,000, and since doing that:

> *We've had really low churn. So, care workers are reporting that they're happy with their rates of pay now, which is really good. We've seen the lowest numbers of resignations. P11*

Care workers confirmed that pay was a major reason for leaving:

I feel like the workload that you've got to do for the pay you get, it's just… not [right]. CW16

Income insecurity also affected retention, as zero-hours contracts for home care workers led to high turnover because '*they've got no guaranteed income levels' (P8).*

3.3.2.2.2 Worker priorities

WP1 analyses evidence that 47% of variation in length of service is accounted for by fixed worker and provider characteristics, of which 32% is attributed to workers. That is, some workers stay longer regardless of qualifications, experience, age, or provider. Interview data and other research suggest the nature of care work, flexibility, variety and autonomy, career progression and being valued were important in retention, whether positively or negatively. Perceptions of the sector also had a role to play.

In relation to the nature of the work, care workers valued the relationships they built with the people they cared for, and this was one of the most satisfying aspects of their roles. Some expressed a strong feeling of loyalty and not wanting to people down was a significant factor in retention, despite poor pay:

> *I've just got a passion for caring and supporting people. And I just think if I've made someone smile in a day, I've done my job, I just love it. CW11*

> *It is that making a difference, getting something out of it yourself…. you know it's that feeling that you get back, you know what I mean? So it's yeah, it's a win-win. P1*

Despite this, care workers argued that other aspects of their work could cause them to leave, given excessive working hours caused by staffing shortages where they felt an obligation to work extra hours:

> *My issue is lack of staff, meaning I've got to cover a lot more hours, sometimes more than I want to. I don't want there to be no overtime because then I would struggle pay wise but equally, being the senior, I have to, basically, make sure the home is staffed so, it can sometimes be a bit like, "Oh look, I'm in work again…" CW9*

Care work is demanding and stressful and some care workers suggested that this took its toll and that they were often unsupported by management. Safety at work was also raised as a concern, given the challenging behaviours of some care recipients. Some providers also argued that care worker commitment to care recipients was over-relied on and exploitative of care workers in enabling low pay to continue.

Flexible working, that is, patterns that fit around family commitments and choice over hours worked, were important to many care workers:

> Now [son]'s started school, I've gone from 28 hours down to 23 hours, working 9:00 AM until 2:45pm, Tuesday through to Friday. But then, I'll also do a sleep. Most staff will do a late shift and a sleep, but I've said, "I'll go home. I'll come back at 10:00. Do the sleep. Go home at 7:00 AM. Take my son to school. Come back to work for 9:00 AM." And they're like, "Why would you do that?" I said, "Because that's what works for me. It might not work for you, but it works for me. And it's a way I can earn more money." CW14

Again, there is a note of caution around over-relying on flexibility to retain, as it is more important at some life stages than others:

> I've got two small children. When they're both older and you know, when they are not as reliant on me and my partner being at home every night,... maybe I'll look at [changing jobs] but currently, it's the hours and days, is a big plus. [But] if there was an opportunity similar to this that was better pay I would probably go for that. CW11

Many workers felt that their working hours matched their preferences and that there was flexibility to swap with other staff where necessary. This control over hours was particularly important and many suggested that their decision to remain in their role was in part related to the fact that their shift pattern and hours suited their lifestyle, despite the poor pay.

Others care workers were, however, less satisfied with their flexibility; unfavourable shift patterns and short notice shift changes, meaning that they were caring for different people on a regular basis, were factors in their decisions to leave. Care provider interview data supported this, particularly given unsocial hours and long shifts in residential/nursing homes:

> One of our main issues is around flexible working and how we support and offer that, and that's why people leave, or may turn down a role…. People don't want to work weekends, for example, or they just want to work Monday, Wednesday, Friday, and that's our biggest challenge from a… retention point of view and rota management point of view. P7

Some providers noted that they would prefer care workers to be on guaranteed hours contracts, but that workers often resisted this because of their need for flexibility around their domestic commitments, or other jobs, or because it helped them to avoid working at unsocial times. This could be to providers' detriment as care workers could choose when to work and make themselves unavailable at short notice.

Autonomy and variety were also important in retention, with care workers enjoying the diverse nature of their roles. Despite this, several care workers suggested that they would leave roles for better career progression opportunities. For many, lack of career progression was seen as a key reason for turnover, which reflects current DHSC efforts to introduce career pathways into the occupation (DHSC, 2024). One care worker was doing a Level 5 qualification in management to progress her career, but most were not engaged in taking qualifications. Not all sought to progress, and barriers to taking on more senior roles, beyond insufficient pay progression, included changes to hours and shift patterns and disrupting relationships with care recipients, again reflecting their importance in retention. Amongst those who

wanted to progress, there was frustration at limited opportunities for development and progression, which both care workers and providers acknowledged:

> *The only career opportunity you can have here is designation of senior carer, that's all, nothing else CW16*

> *Pay honestly is the biggest negative aspect and currently within this organization there's not a great deal of opportunity to progress. I mean I've not stayed at this level out choice, there's just not been a great deal of opportunity to move up. CW18*

Providers recognised the need for career progression and sought to offer this, but some were concerned that an over-preoccupation with qualifications may cause some care workers to leave the sector and noted that it was important to also retain those who did not seek career progression:

> *So you go in as a carer, you're always carer, 30 years later. But some people choose that. That's actually what they want to do, because actually it's the nurturing, caring side of them that takes them into that job. Other people want a career out of it. So we are trying to develop and build those career pathways P8*

For some, the satisfaction of caring offset a lack of career progression, although a number suggested that the NHS, offering both the opportunity to care and better career opportunities and pay and benefits, was an attractive destination that they were considering.

Finally, the image of care work, as a job of 'last resort' and the sector, with its negative media coverage, were frequently raised as concerns. While some workers enter the sector because they lack alternative opportunities and may leave regardless of pay or conditions (GMCA, 2023, Green et al., 2014), many saw the work as skilled and were frustrated by the society's view that they were '*just a care worker*' and were not valued. This lack of status and negative perceptions of the sector were cited as key factors in turnover:

> *After the pandemic we saw a lot of people leave, so the positive press turned into negative press again, sadly…. Then that died a death [clap for carers], that was the end of that and then it's back to being a low paid, hard job…… What you read and hear in the media affects people. P7*

3.3.2.2.3 Leadership and culture

WP1 identified that 15% of the variation in length of service accounted for by fixed worker and provider characteristics was attributed to providers. Retention is impacted by, for example, location, building quality, access to transport, nearby shops, bar/ café, internet/ phone/ television access and so on. Importantly, interviews also identified leadership and workplace culture as critical in retention through treating people well, making them feel valued and offering a supportive environment. However, providers argued that this was only effective in improving retention once pay was at an acceptable level:

> *They've got to be able to pay their bills, haven't they?... They'll go and work elsewhere if they can't pay their bills….. [but] It's not just about pay. It's about recognition…. That's what it's about. P6*

Care workers supported the importance of being part of a positive work environment and being supported to retention.

It's the staffing, as well and the management. I know it sounds a bit cliché, but it is like one happy family. CW12

Interview data suggested that induction is important to retention, particularly socialisation into a positive working environment. Turnover is highest in the first 6 months of employment (SfC, 2023), after which it reduces significantly. One induction initiative had been particularly successful:

About 18 months ago, we introduced something called the candidate journey, that looked at things like candidate touch points. So, paying for DBSs for the candidates, for example, whereas they used to pay for their own. The welcome bonus. And then around that some softer training and development pieces designed to put an arm around people. Some data that we pulled last month showed that…. we're now retaining close to 90% of those new starts in their first six months of employment with us. P22

Care workers also appreciated the support offered when people they cared for passed away, around their childcare responsibilities, and the availability of counselling and other mental health support. Many noted, however, that this support was largely absent and some who felt unsupported were actively considering leaving their roles or had left previous roles for this reason. As one noted:

Our managers are always in the office, they never come out on the floor to help and stuff like that. Yeah, you don't really feel valued… say like so-and-so has just passed away and then you're immediately back on the floor going to help someone else. You never get emotional time to process anything CW6

In contrast, care providers argued that they worked hard to build a strong culture and that leadership was central to this. One provider invested substantial sums in management training, although another argued that management skills were often over-looked given the emphasis on clinical experience:

Providers more than anything need to wake up to the fact that they need somebody who actually is qualified in management.… This thing about you've got to be a nurse to manage a care home, no you don't. You just have to understand how it works and as long as you've got a deputy who is a nurse, or an equivalent of, and one runs the business side, and one runs the clinical side. P4

The benefits of out-of-sector experience, including financial backgrounds, were also noted. Four providers who had entered care from other sectors all argued that new working practices had resulted from their wider experience.

Care providers used a range of financial and non-financial rewards to build strong and supportive cultures. Survey data showed that around half offered bonuses or vouchers and around a quarter discounted shopping (Figure 11). Although some care workers noted that promised bonuses for reaching the end of the probation period were not paid. In interviews, care providers noted using long service awards and suggested these could be effective, even if they only supported one year's service:

So, in year one you get £750 if you stay. That went down really well. I think that has helped our retention although a few people are staying until one [year] and then going. I need to figure out what that means, but if you've got people for a year, it's not so bad. P7
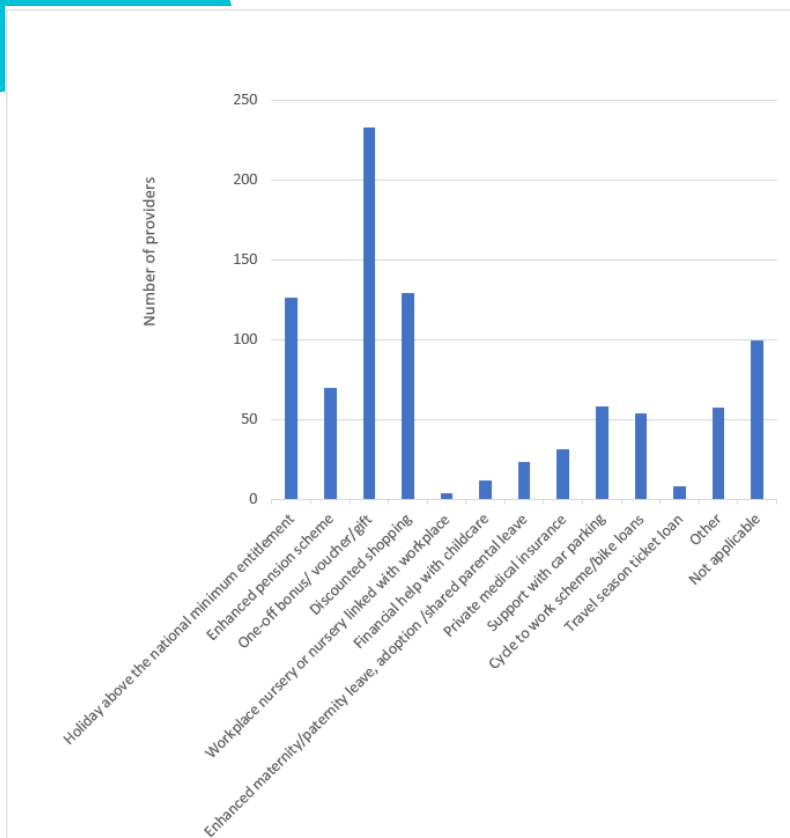
A number offered Employee Assistance Programmes and counselling schemes alongside Blue Light and other discount schemes. Care workers also cited additional benefits including free physiotherapy for work-related injuries; fast track medical treatment; "medicash" to get money off a dentist or optician treatment; and gym membership. These kinds of schemes were looked upon positively by care workers and were factors considered when weighing up the positives and negatives of roles. Whilst it was recognised that the financial support these kinds of schemes offered was not significant, they were seen as beneficial:

> *We have this company, so if you're struggling and you need a therapist or a counsellor, you can phone them…. And I have actually utilised that service because I found someone deceased at work, and [providers] really were, "Just do it. We are strongly encouraging you to just do it." And it was amazing. I can't fault it. I didn't have to pay for that service. It was just there. CW14*

Non-financial reward through recognition was equally, if not more important, and included formal schemes like carer of the month, with awards ceremonies, and informal events, like coffee and cake:

> *What people seem to value are things like training, socials, those kinds of things make a difference. Making people feel like they're part of a group and a community… We invest in a lot of silly things.. like badges.. It's the little things that make sure that people are noticed. P12*

While financial and non-financial rewards were important as a retention mechanism, there were limits to their effectiveness in retention:

We can give the responsibility; we can give them interest. We can give them a stimulating job but can't do anything about the fact they might have to be living on food vouchers when bringing up a family or not have enough money to pay for a holiday. P20

3.4 Discussion and conclusions

Care workers are low paid with limited pay variation, that is, most are paid at or a little above NLW levels with senior care workers earning a small amount more. Variation has also reduced over recent years. The research offers important insights both into why there is little variation and what causes the variation that does exist. It shows that pay is important for retention, and that several other factors are also important in retention. This section draws together the WP analyses, discusses them in the light of existing research and answers the research questions. The recently published adult social care workforce strategy in England notes the importance of a national approach to addressing pay that involves government, employers and unions (SfC, 2024) and this research endorses that approach. It is timely given also the recent election of the Labour Government which has committed to a sector-wide Fair Pay Agreement (Labour_Party, 2024, JRF, 2024).

3.4.1 How do local authority fees and other local conditions influence pay?

WP1 analyses suggest that most local conditions, including local authority fee levels, have statistically significant but small effects on pay. Survey and interview data, however, evidence an important role for local authority fee levels and commissioning practices in pay setting, pay rates and income (in)stability. That is, low fee rates drive low pay rates and basic terms and conditions of employment. Working across local authorities that offer different fee levels also creates complexity in pay setting processes. There are a number of possible reasons for the difference in the size of effect of local authority fees on pay across the datasets. WP1 uses local authority-level data to explore these relationships, and it may be that provider-level data is needed to conduct the detailed analyses required to effectively evidence the scale of these relationships. In home care, the practices of including travel time in home care pay rates and call cramming may also make these relationships hard to identify. WP2 and WP3 datasets are also smaller in scale and perceptual, perhaps presenting a narrow perspective on the fee level/pay relationship. That said, other evidence supports the suggestion that local authority fees do not meet the cost of care (Curry, 2022, Care_England, 2023), lending weight to the argument that they depress pay levels.

Framework/spot commissioning and the frequent use, particularly in home care, of minute-by-minute commissioning exacerbate the difficulties of low pay for care workers. Providers have uncertain revenue flows and offset this risk via use of zero-hours contracts which creates income insecurity for care workers. In home care, both local authority fees and commissioning practices impact in ways that are perceived to be problematic for pay/ income. Minute-by-minute commissioning also underpins, in certain providers, the practice of call cramming, which both intensifies worker experiences and reduces care quality. This may have a negative impact on retention.

Some providers adopt strategies of providing mainly/wholly self-funded care to underpin more secure income flows and offer higher pay rates, which could threaten sector strategies supporting people to live at home better and for longer (Labour_Party, 2024, SfC, 2024). More detailed data is needed to explore the relationships between fees/commissioning practices via statistical analysis, including both provider-level local authority fee data and the proportions of state- versus self-funded care offered at provider level.

Government funding is fragmented and uncertain, meaning that local authority fee settlements are usually for only one year and additional resources offered by government are ad hoc and non-recurrent. This works against strategic, long-term investment in pay.

3.4.2 What pay and reward systems are used?

As already noted, pay is low and there is limited variation within the care worker group and differentials across the care worker/senior care worker group are small. Further, both forms of variation have reduced over recent years which may result from local authority fee rates not having kept pace with inflation, creating pressures within pay systems.

Pay systems for independent sector care workers typically offer a flat rate for care workers and a slightly higher flat rate for senior care workers, although a small number of providers use pay scales, discussed in the following section. Many providers seek to maximise flat rates and offer few other enhancements. Pay rates do not reflect the level of responsibility inherent in care work and small differentials between care worker and senior care worker rates offer limited incentive to progress to more senior roles. As care work is positioned as a low-skilled occupation, care workers have limited bargaining power and there were few examples of their negotiating higher pay despite staffing shortages. A recent report on pay options in the sector suggests a sector-wide minimum wage as a mechanism to increase pay (Hemmings et al., 2024) and, given low bargaining power, this could be a fruitful way forward, raising base pay and recognising the skilled nature of the work.

Annual changes affecting everyone are important influences on pay. For example, in 2020 and 2021, national pay increases, including NLW, were in the 3% to 5% range, possibly due to increased labour demand from COVID-19 and government support during the pandemic. This is consistent with the fact that many care workers earn NLW and are directly affected by these changes (Skills for Care, 2023). Again, a sector-wide minimum wage could be effective in increasing pay to an acceptable base level (Parchment and Houghton, 2024). Any pay increases must be properly funded to avoid adverse consequences seen internationally, such as an increased reliance on zero-hours contracts or the hand back of contracts due to lack of affordability (Hemmings et al., 2024).

Other terms and conditions are at mainly statutory minimum levels, for example, holiday entitlements, sick pay, and pension provision. Where they exceed these, it is usually only by small amounts and the disparity between social care and healthcare terms and conditions is apparent. In many instances, care workers pay for their own DBS checks and uniforms, with some also undertaking training unpaid. There is use of other financial and non-financial rewards. These can compensate, to a limited extent, for low pay and basic terms and conditions. Improvement to these terms and conditions, and in the short term particularly sick pay, is much needed, longer term working towards parity with local government and/ or NHS terms and conditions. It will be important to factor this into a Fair Pay Agreement.

3.4.3 What skills- and experience-based systems are used and how do they link to worker progression?

In the independent sector, there is limited use of skills- and experience-based pay systems and increments for gaining qualifications and experience, where they exist, are small, sometimes only a few pence per hour. Providers attribute this to funding constraints and lack of affordability linked to inadequate local authority fees. Qualifications and experience thus have limited impact on pay and lower paid workers benefitted less from gaining qualifications. There are limited career opportunities, which further reduces motivation to gain qualifications. Without an appropriate pay structure that rewards gaining qualifications, together with improved terms and conditions, the recently introduced adult social care career pathways are in isolation unlikely to position adult social care work as an attractive occupation and address negative societal perceptions of the role.

The first King's Speech made reference to a Fair Pay Agreement, potentially via a sectoral minimum wage and adoption of pay scales (JRF, 2024). Pay scales are also outlined as a potential option in the recent Health Foundation report on pay options in the sector (Hemmings et al., 2024), but described as ambitious. The research reported here has a particular emphasis on pay strategies and pay setting and

argues that implementation of pay scales is essential to building workforce capacity and improving the status of care work. The benefits of this are supported by the recent national adult social care workforce strategy that has costed implementation of AfC Band 2 and Band 3 in the sector and evidenced that savings will outweigh costs over a 15 year period (SfC, 2024).

3.4.4 What drives differences in pay and reward in the sector?

Measured factors that drive pay variation include sector and service, with small differences across, for example, residential and nursing homes, and worker job title and fixed attributes. Most notably, local authority providers pay more than voluntary sector providers, who pay more than private sector providers. This results from the local authority terms and conditions offered by local authority-run being more generous than those in the independent sector, and because private sector providers have a profit motive which is absent in voluntary sector providers. Pay varies by region, being higher in London and Southeast and Eastern regions and lowest in Northeast. Pay also varies by protected characteristics, with women, ethnic minorities and non-British nationals having lower pay rates. Providers have pay setting responsibilities and the absence of robust pay systems may result in unfair practices or discrimination. Mechanisms to support independent sector providers to establish fair and robust pay systems are needed.

As outlined above, skills and experience account for only a small proportion of pay variation, as was first noted by Mortensen (2003). Subsequent studies have confirmed similar findings for European and US labour markets (Boza, 2021). Indeed, WP1 analyses show that measured factors account for a relatively small proportion of pay variation; 57% results from unmeasured fixed worker and provider attributes, policies, and/or constraints and 13% is unexplained. Here, WP2, WP3, WP1/2 linked analyses and other research offer insight into these unmeasured factors, the main reasons generally being cited as worker attributes, provider pay policies, and the limited bargaining power of workers (Boza, 2021, Torres et al., 2018, Mortensen, 2003, Rubery et al., 2011).

The influence of worker attributes such as personality as a significant determinant of pay differences aligns with findings here and other studies of the English ASC sector. Interview data placed substantial emphasis on the personal qualities required for the role, reflected in use of mechanisms like values-based recruitment. Similarly, other research suggests that providers often prioritise the personality and character of care workers over specific experience or qualifications (Greater Manchester Combined Authority, 2021). Rubery et al. (2011) found that 66% of ASC providers valued a positive attitude and friendly nature most highly, while only 6.9% selected care-related qualifications, and just 2% considered care-related experience important. To a large extent, this results from labour shortages and the difficulties of recruiting workers. While personal attributes are important, focusing on them alone in recruitment sits in tension with the aspiration to build career pathways and change the perception of care work as low-skilled and a job of 'last resort'.

Pay mainly varies across rather than within providers, meaning provider pay strategies, outlined above, are the main drivers of pay differences (Machin and Manning, 2004). Leadership is key here as this determines how organisational resources are used (Spilsbury et al., 2024). For instance, as noted earlier, half of providers offer one-off bonuses, vouchers, or gifts to reward workers and WP3 data evidences pay strategies centred on offering either one flat rate or narrow incremental scales. Most workers are also based in SMEs, which typically have less sophisticated HR policies and practices than their larger counterparts (Atkinson and Lucas, 2013). Additionally, due to low overall pay rates, workers are more likely to work locally (Green et al., 2014), WP1 analyses showing that most work with 6 miles of their home. These conditions increase the importance of non-skill-based practices in pay determination.

3.4.5 Are some models of pay and reward are linked to better retention or higher skill levels?

As already noted, pay and reward models have limited impact on skills. Turning to retention, no known prior studies decompose variation in length of service in the manner of WP1 analyses. These show that pay has a positive but small role in worker retention. This is not to say that pay is not important in

retention. Rather, the small effect may result from limited pay variation creating difficulty in identifying any causal relationship. There is again a difference in the size effect of pay on retention across the WPs, with interview and survey data evidencing that pay is very important for retention, but this again being perceptual data. However, job switching analyses also evidence that moving jobs with the sector generally leads to higher pay and better working conditions, suggesting that both are important in retention. Vadean et al. (2024) found similar patterns and SfC (2024) also argues that higher pay and good work quality are important influences on retention. Further, turnover in private sector providers being roughly double that in local authority providers may result from the higher pay and more generous terms and conditions they offer. Taken together, these findings suggest that small pay increases are unlikely to have substantial effect given other pressures in the role, for example, staffing shortages, work intensification and minute-by minute commissioning in home care, and that substantial pay increases are required to significantly impact retention. Improved terms and conditions of employment, particularly sick pay, are also needed, again raising the need for parity with local government and/ or the NHS.

Worker age, experience, on-the-job training, permanent contracts, and provider quality, measured by CQC ratings, also influence length of service, and play a role in staff retention, but again by small amounts. Other research supports the importance of contract type and training on retention (SfC, 2024) and induction training, as noted in the interview data, can also have a positive effect, again supporting other research (Parchment and Houghton, 2024). Length of service varies significantly by ownership, provider type, job title, and region. Retention also varies by protected characteristics, with women, ethnic minorities and non-British nationals having shorter length of service. These findings confirm SfC (2023) and Vadean and Saloniki's (2023) conclusions about the favourable impact of age, contracted hours, and training on staff retention. They also confirm that retention is relatively higher among British workers. Patterns of retention by worker demographics may link to the similar patterns identified above for pay and again highlight the need for robust pay systems.

SfC (2023) and Vadean and Saloniki (2023) found a small but statistically significant positive association between ASC qualifications and worker retention, but they do not account for worker and provider fixed effects. WP1 analyses indicate that new ASC qualifications have no clear impact on staff retention, and interview data support this. In WP1, the retention curve of those with ASC qualifications lies significantly above those without and it is possible that those intending to stay in the sector are more likely to obtain ASC qualifications, rather than the qualifications causing increased retention. It is perhaps not surprising that qualifications do not positively impact length of service, as they certify general, portable skills useful to any adult social care provider. Conversely, training may increase retention where it focuses on provider-specific skills (Acemoglu and Pischke, 1999).

The findings presented so far account, however, for a relatively small proportion of variation in length of service; 47% results from unmeasured fixed worker and provider attributes, policies, and/or constraints and 6% is unexplained. This seems plausible for two reasons. Firstly, unlike pay, the decision to stay or leave mostly rests with workers. This is reflected in the WP1 decomposition exercise; for example, the role of provider heterogeneity was 37.6% in pay variation but only 19.7% in length of service variation. Secondly, this finding is consistent with responses from care workers and providers outlining several other factors that are important for retention. Care workers, for example, suggest the following factors are significant: the satisfaction of caring, flexible working, variety and autonomy in their roles and career opportunities. Personal circumstances and convenient working times are also highlighted as significant factors in retention, by both providers and workers. In ASC-WDS data, providers report these to be around seven times more important than pay and Rubery et al. (2011) cite family commitments as the primary reason for turnover, followed by convenient working times, with only around one fifth reporting pay as the main reason. Conversely,

the WP2 survey places more weight on the importance of pay in retention, followed by flexible hours, health and well-being support, and training opportunities. It nevertheless suggests that the demanding nature of care work is more important than pay in care workers leaving their jobs. Pay is thus balanced with several other factors in determining a worker's decision on whether to leave their job but is a significant influencing factor.

Switching jobs within the sector generally leads to higher quality employment environments, suggesting that the environment provided by employers is a key factor in worker decisions to stay in their roles (SfC, 2024, JRF, 2024). Leadership is vital in creating this positive environment and workplace culture, with supportive practices and strong teams: being a good place to work is important, and this ranges from high CQC ratings to robust induction, from financial forms of reward such as counselling to non-financial forms of reward including recognition schemes. Addressing factors important to care workers, such as flexibility, is also important. Providers are, however, clear that these strategies are only effective when pay is at a minimum acceptable level. Many care workers, however, express dissatisfaction at the support received from their managers and do not feel valued, suggesting that leadership can be improved. New provider entrants to the sector, some with financial backgrounds, had created new ways of working, for example, offering shift work in home care, that had improved retention. Diversification of leadership experience may be of benefit.

In summary, this is the first study to estimate the role of fixed workers and provider characteristics in pay variation. It finds that more than 50% of pay variation is explained by factors that, although time-invariant, are not collected in national datasets. Survey and interview data are used to offer insights into these factors. Future research should explore these further, and additional datasets will be needed. Nevertheless, findings are novel and rigorous and have important implications for policy, which are explored below.

4. Details of patient and public involvement in the research

Patient and Public Involvement (PPI) undertaken: the research was co-designed at bid stage with a local authority commissioner, care providers and a representative from the NIHR Applied Research Collaboration Greater Manchester PPI panel (NIHR ARC-GM PPI Panel). Once the project began, a project PPI panel was established, facilitated by the NIHR ARC-GM PPI infrastructure. Members were from a wide range of backgrounds, including those with: caring responsibilities, lived experience as a recipient of social care services, responsibility for training social care workers, a care provider, and a social care student. Members were diverse in age, gender, and ethnicity.

There were nine PPI engagements, one for the overall project introduction, two per work package for analysis design and interpretation, and two to agree appropriate dissemination formats. The initial PPI event summarised the overall project and led to suggestions on how to maximise PPI input and engagement (see key lessons below). It also identified a representative for the Steering Group meetings, which was the care provider representative. Others then focused on project design, informing interpretation of findings, and discussion of appropriate dissemination mechanisms.

Differences from original plans: two meetings were held per work package as, following the introductory meeting, the care provider representative felt more comfortable in expressing their views in a meeting separate to workers and those with lived experience. The engagements on dissemination were not originally planned, but feedback from the meetings on work package results, particularly

WP1, was that these were too technical. The panel did not see its role as helping to interpret which results were important, rather they wanted to be told what the results were so that they could advise on dissemination.

Impact: PPI provided a wealth of invaluable insights. From designing interview schedules and the survey to gaining some access to care provider participants, to broadening the aspects considered when exploring factors related to pay and retention, to identifying appropriate mechanisms/formats to disseminate to care recipients and the public. On design, for example, work intensification was included in WP1 analyses because of PPI feedback. Also, the initial WP2 report was not disseminated due to concerns that its findings could be mis-leading without contextualisation from other WPs. All dissemination will, therefore, be of the combined results across the three WPs. PPI has been significantly strengthened by having a representative from a provider of adult social care.

Key lessons: separate sessions for different PPI group members were needed due to sensitivities around pay; there was limited interest in understanding analysis techniques and the associated training, rather members wanted to receive analysis and advise on dissemination. Other matters included:

- Keeping the invitation for events open to all members of the group, maximising potential attendance.
- Keeping meetings to late afternoons to align with other commitments of group members.
- Presenting overviews of each WP with the opportunity to input in more depth where appropriate.

5.   How equality and diversity issues are addressed

Equality and diversity in the samples are reflected as follows:

WP1: data were drawn from ASC-WDS and population diversity was thus dictated by that dataset. Demographics were as follows: 83% female/17% male; 83% were British and 17% non-British; 83% were White British and 17% were from other ethnicities; 98% were able bodied and 2% disabled. These proportions broadly reflect the make-up of the wider care worker population.

WP2: survey data here was at provider level e.g. sector, service, size, and individual equality, and individual level equality and diversity characteristics were not relevant.

WP3: some interview data here was at provider level e.g. sector, service, size, and individual level equality and diversity characteristics were not relevant. For care worker interviews, twenty were held and it was not possible to generate a sample that reflected population diversity. Sample diversity was, however, an important consideration in selection for interview and characteristics were as follows: White British, 16; British Asian, 1; other nationalities/ethnicities 2; female, 13, male, 7; age, 20-30=3; 30-40-10; 4-50 =7

All data have been reported in full via the separate reporting process as requested.

6.   A list of outputs from the project

- Home Care Forum presentation [Conference presentation].
- What do 'good' jobs look like in adult social care [Conference presentation]
- Report for policy makers [submitted on 14 August with final NIHR report]

7.   Policy Relevance

Higher basic pay rates for care workers are needed, alongside pay structures that recognise the acquisition of skills and experience and support the recently established adult social care career pathways. These will offer recognition for the responsible and skilled nature of care work, create differentials within and across roles to offer career progression, and ensure that worker attributes complement but do not replace qualifications and experience. These actions will build the status of the occupation.

Terms and conditions must also be improved, to work towards parity with local authority-employed social care workers and NHS health care workers. This includes pension provision, holiday pay and, importantly, sick pay. Other forms of both financial and non-financial reward are important but are only fully effective once pay is at an adequate level. These include bonuses, vouchers, discount schemes, and formal and informal recognition schemes.

Most independent sector adult social care providers are SMEs and may lack in-house HR support. Many providers are also run by those with clinical experience who may benefit from developing their management skills. Leadership development programmes could support providers to develop and implement robust pay systems, as some providers offer/workers receive consistently better pay regardless of skills, experience, or length of service. This will also address the need for pay systems that reduce/remove patterns of pay disadvantage and increased turnover linked to worker gender, ethnicity, and nationality. Attracting new leaders with experience of management in other sectors will also support innovation.

Working patterns are very important to care workers. While often challenging when delivering a 24/7 care service, offering flexibility that meets their needs is critical to their retention. This includes choice of working patterns and consistent working patterns that do not disrupt personal circumstances and relationships with care recipients, which will also enhance continuity of care. Working time should be organised, particularly in home care, to reduce reliance on zero-hours contracts and offer shift working. Local authority commissioning processes can require this. Digital solutions, such as rostering systems, can support with the management of working time allocation that meets both provider and care worker need.

Care workers value positive working environments and strong workplace cultures that support them to do a demanding role effectively. Care workers also value well-being support systems. Both are important to retention, as is the caring nature of the role, although this can be diminished by intensive working environments caused by both lack of resource and staffing shortages. Autonomy and variety offered are also important. All these factors, alongside the forms of financial and non-financial reward outlined above, are critical to retention, but again will only be fully effective once base pay is at an adequate level. Leadership development programmes could support providers to design and implement supportive working practices and build strong workplace cultures. Once other aspects of the employment offer have been addressed, these will also support in recruitment.

In combination, these actions will build workforce capacity, alleviate recruitment and retention difficulties, and support the delivery of improved adult social care. They will not, however, be achievable within current levels of resourcing and increased government investment is required. Stable and long-term government funding that supports longer term pay strategies is also needed, and consideration could be given to a national fee structure to remove the current complexity of differing local authority fee rates and the difficulties these cause for pay setting. Increased funding will support higher local authority fee rates for state-funded care that cover the cost of care and should sit alongside changes to local authority commissioning practices. To ensure that increased fees flow to improving pay and other terms and conditions, commissioning processes could stipulate certain pay levels and other terms and conditions, and/ or other forms of regulation, for example, legislation or collective bargaining, could be adopted. Commissioning processes must also offer more stable income flows, particularly in home care. Where framework/spot commissioning are used, minute-by-minute commissioning practices should be avoided and there should be reasonable fee continuation periods where, for example, those receiving care are hospitalised or pass away. These actions will serve to reduce the number of providers that adopt a strategy of offering wholly/mainly self-funded care and build capacity in the system. While significant investment will be needed, this will be offset to an extent by a better functioning adult social care system that will reduce pressure on the NHS. For example, more care recipients can be prevented from being admitted to hospital and there will be system capacity to support more effective discharge from hospital.

This research offers important insights into pay variation in adult social care. Future research would benefit from additional datasets to extend these insights, including: provider-level rather than aggregate-level local authority fee data; data on provider proportions of state- versus self-funded care, possibly by extending the ASC-WDS; data on provider pay and other HR practices at larger scale, either extending the ASC-WDS or generating a dataset that links to it; data on worker attitudes at larger scale, which may be offered by the ASC workforce survey pilot that is currently in train, and again links to ASC-WDS would be of benefit.

8. Dissemination

8.1 Publication strategy
Academic workshops/conferences include to date: one seminar presentation (December 2023) and one conference presentation (September 2024). Plans include:

- National ARC Economics Showcase Event, Oct 2024.
- Health Economists Study Group Winter Meeting, January 2025.
- British Academy of Management, Sept 2024, Nottingham Trent University: what does 'good' care work look like?
- Chartered Institute of Personnel and Development Applied Research Conference, 2025: pay setting in adult social care
- European Group for Organizational Studies conference, 2025: Leadership in adult social care

8.2 Journal articles
- Supply and demand side drivers of adult social care workforce retention; target journal - The Aging Journal, Innovation in Aging, or the Journal of Long-Term Care.
- The impact of mobility on adult social care workers' outcomes: A comparative before-after analysis of pay, working hours, and work burden; target journal - The Aging Journal, Innovation in Aging, or the Journal of Long-Term Care.

- Worker and provider heterogeneities, wage variation, and wage-sorting: Evidence from England's adult social care; target journal - Health Economics or Journal of Health Economics.
- Work quality in adult social care; target journal – Human Resource Management Journal
- Leadership in adult social care; target journal – Academy of Management Learning and Education
- Commissioning and pay in adult social care; target journal – Journal of Social Policy

8.3 Communication and public engagement activities

Feedback to research participants: the policy report will be emailed to all those who participated in interviews; a shorter policy briefing note (or other appropriate document) will be placed on SfC's website and be accessible to those who completed the WP2 survey.

A draft policy report has been shared with and been positively received by the project Steering Group and when finalised and signed off for publication by NIHR will form the basis of communication and public engagement activities.

Policy and social care practitioner engagement: the team will work with the Steering Group to identify appropriate opportunities. Currently in planning:

- A parliamentary launch in November 2024, supported by ManMet's policy think tank, Metropolis
- A joint event with Skills for Care in autumn 2024 as part of its national workforce strategy roll out (agreed in principle)
- A workshop with the Greater Manchester Integrated Care Service to identify possible changes in practice (agreed in principle)
- Collaborating with contacts, e.g. the TUC member of the Steering Group, to ensure that the policy report is part of the body of evidence that informs the Labour Government's development of a sector-wide Fair Pay Agreement

Public and care recipients: a final PPI group meeting indicated significant interest in the reports findings being disseminated beyond policy makers and practitioners to the public and care recipients. These include outputs such as videos, infographics and posters and these will be developed to disseminate key messages to these groups.

Media coverage: university PR teams will issue press releases when the policy report is published; the policy report will be made available on university websites and will be placed in ManMet's repository, e-space, with a DOI for easy discoverability.

9. Actual and anticipated impact

As a fast-track policy project, impact is yet to be delivered, although the forthcoming policy report has already been cited in a publication on pay in the sector (Hemmings et al., 2024). Over time, it is anticipated that the research will impact on pay policy in the sector, specifically establishment of a sector-wide Fair Pay Agreement, improved terms and conditions of employment, and on implementation of guaranteed hours/shift working in home care. These impacts are outlined in the three Added Value Examples. These are workforce wide impacts affecting around 1.5 million workers and the c850,000 people they care for.

10. References

ABOWD, J. M., KRAMARZ, F. & MARGOLIS, D. N. 1999. High wage workers and high wage firms. *Econometrica,* 67**,** 251-333.

ACEMOGLU, D. & PISCHKE, J.-S. 1999. The structure of wages and investment in general training. *Journal of political economy,* 107**,** 539-572.

ADDISON, J. T., PORTUGAL, P. & RAPOSO, P. S. 2023. Retrieving the Returns to Experience, Tenure, and Job Mobility from Work Histories.

ATKINSON, C., CROZIER, S. & LEWIS, E. 2016. Factors that affect the recruitment and retention of domiciliary care workers. *Government Social Research.* Cardiff: Welsh Government.

ATKINSON, C. & LUCAS, R. 2013. Worker responses to HR practice in adult social care in England. *Human Resource Management Journal,* 23**,** 296-312.

BALTAGI, B. H. 2015. *The Oxford handbook of panel data*, Oxford University Press.

BONHOMME, S., HOLZHEU, K., LAMADON, T., MANRESA, E., MOGSTAD, M. & SETZLER, B. 2023. How much should we trust estimates of firm effects and worker sorting? *Journal of Labor Economics,* 41**,** 291-322.

BOZA, I. 2021. Wage Structure and Inequality: The role of observed and unobserved heterogeneity. KRTK-KTI Working Papers.

CARD, D., HEINING, J. & KLINE, P. 2013. Workplace heterogeneity and the rise of West German wage inequality. *The Quarterly journal of economics,* 128**,** 967-1015.

CARE_ENGLAND. 2023. *Fair Cost of Care Analysis* [Online]. https://www.careengland.org.uk/fair-cost-of-care-analysis/: Care England. [Accessed 17 June 2024].

CLARKE, D. & TAPIA-SCYTHE, K. 2021. Implementing the panel event study. *The Stata Journal,* 21**,** 853-884.

CURRY, N. 2022. Fair cost of care: what is it and will it fix the problems in the social care provider market? : Nuffield Trust.

DHSC. 2022. *People at the Heart of Care: adult social care reform* [Online]. https://www.gov.uk/government/publications/people-at-the-heart-of-care-adult-social-care-reform-white-paper/people-at-the-heart-of-care-adult-social-care-reform. [Accessed 11 June 2023].

DHSC. 2023a. *Market Sustainability and Fair Cost of Care Fund 2022 to 2023: guidance* [Online]. https://www.gov.uk/government/publications/market-sustainability-and-fair-cost-of-care-fund-2022-to-2023-guidance/market-sustainability-and-fair-cost-of-care-fund-2022-to-2023-guidance: DHSC. [Accessed 26 June 2024].

DHSC 2023b. Next steps to put People at the Heart of Care. London: DHSC.

DHSC. 2024. *Care workforce pathway for adult social care: overview* [Online]. https://www.gov.uk/government/publications/care-workforce-pathway-for-adult-social-care/care-workforce-pathway-for-adult-social-care-overview#universal-sector-values: DHSC. [Accessed 6 February 2024].

GERMINARIO, G., AMIN, V., FLORES, C. A. & FLORES-LAGUNES, A. 2022. What can we learn about the effect of mental health on labor market outcomes under weak assumptions? Evidence from the NLSY79. *Labour Economics,* 79**,** 102258.

GMCA 2023. Labour Market and Skills Intelligence Report. https://www.greatermanchester-ca.gov.uk/media/8217/industry-skills-intelligence-pack-health-and-social-care-v2.pdf: Greater Manchester Combined Authority.

GOODMAN-BACON, A. 2021. Difference-in-differences with variation in treatment timing. *Journal of econometrics,* 225**,** 254-277.

GREATER MANCHESTER COMBINED AUTHORITY 2021. Industry Skills Intelligence Report: Health and Social Care Sector.

GREEN, A., ATFIELD, G., STANIEWICZ, T., BALDAUF, B. & ADAM, D. 2014. Determinants of the composition of the workforce in low skilled sectors of the UK economy: social care and retail sectors. University of Warwick: Warwick Institute for Employment Research.

HEMMINGS, N., ALLEN, L., LOBONT, C., BURALE, H., THORLBY, R., ALDERWICK, H. & CURRY, N. 2024. From ambition to reality: National policy options to improve care worker pay in England. The Health Foundation and Nuffield Trust.

HOC 2024. Reforming adult social care in England. London: House of Commons Committee of Public Accounts.

JRF. 2024. Our acceptance of low pay in social care costs us more than we think | Joseph Rowntree Foundation. [Accessed 31 July 2024].

LABOUR_PARTY. 2024. *Labour Party Manifesto 2024: Our plan to change Britain* [Online]. https://labour.org.uk/change/: Labour Party. [Accessed 28 July 2024].

MACHIN, S. & MANNING, A. 2004. A test of competitive labor market theory: The wage structure among care assistants in the south of England. *ILR Review,* 57**,** 371-385.

MORIARTY, J., MANTHORPE, J. & HARRIS, J. 2018. Recruitment and retention in adult social care services. *In:* UNIT, S. C. W. R. (ed.). London: Kings College London.

MORTENSEN, D. 2003. *Wage dispersion: why are similar workers paid differently?,* MIT press.

ONS. 2023a. *Care homes and estimating the self-funding population, England* [Online]. https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/socialcare/datasets/carehomesandestimatingtheselffundingpopulationengland: ONS. [Accessed 26 June 2024].

ONS. 2023b. *Estimating the size of the self-funding population in the community, England: 2022 to 2023* [Online]. https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/socialcare/bulletins/estimatingthesizeoftheselffunderpopulationinthecommunityengland/2022to2023: ONS. [Accessed 26 June 2024].

PARCHMENT, M. & HOUGHTON, A. 2024. Workforce Survey 2024. London: Home Care Association.

ROTH, J., SANT'ANNA, P. H., BILINSKI, A. & POE, J. 2023. What's trending in difference-in-differences? A synthesis of the recent econometrics literature. *Journal of Econometrics,* 235**,** 2218-2244.

ROUSE, R., ATKINSON, C., LUPTON, B., WILLOCKS, K., ACTON, S., RIVERS, L., SHORLEY, J. & WOOLNOUGH, H. 2023. How To Develop The People Management Skills Of Line Managers: evidence from an evaluation of online learning interventions. Manchester: Manchester Metropolitan University.

RUBERY, J., HEBSON, G., GRIMSHAW, D., CARROLL, M., SMITH, L., MARCHINGTON, L. & UGARTE, S. 2011. The recruitment and retention of a care workforce for older people. *Department of Health*.

SFC 2023. The State of Adult Social Care. Leeds: SfC.

SFC 2024. A Workforce Strategy for Adult Social Care in England. Leeds: Skills for Care.

SKILLS FOR CARE 2023. The state of the adult social care sector and workforce in England.

SPILSBURY, K., CHARLWOOD, A., THOMPSON, C., HAUNCH, K., VALIZADE, D., DEVI, R. & ET_AL. 2024. Relationship between staff and quality of care in care homes: StaRQ mixed methods study. *Health and Social Care Delivery Research,* 12**,** 1-139.

TORRES, S., PORTUGAL, P., ADDISON, J. T. & GUIMARÃES, P. 2018. The sources of wage variation and the direction of assortative matching: Evidence from a three-way high-dimensional fixed effects regression model. *Labour Economics,* 54**,** 47-60.

UKHCA 2023. A Minimum Price for Homecare. UK Home Care Association.

VADEAN, F., ALLAN, S. & TEO, H. 2024. Wages and labour supply in the adult social care sector. https://www.ascru.nihr.ac.uk/reports: NIHR Policy Research Unit (PRU).

VADEAN, F. & SALONIKI, E.-C. 2023. Job quality and job separation of direct care workers in England. *Innovation in Aging,* 7**,** igad009.

VADEAN, F. & SALONIKI, E. 2021. Job separation and sick leave in the long-term care sector in England. *GLO Discussion Paper.*

WOOLRIDGE, J. M. 2019. Correlated random effects models with unbalanced panels. *Journal of Econometrics,* 211**,** 137-150.

11. Appendices

Table A1: Summary statistics

	Private sector	Local authority	Voluntary sector	Overall (ASC sample)	Overall (estimation sample)
Gender: Female	85.31%	86.41%	80.41%	84.54%	86.63%
Nationality: British	81.31%	83.21%	83.28%	81.75%	85.88%
Ethnicity: White	80.29%	84.58%	79.76%	80.74%	84.89%
Ethnicity: Black/African/Caribbean/Black British	10.40%	8.40%	12.14%	10.49%	7.57%
Ethnicity: Asian/Asian British	6.69%	4.55%	5.27%	6.12%	5.39%
Ethnicity: Mixed/multiple/other ethnic groups	2.63%	2.46%	2.84%	2.65%	2.15%
Disability: Yes	1.04%	2.41%	1.80%	1.33%	1.34%
Job role: Senior care worker	9.60%	7.57%	8.37%	9.14%	11.55%
Job role: Care worker	90.40%	92.43%	91.63%	90.86%	88.45%
Social care related qualification: Yes	47.61%	76.01%	55.58%	53.2%	61.06%
Any training: Yes	74.75%	74.96%	76.57%	74.92%	80.72%
Age in years	40.88	48.26	43.59	42.22	41.63
Experience in years	7.55	11.20	9.07	8.16	8.50
Length of stay in years	5.51	9.57	7.11	6.25	6.10
Number of contracted hours	23.05	25.62	25.80	23.94	21.20
Distance to work (miles)	5.70	4.61	7.09	5.85	4.68
Absence days due to sickness in past year	4.40	11.94	7.20	6.31	4.71
Full-time equivalent hourly pay (2015£)	7.66	9.56	8.10	7.96	7.70
On zero hours: Yes	37.97%	14.30%	21.38%	32.12%	30.67%
Job Status: Full-time	54.07%	30.28%	45.13%	49.28%	50.63%
Job Status: Part-time	37.75%	64.99%	45.34%	42.32%	40.95%
Employment: Permanent	87.90%	84.27%	86.05%	87.07%	91.12%
Employment: Temporary	2.67%	4.53%	2.16%	2.79%	2.47%
Employment type: Other	9.42%	11.20%	11.80%	10.14%	6.41%
Staff size: Micro (1 to 9)	3.50%	4.45%	7.82%	4.38%	2.59%
Staff size: Small (10 to 49)	39.30%	42.26%	39.37%	39.40%	40.70%
Staff size: Medium (50 to 249)	49.66%	47.02%	43.24%	48.38%	49.54%
Staff size: Large (250 or more)	7.54%	6.27%	9.56%	7.84%	7.17%
Overall CQC rating: Inadequate	2.18%	0.72%	1.05%	1.85%	1.80%
Overall CQC rating: Requires improvement	19.28%	13.43%	12.23%	17.59%	16.50%
Overall CQC rating: Good	72.80%	82.80%	78.77%	74.67%	75.45%
Overall CQC rating: Outstanding	5.74%	3.05%	7.95%	5.88%	6.26%
Main service: Care home services with nursing	22.31%	4.98%	10.54%	18.31%	20.43%
Main service: Care home services without nursing	26.67%	26.37%	32.71%	27.81%	33.77%
Main service: Home care services (Adults)	40.85%	26.67%	23.69%	35.88%	40.68%
Turnover rate	0.32	0.13	0.26	0.28	0.33
Vacancy rate	0.06	0.06	0.05	0.06	0.06
Turnover rate-care worker	0.32	0.14	0.27	0.29	0.36
Observations (maximum)	2,065,666	312,011	535,423	2,997,799	690,222

Technical note

WP1 relies on two types of statistical analyses. The first part uses summary statistics such as mean, median, and percentiles to summarise the key features of the ASC workforce outcomes. These analyses help highlight the levels and trends in pay and retention and the differences in pay levels by sector and types of providers (e.g., differences in pay of workers in residential homes, nursing homes, and home care).

Summary statistics such as mean or median help highlight the key features of the sector but cannot be used to draw conclusions about any causal relations. To draw conclusions about the impact of the different factors on pay, training, and length of stay, we rely on regression analyses. Regression analyses, while drawing conclusions about the impact of one variable on another, can control for all other confounding variables. We rely on regression models that are particularly designed for linked employer-employee data (Abowd et al., 1999, Card et al., 2013, Bonhomme et al., 2023). In addition to measuring the impact of traditional factors such as age, experience, qualifications, provider size, turnover, and vacancy rates, these regression models can estimate the influence of measured and unmeasured time-invariant differences among workers and providers on pay and retention. This helps explain variations in pay and length of stay attributable to characteristics of providers or workers that do not change over time. More specifically, for each outcome, we estimate the following first-stage regression:

$$lnO_{iflt} = \alpha + X_{iflt}\beta + \theta_i + \mu_f + \delta_f t + \rho_l + \varepsilon_{iflt.} \qquad (1)$$

In the above equation, lnO_{iflt} stands for the natural logarithm of outcomes like pay and tenure of individual i_i ($i = 1, ..., N$) working at provider f ($f = 1, ..., F$) in local authority l ($l = 1, ..., L$) at year t ($t = 1, ..., T_i$)t, while X_{iflt} is a vector of measured time-varying exogenous characteristics of individual i, provider f and local authority l. X_{iflt} also includes the year fixed effects. All time-invariant characteristics of the workers, providers and local authorities are captured by the fixed effects which are, respectively denoted as θ_i, μ_f, and ρ_l. Existing works that estimate such high dimensional fixed effects model assume, that conditional on X_{iflt}, θ_i, μ_f, and ρ_l, workers' mobility is exogenous, implying that the mean of error term ε_{iflt} must be zero (Torres et al., 2018, Boza, 2021). However, some providers might experience continued growth or decay in their pay, quality, or reputation. Such changes might attract new workers to join or existing workers to leave the provider. To overcome the possibility of any bias arising from such changes, we also included provider-specific linear time trends $\delta_f t$.

These regression models have strong predictive power and nearly eliminate the possibility of any omitted variable bias. These regressions are estimated not only at the mean value but also at the 20th percentile, median, and 80th percentile of the pay distribution. Regression analyses at the 20th and 80th percentiles of the pay distribution help assess whether the impact of different factors such as qualification and experience is different for low versus high-paid workers.

In the second stage, the estimated workers, providers, and local authorities' fixed effects ($\widehat{\theta_i}$, $\widehat{\mu_f}$, and $\widehat{\rho_l}$) are regressed, respectively, on the measured fixed characteristics of workers, providers, and local authorities. These help us not only determine the sign of the relationships but also decompose the component of workers, providers, and local authorities' specific outcomes variation into observed and unobserved variations. For this purpose, we run the following three regressions:

$$\widehat{\theta_i} = const. + \varphi_i W_i + \epsilon_i, \qquad (2)$$

$$\widehat{\mu_f} = const. + \varphi_f Y_f + \epsilon_f, \qquad (3)$$

$$\widehat{\rho_l} = const. + \varphi_l Z_l + \epsilon_l. \qquad (4)$$

In the above equations, W_i is a vector of fixed worker characteristics (gender, ethnicity, region, country of birth, and job role), Y_f is a vector of fixed provider characteristics (sector, ownership type, service and type of residents served), and Z_l is a vector of fixed local authority characteristics (type of ASC contract offered, Unison ethical charter signatory status, real living wage accreditation status, etc). Note that most of these local authority-level variables are not strictly time-invariant. However, we can only observe these data at a single time point and are forced to treat these variables as time-invariant. The error terms in the above equations will capture the part of workers, providers, and local authorities' specific outcomes variations that are not explained by the observed variables.

In third stage, we measure the contributions of worker, providers, and local authority characteristics (both measured and unmeasured) to pay and retention variations using the following decomposition (Boza, 2021, Torres et al., 2018):

$$var(lnO) = \frac{cov(\hat{\theta}, lnO) + cov(\hat{u}, lnO) + cov(\hat{\rho}, lnO) + cov(X\hat{\beta}, lnO) + cov(\hat{\varepsilon}, lnO)}{var(lnO)}, \quad (5)$$

where var stands for variance and cov stands for covariance. The workers and providers terms are further split into:

$$cov(\hat{\theta}, lnO) = cov(\hat{\varphi}_\iota W_i, lnO) + cov(\hat{\epsilon}_\iota, lnO), \quad cov(\hat{u}, lnO)$$
$$= cov(\widehat{\varphi_f} Y_f, lnO) + cov(\hat{\epsilon}_f, lnO). \quad (6)$$

Figure A1: Trends in pay by service and region (care and senior care workers)
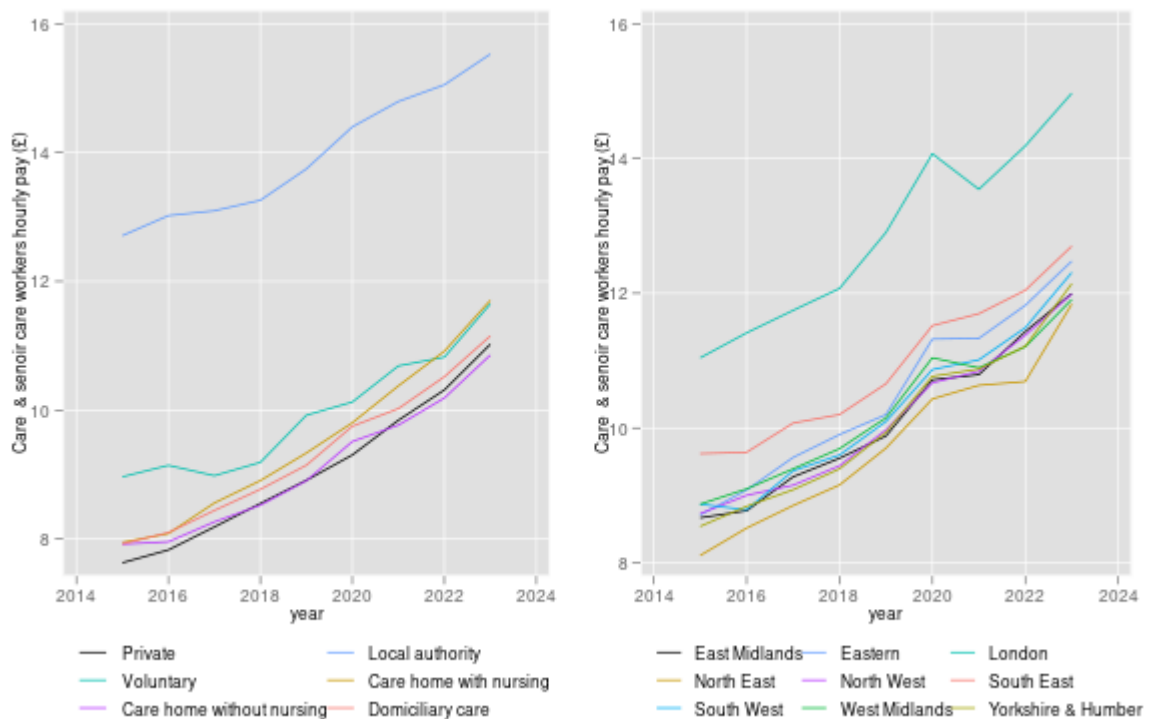
Table A2: Over-time average pay, length of stay, turnover, and vacancy rates by type of care worker and sector

	March 2015	March 2017	March 2019	March 2020	March 2021	March 2022	March 2023
Care workers pay (mean)	7.63	8.06	8.66	9.16	9.52	9.90	10.56
Care workers pay (p90)	9.07	9.40	9.85	10.40	10.67	11.08	11.70
Care workers pay (p10)	6.50	7.20	7.83	8.21	8.72	8.91	9.50
Senior care workers pay (mean)	8.59	9.02	9.56	10.22	10.51	10.95	11.63
Senior care workers pay (p90)	11.13	11.27	11.55	12.39	12.44	12.73	13.53
Senior care workers pay (p10)	6.72	7.38	8.03	8.50	9.00	9.35	10.00
National min/living wage	6.50	7.20	7.83	8.21	8.72	8.91	9.50
Real living wage UK	7.85	8.25	8.75	9.00	9.30	9.50	9.90
Real living wage London	9.15	9.40	10.20	10.55	10.75	10.85	11.05
Care worker length of stay (mean)	4.99	4.80	4.91	4.97	5.16	5.53	5.42
Senior care workers length of stay (mean)	7.51	7.23	7.34	7.34	7.68	7.81	7.43
Care workers training	0.75	0.78	0.78	0.74	0.71	0.66	0.64
Senior care workers training	0.79	0.84	0.84	0.83	0.81	0.78	0.74
Turnover rate (all staff)	0.24	0.28	0.32	0.30	0.27	0.26	0.27
Turnover-private sector (all staff)	0.29	0.31	0.36	0.33	0.31	0.30	0.30
Turnover-local authority (all staff)	0.10	0.15	0.12	0.12	0.12	0.12	0.16
Turnover-voluntary sector (all staff)	0.20	0.23	0.31	0.28	0.27	0.25	0.27
Vacancy rate (all staff)	0.05	0.05	0.06	0.06	0.05	0.07	0.07
Vacancy-private sector (all staff)	0.05	0.05	0.07	0.06	0.05	0.07	0.08
Vacancy-local authority (all staff)	0.06	0.06	0.05	0.05	0.05	0.07	0.07
Vacancy-voluntary sector (all staff)	0.04	0.04	0.06	0.04	0.03	0.05	0.05
Turnover-care workers	0.24	0.26	0.31	0.36	0.32	0.32	0.33
Turnover-senior care workers	0.13	0.15	0.19	0.19	0.16	0.15	0.15
Vacancy-care workers	0.04	0.04	0.05	0.06	0.07	0.09	0.10
Vacancy-senior care workers	0.02	0.03	0.04	0.05	0.04	0.05	0.05

Notes: P10, 10th percentile; P90, 90th percentile. Unless mentioned explicitly, the numbers are combined statistics for care workers and senior care workers.

Table A3: Time variant drivers of workers full-time equivalent hourly pay (£2015) (selected coefficients)

Pay regression	OLS	CRE	2-way FE	3-way FE
Age (years)	0.3058 (0.00)***	0.7615 (0.00)***	0.8436 (0.00)***	0.6554 (0.00)***
Age (years) squared	-0.0032 (0.00)***	-0.0082 (0.00)***	-0.0070 (0.00)***	-0.0069 (0.00)***
Experience (years)	0.1636 (0.00)***	0.1313 (0.00)***	0.1332 (0.00)***	0.1294 (0.00)***
Experience (years) squared	-0.0026 (0.00)***	-0.0043 (0.00)***	-0.0052 (0.00)***	-0.0050 (0.00)***
Number of contracted hours	0.0064 (0.00)*	-0.0229 (0.00)***	-0.0218 (0.00)***	-0.0150 (0.00)**
Distance to work (miles)	0.0417 (0.00)***	0.0352 (0.00)***	0.0042 (0.00)	0.0022 (0.00)
Sick leave: None	0.0000 (.)	0.0000 (.)	0.0000 (.)	0.0000 (.)
Sick leave: Up to two weeks	0.6988 (0.00)***	0.6613 (0.00)***	0.4687 (0.00)***	0.3973 (0.00)***

	1.5606	0.6915	0.5836	0.5573
Sick leave: More than two weeks	(0.00)***	(0.00)***	(0.00)***	(0.00)***
Employment: Permanent	0.0000 (.)	0.0000 (.)	0.0000 (.)	0.0000 (.)
	-2.6625	-0.8004	-0.9079	-1.0165
Employment: Temporary	(0.00)***	(0.00)***	(0.00)***	(0.00)***
	-0.7132	-0.7845	-0.8546	-0.8183
Employment: Other	(0.00)***	(0.00)***	(0.00)***	(0.00)***
Job Status: Full-time	0.0000 (.)	0.0000 (.)	0.0000 (.)	0.0000 (.)
	-0.0929	0.3735	-0.5920	-0.8135
Job Status: Neither of these	(0.00)	(0.00)***	(0.00)***	(0.00)***
	0.8349	0.5810	0.0741	0.0911
Job Status: Part-time	(0.00)***	(0.00)***	(0.00)	(0.00)
	0.6263	-0.4719	-0.2094	-0.1919
Disability: Yes	(0.00)**	(0.00)	(0.00)	(0.00)
	-0.5124	-0.7750	-0.5065	-0.4903
Any training: Yes	(0.00)***	(0.00)***	(0.00)***	(0.00)***
	-0.1445	-1.4489	-1.6851	-1.4988
On zero hours: Yes	(0.00)	(0.00)***	(0.00)***	(0.00)***
	0.0506	0.7898	0.7112	0.7176
ASC qualification: Up to level 2	(0.00)	(0.00)***	(0.00)***	(0.00)***
	1.7163	2.0218	1.7782	1.8269
ASC qualification: Level 3 to level 5	(0.00)***	(0.00)***	(0.00)***	(0.00)***
	4.3021	3.2215	0.1697	-0.1152
ASC qualification: Level 6 to level 8	(0.01)***	(0.01)***	(0.01)	(0.01)
ASC qualification: No	0.0000 (.)	0.0000 (.)	0.0000 (.)	0.0000 (.)
	-0.0012	0.0021	0.0012	0.0008
Number of starters in the last year	(0.00)***	(0.00)***	(0.00)***	(0.00)***
	-0.0043	-0.0085	-0.0039	-0.0030
Number of leavers in the last year	(0.00)***	(0.00)***	(0.00)***	(0.00)***
	0.0019	-0.0006	0.0120	0.0126
Number of vacancies	(0.00)***	(0.00)*	(0.00)***	(0.00)***
	-0.0827	-0.0328	0.0002	-0.0003
Nurses as % of total staff	(0.00)***	(0.00)***	(0.00)	(0.00)
	0.0196	-0.0021	0.0177	0.0242
Staff to resident ratio	(0.00)***	(0.00)	(0.00)	(0.00)*
	0.0010	0.0021	-0.0020	-0.0003
Provider total staff	(0.00)***	(0.00)***	(0.00)***	(0.00)
Overall CQC rating: Inadequate	0.0000 (.)	0.0000 (.)	0.0000 (.)	0.0000 (.)
	-0.2058	-0.1933	0.0721	0.0218
Overall CQC rating: Requires improvement	(0.00)*	(0.00)*	(0.00)	(0.00)
	1.1122	0.1900	0.1223	0.0455
Overall CQC rating: Good	(0.00)***	(0.00)*	(0.00)	(0.00)
	3.0497	0.5583	-0.1355	-0.1832
Overall CQC rating: Outstanding	(0.00)***	(0.00)***	(0.00)	(0.00)
Weekly unit costs nursing & residential care (100s, 2015£)	-0.0591	-0.0271	-0.0111	-0.0021
	(0.00)***	(0.00)***	(0.00)	(0.00)
Weekly unit costs nursing & residential care (100s, 2015£) squared	0.0006	0.0003	0.0001	0.0001
	(0.00)***	(0.00)***	(0.00)*	(0.00)
	0.3265	0.1993	0.0359	0.0146
Hourly rate for external home care (2015£)	(0.00)***	(0.00)***	(0.00)	(0.00)
Hourly rate for external home care (2015£) squared	-0.0062	-0.0026	-0.0016	-0.0012
	(0.00)***	(0.00)***	(0.00)*	(0.00)
	-0.0001	-0.0001	-0.0000	-0.0000
Hourly rate for inhouse home care (2015£)	(0.00)***	(0.00)***	(0.00)***	(0.00)***

Hourly rate for inhouse home care (2015£) squared	0.0000	0.0000	0.0000	0.0000
	(0.00)***	(0.00)***	(0.00)***	(0.00)***
Gross adult social care expenditure (1000s, 2015£)	0.0145	0.0139	0.0171	0.0273
	(0.00)***	(0.00)***	(0.00)***	(0.00)***
Gross adult social care expenditure (1000s, 2015£) squared	-0.0000	-0.0000	-0.0000	-0.0000
	(0.00)***	(0.00)***	(0.00)***	(0.00)***
Gross mean annual pay (LA level, 100s, 2015£)	-0.0029	0.0001	-0.0013	0.0002
	(0.00)**	(0.00)	(0.00)	(0.00)
Gross 20th percentile annual pay (LA level, 100s, 2015£)	-0.0112	-0.0079	0.0016	0.0086
	(0.00)***	(0.00)***	(0.00)	(0.00)***
Gross 30th percentile annual pay (LA level, 100s, 2015£)	0.0451	0.0146	-0.0031	-0.0061
	(0.00)***	(0.00)***	(0.00)	(0.00)*
Median house price in LA (1000s, 2015£)	0.0141	0.0100	-0.0011	-0.0009
	(0.00)***	(0.00)***	(0.00)	(0.00)
Median age in LA	0.0021	-0.0513	-0.0288	0.1882
	(0.00)	(0.00)***	(0.00)*	(0.00)***
LA age-standardised mortality ratio	-0.0024	0.0004	0.0021	0.0010
	(0.00)***	(0.00)	(0.00)***	(0.00)***
Unemployment rate in LA	-0.2464	-0.1430	0.0234	-0.0163
	(0.00)***	(0.00)***	(0.00)	(0.00)
LA tax base (include ASC percept)	0.0002	0.0002	0.0008	-0.0011
	(0.00)	(0.00)	(0.00)***	(0.00)*
year=2015	0.0000 (.)	0.0000 (.)	0.0000 (.)	0.0000 (.)
year=2016	2.9639	2.5234	0.5029	0.6530
	(0.00)***	(0.00)***	(0.00)**	(0.01)
year=2017	4.0666	4.0674	0.9876	1.1936
	(0.00)***	(0.00)***	(0.00)**	(0.03)
year=2018	4.4471	4.4095	0.4252	0.7889
	(0.00)***	(0.00)***	(0.01)	(0.04)
year=2019	6.3759	6.2809	1.6667	2.0848
	(0.00)***	(0.01)***	(0.01)*	(0.05)
year=2020	9.3949	9.7559	4.3925	4.8983
	(0.00)***	(0.01)***	(0.01)***	(0.06)
year=2021	10.8292	11.3855	4.9673	5.4950
	(0.00)***	(0.01)***	(0.01)***	(0.08)
year=2022	7.2826	7.7064	-1.0036	-0.4855
	(0.00)***	(0.01)***	(0.01)	(0.09)
Constant	172.1925	160.7959	248.0976	237.7204
	(0.08)***	(0.06)***	(0.15)***	(0.15)***
Workers fixed effects	no	no	yes	yes
Providers fixed effects	no	no	yes	yes
Provider specific time trend	no	no	yes	yes
Local authority fixed effects	no	no	no	yes
Observation	676132	662242	633845	573187
R-squared	0.3637	0.3712	0.9032	0.9090

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. OLS, Ordinary Least Square; CRE, Correlated Random Effects; 2-way FE, includes worker and provider fixed effects; 3-way FE, includes worker, provider, and local authority fixed effects; LA, local authority.

The OLS and CRE regressions include all the variables reported in Tables A3 and A4 below.

All the regressions control for the number of recipients of different benefits, index of multiple deprivation, population size and number of jobs in each local authority.

Table A4: Effects of time invariant workers characteristics on hourly pay (£2015)

2nd stage pay regression	2-ways FE	3-ways FE
Job role: Senior Care Worker	0.0000 (.)	0.0000 (.)
Job role: Care Worker	-7.5015 (0.00)***	-7.5004 (0.00)***
None-ASC qualification: Up to level 2	-0.0091 (0.00)	0.0262 (0.00)
None-ASC qualification: Level 3 to level 5	-0.2981 (0.00)***	1.1718 (0.00)***
None-ASC qualification: Level 6 to level 8	0.9635 (0.00)***	1.0402 (0.00)***
None-ASC qualification: No	0.0000 (.)	0.0000 (.)
ASC qualification: Up to level 2	0.5208 (0.00)***	0.3092 (0.00)***
ASC qualification: Level 3 to level 5	0.3709 (0.00)***	0.2435 (0.00)***
ASC qualification: Level 6 to level 8	3.7824 (0.00)***	3.1404 (0.00)***
ASC qualification: No	0.0000 (.)	0.0000 (.)
Ethnicity: White	0.0000 (.)	0.0000 (.)
Ethnicity: Black/African/Caribbean/Black British	-0.9198 (0.00)***	-1.0374 (0.00)***
Ethnicity: Asian/Asian British	-0.8286 (0.00)***	-0.8247 (0.00)***
Ethnicity: Mixed/multiple/other ethnic groups	-0.4719 (0.00)***	-0.6134 (0.00)***
Gender: Male	0.0000 (.)	0.0000 (.)
Gender: Female	-0.2469 (0.00)***	-0.2815 (0.00)***
Nationality: None-British	0.0000 (.)	0.0000 (.)
Nationality: British	0.7623 (0.00)***	0.6346 (0.00)***
British born: No	0.0000 (.)	0.0000 (.)
British born: Yes	-0.3254 (0.00)***	-0.3634 (0.00)***
Region: East Midlands	0.0000 (.)	0.0000 (.)
Region: Eastern	1.2427 (0.00)***	2.3170 (0.00)***
Region: London	2.5433 (0.00)***	3.2431 (0.00)***
Region: Northeast	-2.4359 (0.00)***	-2.5473 (0.00)***
Region: Northwest	0.9083 (0.00)***	0.9685 (0.00)***
Region: Southeast	0.7445 (0.00)***	0.7241 (0.00)***
Region: Southwest	0.6626 (0.00)***	0.2335 (0.00)***
Region: West Midlands	-0.1556 (0.00)**	-0.2869 (0.00)***
Region: Yorkshire & Humber	0.8946 (0.00)***	0.9171 (0.00)***
Constant	5.4235 (0.00)***	7.1860 (0.00)***
Observations	532582	478093
R-squared	0.0762	0.0822

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. 2-way FE, the dependent variable come from 2-way FE regression of Table A2; 3-way FE the dependent variable come from 3-way FE regression of Table A2.

Table A5: Effects of time invariant providers characteristics on hourly pay (£2015)

2nd stage pay regression	2-ways FE	3-ways FE
Older people with dementia: Yes	-0.1882 (0.00)***	-0.4902 (0.00)***
Older people with mental disorders or infirmities: Yes	-0.4151 (0.00)***	0.1095 (0.00)**
Adults with physical disabilities: Yes	0.1128 (0.00)***	0.5600 (0.00)***
Adults with learning disabilities and/or autism: Yes	-1.4640 (0.00)***	-1.6914 (0.00)***
Adults with mental disorders or infirmities: Yes	-0.0825 (0.00)*	-1.0255 (0.00)***
Older people detained under the Mental Health Act: Yes	0.0633 (0.00)	-0.3733 (0.00)***
Older people with learning disabilities and/or autism: Yes	0.4739 (0.00)***	-0.4556 (0.00)***
Older people with autistic spectrum disorder: Yes	0.0290 (0.00)	0.1185 (0.00)
Older people with physical disabilities: Yes	1.1695 (0.00)***	1.8372 (0.00)***
Adults with dementia: Yes	-0.5911 (0.00)***	-0.5411 (0.00)***
Adults detained under the Mental Health Act: Yes	1.9972 (0.00)***	2.3775 (0.00)***
Main service: Care home services with nursing	0.0000 (.)	0.0000 (.)
Main service: Care home services without nursing	2.0147 (0.00)***	2.1219 (0.00)***
Main service: Home care services (Adults)	5.4028 (0.00)***	5.2108 (0.00)***
Main service: Any adult community care service	0.1840 (0.00)	-5.3796 (0.01)***
Main service: Any adult day care services	2.4633 (0.00)***	2.7261 (0.00)***
Main service: Any other adult home care service	6.1169 (0.00)***	6.8638 (0.00)***
Main service: Any other adult residential care service	7.4294 (0.00)***	7.0531 (0.00)***
Main service: Any other Services	6.3773 (0.00)***	5.9019 (0.00)***
Sector: Private sector	0.0000 (.)	0.0000 (.)
Sector: Local authority	14.7368 (0.00)***	13.4001 (0.00)***
Sector: Voluntary / Charity	3.0969 (0.00)***	2.7633 (0.00)***
Other	2.2480 (0.00)***	0.5982 (0.00)***
Chain ownership: Yes	-0.6546 (0.00)***	-0.3089 (0.00)***
Constant	-6.2696 (0.00)***	-8.8799 (0.00)***
Observations	506195	455789
R-squared	0.2605	0.3545

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. 2-way FE, the dependent variable come from 2-way FE regression of Table A2; 3-way FE the dependent variable come from 3-way FE regression of Table A2.

Table A6: Effects of local authority characteristics on hourly pay in home care (£2015)

2nd stage pay regression	Wage: 3-ways	Wage: 3-ways
Ethical Care Charter signatory: yes	-1.0964 (0.00)***	-1.0896 (0.00)***
Real living wage accredited LA: yes	-2.3279 (0.00)***	-4.0314 (0.00)***
Ratio of 1 car owners to 3 or more cars owners	0.1730 (0.00)***	0.1459 (0.00)***
Ratio of 2 car owners to 3 or more cars owners	-0.1103 (0.00)***	-0.3207 (0.00)**
Unpaid care: 19 hours or less	1.1673 (0.00)***	-0.7869 (0.00)***
Unpaid care: 20 to 49 hours	-3.9320 (0.00)***	-3.7419 (0.00)***
No. of private & voluntary providers	-0.0195 (0.00)***	-0.0245 (0.00)***

Block & spot	0.0000 (.)	0.0000 (.)
Framework	-2.8561 (0.00)***	-3.5791 (0.00)***
Framework & spot	-0.3872 (0.00)***	-0.9638 (0.00)***
Preferred & spot	-8.3864 (0.00)***	-9.8122 (0.01)***
Spot only	-3.1344 (0.00)***	-3.2147 (0.00)***
Other	-7.1724 (0.00)***	-8.3379 (0.00)***
Commission 15-minute visits: yes	3.0065 (0.00)***	3.0796 (0.00)***
Constant	8.2057 (0.00)***	17.4492 (0.01)***
Observations	97633	13979
R-squared	0.4200	0.4313

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. 3-way FE the dependent variable come from 3-way FE regression of Table A2; LA, local authority.

Results in the first column are based on the whole sample period (2015-2022). The second column results come from 2015 to 2017 sample only as the Unison data on contracting practices was collected in 2013.

Table A7: Decomposition of pay variance

Components	Shares	Sub-shares
Contribution of XB	8.51	
Contribution of individual heterogeneity	40.46	
— Unobserved individual heterogeneity		86.18
—Observed (job role, demographics)		13.82
Contribution of firm heterogeneity	37.55	
— Unobserved		58.51
— Observed (sector, type, service, region)		41.49
Unexplained variation	13.48	

Notes: As defined in Eq. 1, XB contains all time varying workers, providers and local authority-level variables including time fixed effects.

Table A8: Time variant drivers of workers' pay (£2015) at different level of pay distribution (selected coefficients)

Wage regression	20th percentile	50th percentile	80th percentile
Age (years)	0.3748 (0.00)***	0.3164 (0.00)	0.9128 (0.00)***
Age (years) squared	-0.0024 (0.00)***	-0.0027 (0.00)***	-0.0084 (0.00)***
Experience (years)	0.1362 (0.00)***	0.1936 (0.00)***	0.0767 (0.00)
Experience (years) squared	-0.0038 (0.00)***	-0.0054 (0.00)***	-0.0042 (0.00)***
Number of contracted hours	0.0058 (0.00)	0.0325 (0.00)***	0.0490 (0.00)***
Distance to work (miles)	-0.0033 (0.00)	0.0086 (0.00)*	0.0064 (0.00)
Sick leave: None	0.0000 (.)	0.0000 (.)	0.0000 (.)
Sick leave: Up to two weeks	0.1677 (0.00)***	0.4115 (0.00)***	0.4464 (0.00)***
Sick leave: More than two weeks	0.2557 (0.00)***	0.4264 (0.00)***	0.4855 (0.00)***
Employment: Permanent	0.0000 (.)	0.0000 (.)	0.0000 (.)

Employment: Temporary	-1.4957 (0.00)***	-0.9563 (0.00)***	-0.1100 (0.00)
Employment: Other	-0.2843 (0.00)**	-0.5665 (0.00)***	0.0300 (0.00)
Job Status: Full-time	0.0000 (.)	0.0000 (.)	0.0000 (.)
Job Status: Neither of these	-0.0816 (0.00)	0.0452 (0.00)	-0.6778 (0.00)**
Job Status: Part-time	-0.1200 (0.00)**	0.6612 (0.00)***	0.0875 (0.00)
Disability: Yes	-0.4518 (0.00)	0.6577 (0.00)	-0.9610 (0.01)
Any training: Yes	-0.8180 (0.00)***	0.0457 (0.00)	-0.3942 (0.00)***
On zero hours: Yes	-0.4525 (0.00)***	0.1277 (0.00)	-0.2965 (0.00)
ASC qualification: Up to level 2	0.4886 (0.00)***	0.6693 (0.00)***	0.4507 (0.00)**
ASC qualification: Level 3 to level 5	0.5392 (0.00)***	1.5873 (0.00)***	2.8682 (0.00)***
ASC qualification: Level 6 to level 8	-0.2255 (0.00)	-0.5791 (0.00)	1.1385 (0.01)
ASC qualification: No	0.0000 (.)	0.0000 (.)	0.0000 (.)
Number of starters in the last year	0.0015 (0.00)***	0.0043 (0.00)***	-0.0027 (0.00)***
Number of leavers in the last year	-0.0046 (0.00)***	-0.0141 (0.00)***	0.0036 (0.00)***
Number of vacancies	0.0187 (0.00)***	0.0179 (0.00)***	0.0234 (0.00)***
Nurses as % of total staff	-0.0023 (0.00)	0.0064 (0.00)	0.0096 (0.00)*
Staff to resident ratio	0.0470 (0.00)***	0.0549 (0.00)***	-0.0473 (0.00)***
Provider total staff	-0.0027 (0.00)***	-0.0110 (0.00)***	0.0232 (0.00)***
Overall CQC rating: Inadequate	0.0000 (.)	0.0000 (.)	0.0000 (.)
Overall CQC rating: Requires improvement	2.4322 (0.00)***	-1.0172 (0.00)***	-0.0812 (0.00)
Overall CQC rating: Good	2.3849 (0.00)***	-0.7464 (0.00)***	-0.2766 (0.00)
Overall CQC rating: Outstanding	2.2062 (0.00)***	-0.6223 (0.00)**	-0.2568 (0.00)
Weekly unit costs nursing & residential care (100s, 2015£)	-0.0753 (0.00)***	0.0639 (0.00)***	-0.0178 (0.00)
Weekly unit costs nursing & residential care (100s, 2015£) squared	0.0005 (0.00)***	-0.0005 (0.00)***	0.0002 (0.00)
Hourly rate for external home care (2015£)	-0.0153 (0.00)	0.1093 (0.00)***	0.4208 (0.00)***
Hourly rate for external home care (2015£) squared	0.0005 (0.00)	-0.0026 (0.00)***	-0.0098 (0.00)***
Hourly rate for inhouse home care (2015£)	-0.0000 (0.00)***	0.0000 (0.00)*	0.0000 (0.00)
Hourly rate for inhouse home care (2015£) squared	0.0000 (0.00)***	-0.0000 (0.00)*	-0.0000 (0.00)
Gross adult social care expenditure (1000s, 2015£)	0.0104 (0.00)**	0.0049 (0.00)	0.0675 (0.00)***
Gross adult social care expenditure (1000s, 2015£) squared	-0.0001 (0.00)***	0.0000 (0.00)**	-0.0001 (0.00)***

Gross mean annual pay (LA level, 100s, 2015£)	-0.0128 (0.00)***	-0.0076 (0.00)***	0.0026 (0.00)
Gross 20th percentile annual pay (LA level, 100s, 2015£)	0.0011 (0.00)	0.0111 (0.00)***	0.0070 (0.00)
Gross 30th percentile annual pay (LA level, 100s, 2015£)	0.0096 (0.00)***	-0.0121 (0.00)***	0.0034 (0.00)
Median house price in LA (1000s, 2015£)	0.0040 (0.00)***	0.0147 (0.00)***	0.0117 (0.00)***
Median age in LA	-0.1027 (0.00)***	-0.1018 (0.00)***	0.0282 (0.00)
LA age-standardised mortality ratio	0.0021 (0.00)***	0.0040 (0.00)***	-0.0035 (0.00)***
Unemployment rate in LA	-0.0641 (0.00)**	0.1697 (0.00)***	-0.0403 (0.00)
LA tax base (include ASC percept)	0.0004 (0.00)*	-0.0001 (0.00)	-0.0010 (0.00)*
year=2015	0.0000 (.)	0.0000 (.)	0.0000 (.)
year=2016	-1.4029 (0.00)***	1.4052 (0.00)***	-0.6519 (0.00)
year=2017	-0.2349 (0.00)	1.7824 (0.00)***	-1.2246 (0.01)
year=2018	2.7438 (0.00)***	2.4124 (0.01)***	-1.1707 (0.01)
year=2019	2.7088 (0.01)***	2.4268 (0.01)**	-1.5910 (0.01)
year=2020	3.3431 (0.01)***	9.0590 (0.01)***	2.3802 (0.02)
year=2021	3.3179 (0.01)***	6.9672 (0.01)***	3.3904 (0.02)
year=2022	0.8546 (0.01)	1.8959 (0.02)	-2.8961 (0.03)
Constant	216.5547 (0.10)***	164.3260 (0.15)***	216.9883 (0.26)***
Workers fixed effects	yes	yes	yes
Providers fixed effects	yes	yes	yes
Provider specific time trend	yes	yes	yes
Observations	633845	633845	633845
R-squared	0.7442	0.8059	0.8359

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. LA, local authority.
All the regressions control for the number of recipients of different benefits, index of multiple deprivation, population size and number of jobs in each local authority.

Table A9: Time variant drivers of workers length of stay (selected coefficients)

Tenure regression	OLS	CRE	2-way FE
FTE hourly pay (2015£)	2.1040 (0.00)***	0.1287 (0.00)*	0.3476 (0.00)**
FTE hourly pay (2015£) squared	-0.0244 (0.00)***	-0.0037 (0.00)*	-0.0096 (0.00)***
Age (years)	-1.0811 (0.00)***	13.8925 (0.00)***	4.2853 (0.00)***
Age (years) squared	0.0183 (0.00)***	-0.0383 (0.00)***	-0.0447 (0.00)***
Experience (years)	9.9750 (0.00)***	4.4704 (0.00)***	3.5544 (0.00)***

Experience (years) squared	-0.2075 (0.00)***	-0.1305 (0.00)***	-0.1195 (0.00)***
Number of contracted hours	0.0354 (0.00)*	0.1503 (0.00)***	0.1545 (0.00)***
Distance to work (miles)	-0.0925 (0.00)***	-0.0088 (0.00)	-0.0147 (0.00)
Sick leave: None	0.0000 (.)	0.0000 (.)	0.0000 (.)
Sick leave: Up to two weeks	6.6069 (0.00)***	2.3116 (0.00)***	2.0714 (0.00)***
Sick leave: More than two weeks	11.8073 (0.00)***	3.3588 (0.00)***	2.6395 (0.00)***
Employment: Permanent	0.0000 (.)	0.0000 (.)	0.0000 (.)
Employment: Temporary	-7.5752 (0.01)***	-2.3347 (0.01)***	-2.6076 (0.01)***
Employment: Other	-7.4392 (0.00)***	-1.7467 (0.00)***	-0.4693 (0.00)
Job Status: Full-time	0.0000 (.)	0.0000 (.)	0.0000 (.)
Job Status: Neither of these	1.5984 (0.00)***	1.1971 (0.00)**	-0.4101 (0.00)
Job Status: Part-time	2.4750 (0.00)***	1.2813 (0.00)***	0.4991 (0.00)*
Disability: Yes	-1.4446 (0.01)	0.2705 (0.01)	-1.3993 (0.02)
Any training: Yes	-0.5796 (0.00)**	2.8995 (0.00)***	3.5117 (0.00)***
On zero hours: Yes	-3.6767 (0.00)***	2.8436 (0.00)***	0.2821 (0.00)
ASC qualification: Up to level 2	10.0156 (0.00)***	1.9593 (0.00)***	0.2505 (0.00)
ASC qualification: Level 3 to level 5	7.1614 (0.00)***	0.0126 (0.00)	-1.6232 (0.00)***
ASC qualification: Level 6 to level 8	-14.4642 (0.02)***	0.6890 (0.02)	-4.3917 (0.03)
ASC qualification: No	0.0000 (.)	0.0000 (.)	0.0000 (.)
Number of starters in the last year	0.0059 (0.00)***	0.0004 (0.00)	-0.0082 (0.00)***
Number of leavers in the last year	-0.0287 (0.00)***	-0.0032 (0.00)	0.0082 (0.00)***
Number of vacancies	-0.0285 (0.00)***	-0.0064 (0.00)	0.0077 (0.00)
Nurses as % of total staff	0.0763 (0.00)***	0.0108 (0.00)	-0.0019 (0.00)
Staff to resident ratio	0.1393 (0.00)***	0.1294 (0.00)***	0.0821 (0.00)***
Provider total staff	0.0452 (0.00)***	0.0163 (0.00)***	0.0036 (0.00)
Overall CQC rating: Inadequate	0.0000 (.)	0.0000 (.)	0.0000 (.)
Overall CQC rating: Requires improvement	1.5158 (0.01)*	0.4267 (0.00)	1.4039 (0.00)***
Overall CQC rating: Good	1.6574 (0.01)*	0.9083 (0.00)	1.4697 (0.00)***
Overall CQC rating: Outstanding	0.1243 (0.01)	0.9910 (0.01)	2.0114 (0.01)***
Weekly unit costs nursing & residential care (100s, 2015£)	0.0631 (0.00)***	0.0055 (0.00)	-0.0566 (0.00)*

Weekly unit costs nursing & residential care (100s, 2015£) squared	-0.0700 (0.00)***	-0.0452 (0.00)***	0.0005 (0.00)*
Hourly rate for external home care (2015£)	-0.4816 (0.00)***	-0.0051 (0.00)	-0.5187 (0.00)***
Hourly rate for external home care (2015£) squared	-0.0064 (0.00)***	-0.0011 (0.00)	0.0104 (0.00)***
Hourly rate for inhouse home care (2015£)	-0.0000 (0.00)***	-0.0000 (0.00)***	-0.0000 (0.00)
Hourly rate for inhouse home care (2015£) squared	-0.0000 (0.00)	0.0000 (0.00)***	0.0000 (0.00)
Gross adult social care expenditure (1000s, 2015£)	-0.0270 (0.00)***	-0.0066 (0.00)	-0.0199 (0.00)
Gross adult social care expenditure (1000s, 2015£) squared	0.0001 (0.00)***	0.0000 (0.00)	0.0001 (0.00)*
Gross mean annual pay (LA level, 100s, 2015£)	0.0114 (0.00)*	-0.0049 (0.00)	0.0123 (0.00)***
Gross 20th percentile annual pay (LA level, 100s, 2015£)	-0.0290 (0.00)*	-0.0080 (0.00)	0.0208 (0.00)**
Gross 30th percentile annual pay (LA level, 100s, 2015£)	-0.0364 (0.00)*	-0.0416 (0.00)***	-0.0383 (0.00)***
Median house price in LA (1000s, 2015£)	0.0130 (0.00)***	-0.0109 (0.00)***	-0.0122 (0.00)***
Median age in LA	-0.1207 (0.00)***	-0.2144 (0.00)***	-0.0728 (0.00)
LA age-standardised mortality ratio	0.0277 (0.00)***	0.0018 (0.00)	-0.0001 (0.00)
Unemployment rate in LA	0.5918 (0.00)***	0.0211 (0.00)	-0.3619 (0.00)***
LA tax base (include ASC percept)	0.0011 (0.00)**	0.0005 (0.00)	-0.0006 (0.00)
year=2016	0.0000 (.)	0.0000 (.)	0.0000 (.)
year=2017	2.9151 (0.00)***	3.7560 (0.00)***	4.4087 (0.00)***
year=2018	2.3809 (0.00)***	2.1298 (0.01)***	6.8068 (0.01)***
year=2019	3.9043 (0.00)***	2.2149 (0.01)*	10.1303 (0.01)***
year=2020	5.9900 (0.00)***	1.5646 (0.01)	12.3743 (0.01)***
year=2021	10.3870 (0.01)***	2.6452 (0.01)	15.7288 (0.02)***
year=2022	13.4420 (0.01)***	0.3870 (0.02)	17.7549 (0.02)***
year=2023		0.0000 (.)	17.5353 (0.02)***
Constant	254.0349 (0.37)***	439.8927 (0.35)***	118.5832 (0.58)*
Workers fixed effects	no	no	yes
Providers fixed effects	no	no	yes
Provider specific time trend	no	no	yes
Observations	488693	488682	400348
R-squared	0.4557	0.4899	0.9639

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. OLS, Ordinary Least Square; CRE, Correlated Random Effects; 2-way FE, includes worker and provider fixed effects; LA, local authority.

All the regressions control for the number of recipients of different benefits, index of multiple deprivation, population size and number of jobs in each local authority.

Table A10: Effects of time invariant workers characteristics on length of stay

2nd stage tenure regression	2-ways FE	3-ways FE
Job role: Senior Care Worker	0.0000 (.)	0.0000 (.)
Job role: Care Worker	-15.4689 (0.00)***	-15.5321 (0.00)***
Non-ASC qualification: Up to level 2	6.6001 (0.00)***	7.1866 (0.00)***
Non-ASC qualification: Level 3 to level 5	1.7053 (0.01)**	2.3978 (0.01)***
Non-ASC qualification: Level 6 to level 8	4.7871 (0.01)***	4.0604 (0.01)**
Non-ASC qualification: No	0.0000 (.)	0.0000 (.)
ASC qualification: Up to level 2	16.4083 (0.00)***	16.3625 (0.00)***
ASC qualification: Level 3 to level 5	21.2650 (0.00)***	21.3825 (0.00)***
ASC qualification: Level 6 to level 8	5.2443 (0.02)**	6.2441 (0.02)**
ASC qualification: No	0.0000 (.)	0.0000 (.)
Ethnicity: White	0.0000 (.)	0.0000 (.)
Ethnicity: Black/African/Caribbean/Black British	-10.2201 (0.00)***	-7.6120 (0.00)***
Ethnicity: Asian/Asian British	-2.4409 (0.00)***	-2.3174 (0.01)***
Ethnicity: Mixed/multiple/other ethnic groups	-5.0690 (0.01)***	-5.8686 (0.01)***
Gender: Male	0.0000 (.)	0.0000 (.)
Gender: Female	-1.2763 (0.00)***	-1.4585 (0.00)***
Nationality: None-British	0.0000 (.)	0.0000 (.)
Nationality: British	2.1508 (0.01)***	0.0480 (0.01)
British born: No	0.0000 (.)	0.0000 (.)
British born: Yes	3.1973 (0.01)***	5.2221 (0.01)***
Region: East Midlands	0.0000 (.)	0.0000 (.)
Region: Eastern	-21.0736 (0.00)***	-15.0731 (0.00)***
Region: London	-25.8475 (0.01)***	-23.8420 (0.01)***
Region: Northeast	7.0970 (0.00)***	6.1457 (0.00)***
Region: Northwest	-2.5211 (0.00)***	0.3797 (0.00)
Region: Southeast	-10.1790 (0.00)***	-4.1648 (0.00)***
Region: Southwest	-15.0382 (0.00)***	-5.1695 (0.00)***
Region: West Midlands	-2.1189 (0.00)***	4.1762 (0.00)***
Region: Yorkshire & Humber	5.2339 (0.00)***	3.2858 (0.00)***
Constant	4.6509 (0.01)***	1.4769 (0.01)*
Observations	532582	478093
R-squared	0.0597	0.0525

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. 2-way FE, the dependent variable come from 2-way FE regression of Table A8; 3-way FE the dependent variable come from 3-way FE regression (not reported).

Table A11: Effects of time invariant providers characteristics on length of stay

2nd stage tenure regression	2-ways FE	3-ways FE
Older people with dementia: Yes	6.8699 (0.00)***	6.7745 (0.00)***
Older people with mental disorders or infirmities: Yes	-1.3146 (0.00)***	-1.2218 (0.00)***
Adults with physical disabilities: Yes	-2.3466 (0.00)***	-3.6060 (0.00)***
Adults with learning disabilities and/or autism: Yes	6.6436 (0.00)***	8.2671 (0.00)***
Adults with mental disorders or infirmities: Yes	1.2871 (0.00)***	-0.3090 (0.00)
Older people detained under the Mental Health Act: Yes	-3.5435 (0.00)***	-4.7069 (0.01)***
Older people with learning disabilities and/or autism: Yes	-2.2701 (0.00)***	0.4756 (0.00)
Older people with autistic spectrum disorder: Yes	2.0782 (0.00)***	0.9944 (0.00)**
Older people with physical disabilities: Yes	-3.5111 (0.00)***	-2.8411 (0.00)***
Adults with dementia: Yes	-2.7593 (0.00)***	-2.9833 (0.00)***
Adults detained under the Mental Health Act: Yes	3.7149 (0.01)***	4.2047 (0.01)***
Main service: Care home services with nursing	0.0000 (.)	0.0000 (.)
Main service: Care home services without nursing	0.8506 (0.00)***	2.2490 (0.00)***
Main service: Home care services (Adults)	19.0863 (0.00)***	22.4143 (0.00)***
Main service: Any adult community care service	31.7725 (0.03)***	32.9571 (0.03)***
Main service: Any adult day care services	17.3085 (0.01)***	21.4925 (0.01)***
Main service: Any other adult home care service	19.8037 (0.00)***	24.6175 (0.00)***
Main service: Any other adult residential care service	21.0200 (0.01)***	25.4508 (0.01)***
Main service: Any other Services	37.0349 (0.02)***	38.1263 (0.02)***
Sector: Private sector	0.0000 (.)	0.0000 (.)
Sector: Local authority	1.5703 (0.00)***	2.0254 (0.00)***
Sector: Voluntary / Charity	0.7870 (0.00)***	-0.5165 (0.00)*
Other	3.0371 (0.00)***	5.3117 (0.00)***
Chain ownership: Yes	21.1641 (0.00)***	21.3391 (0.00)***
Constant	-25.3947 (0.00)***	-26.1071 (0.00)***
Observations	506195	455789
R-squared	0.1105	0.0938

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. 2-way FE, the dependent variable come from 2-way FE regression of Table A8; 3-way FE the dependent variable come from 3-way FE regression (not reported).

Table A12: Effects of local authority characteristics on length of stay in home care (£2015)

2nd stage tenure regression	3-ways FE	3-ways FE
Ethical Care Charter signatory: yes	4.3279 (0.00)***	4.5717 (0.00)***
Real living wage accredited LA: yes	-0.5051 (0.00)***	-0.3534 (0.00)
Ratio of 1 car owners to 3 or more cars owners	-0.0053 (0.00)	0.1223 (0.00)***
Ratio of 2 car owners to 3 or more cars owners	-0.3369 (0.00)***	-1.5918 (0.00)***
Unpaid care: 19 hours or less	1.6971 (0.00)***	-0.1427 (0.00)
Unpaid care: 20 to 49 hours	8.5081 (0.00)***	6.4620 (0.00)***
No. of private & voluntary providers	0.0383 (0.00)***	0.0393 (0.00)***
Block & spot	0.0000 (.)	0.0000 (.)
Framework	-0.1827 (0.00)	1.4397 (0.00)***
Framework & Spot	5.0841 (0.00)***	4.9244 (0.01)***
Preferred & spot	-9.4097 (0.00)***	-10.4319 (0.02)***

Spot only	-4.2123 (0.00)***	-4.3342 (0.00)***
Other	-1.8808 (0.00)***	0.3994 (0.00)
Commission 15-minute visits: yes	-3.0869 (0.00)***	-3.7382 (0.00)***
Constant	-21.5435 (0.01)***	-5.7067 (0.02)**
Observations	97633	13979
R-squared	0.2403	0.2052

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. 3-way FE the dependent variable come from 3-way FE regression; LA, local authority.

Results in the first column are based on the whole sample period (2015-2022). The second column results come from 2015 to 2017 sample only as the Unison data on contracting practices was collected in 2013.

Table A13: Decomposition of length of stay variance

Components	Shares	Sub-shares
Contribution of XB	39.80	
Contribution of individual heterogeneity	34.43	
— Unobserved individual heterogeneity		92.01
—Observed (job role, demographics)		7.99
Contribution of firm heterogeneity	19.66	
— Unobserved		76.66
— Observed (sector, type, service)		23.34
Unexplained variation	6.10	

Notes: As defined in Eq. 1, XB contains all time varying workers, providers and local authority-level variables including time fixed effects.

Table A14: Time variant drivers of training incidence

Training regression	OLS	CRE	2-way FE
FTE hourly pay (2015£)	-0.4367 (0.00)***	-1.1233 (0.00)***	-0.4501 (0.00)***
FTE hourly pay (2015£) squared	0.0077 (0.00)***	0.0045 (0.00)	0.0055 (0.00)**
Tenure (years)	1.8629 (0.00)***	1.8012 (0.00)***	2.4648 (0.00)***
Tenure (years) squared	-0.0531 (0.00)***	-0.0456 (0.00)***	-0.0626 (0.00)***
Age (years)	0.0914 (0.00)*	-0.1661 (0.01)	0.1291 (0.00)
Age (years) squared	-0.0013 (0.00)**	0.0011 (0.00)	-0.0030 (0.00)**
Experience (years)	0.4098 (0.00)***	1.0070 (0.00)***	0.4119 (0.00)***
Experience (years) squared	-0.0078 (0.00)***	-0.0104 (0.00)***	-0.0016 (0.00)
Number of contracted hours	-0.0387 (0.00)***	-0.1024 (0.00)***	0.0267 (0.00)*
Distance to work (miles)	-0.0179 (0.00)**	-0.0519 (0.00)***	-0.0298 (0.00)*
Sick leave: None	0.0000 (.)	0.0000 (.)	0.0000 (.)
Sick leave: Up to two weeks	3.6220 (0.00)***	1.4931 (0.00)***	1.1830 (0.00)***
Sick leave: More than two weeks	5.0558 (0.00)***	0.9287 (0.00)***	1.0857 (0.00)***

	(1)	(2)	(3)
Employment: Permanent	0.0000 (.)	0.0000 (.)	0.0000 (.)
Employment: Temporary	-1.6341 (0.00)***	-1.0531 (0.00)*	-0.9185 (0.01)
Employment: Other	-0.1088 (0.00)	-0.7398 (0.00)*	-0.6121 (0.00)
Job Status: Full-time	0.0000 (.)	0.0000 (.)	0.0000 (.)
Job Status: Neither of these	0.1602 (0.00)	-1.5407 (0.00)***	-0.7434 (0.00)
Job Status: Part-time	-1.2965 (0.00)***	-0.7580 (0.00)***	-0.0459 (0.00)
Disability: Yes	1.3099 (0.01)*	6.7979 (0.01)***	-2.4204 (0.02)
On zero hours: Yes	-4.9850 (0.00)***	-2.5319 (0.00)***	-0.5583 (0.00)
ASC qualification: Up to level 2	0.0773 (0.00)	-0.5662 (0.00)*	-0.1203 (0.00)
ASC qualification: Level 3 to level 5	0.4220 (0.00)	0.4442 (0.00)	-0.3058 (0.00)
ASC qualification: Level 6 to level 8	-0.1687 (0.01)	0.4136 (0.03)	0.6277 (0.03)
ASC qualification: No	0.0000 (.)	0.0000 (.)	0.0000 (.)
Number of starters in the last year	0.0024 (0.00)	-0.0038 (0.00)***	0.0013 (0.00)
Number of leavers in the last year	0.0404 (0.00)***	0.0170 (0.00)***	-0.0030 (0.00)
Number of vacancies	0.0237 (0.00)***	0.0007 (0.00)	-0.0004 (0.00)
Nurses as % of total staff	0.0239 (0.00)	-0.0997 (0.00)***	-0.0732 (0.00)***
Staff to resident ratio	0.0493 (0.00)***	-0.1312 (0.00)***	-0.0696 (0.00)*
Provider total staff	-0.0501 (0.00)***	-0.0046 (0.00)***	0.0141 (0.00)***
Overall CQC rating: Inadequate	0.0000 (.)	0.0000 (.)	0.0000 (.)
Overall CQC rating: Requires improvement	4.2053 (0.01)***	1.7915 (0.00)***	-0.2646 (0.00)
Overall CQC rating: Good	6.8588 (0.01)***	2.1261 (0.00)***	-0.3910 (0.00)
Overall CQC rating: Outstanding	11.1133 (0.01)***	3.6430 (0.00)***	-0.3054 (0.00)
Weekly unit costs nursing & residential care (100s, 2015£)	-0.2990 (0.00)***	-0.1710 (0.00)***	-0.0753 (0.00)*
Weekly unit costs nursing & residential care (100s, 2015£) squared	0.0019 (0.00)***	0.0009 (0.00)***	0.0003 (0.00)
Hourly rate for external home care (2015£)	-0.0769 (0.00)*	0.3250 (0.00)***	0.0512 (0.00)
Hourly rate for external home care (2015£) squared	0.0132 (0.00)***	-0.0052 (0.00)***	0.0019 (0.00)
Hourly rate for inhouse home care (2015£)	-0.0003 (0.00)***	-0.0000 (0.00)	-0.0000 (0.00)
Hourly rate for inhouse home care (2015£) squared	0.0000 (0.00)***	0.0000 (0.00)	-0.0000 (0.00)
Gross adult social care expenditure (1000s, 2015£)	0.0227 (0.00)***	0.0112 (0.00)	0.0500 (0.00)***
Gross adult social care expenditure (1000s, 2015£) squared	-0.0000 (0.00)**	0.0000 (0.00)	-0.0001 (0.00)*

	(1)	(2)	(3)
Gross mean annual pay (LA level, 100s, 2015£)	0.0093 (0.00)*	-0.0108 (0.00)***	-0.0073 (0.00)*
Gross 20th percentile annual pay (LA level, 100s, 2015£)	0.1831 (0.00)***	0.0301 (0.00)***	-0.0524 (0.00)***
Gross 3oth percentile annual pay (LA level, 100s, 2015£)	-0.1690 (0.00)***	0.0226 (0.00)**	0.0367 (0.00)***
Median house price in LA (1000s, 2015£)	-0.0270 (0.00)***	-0.0164 (0.00)***	0.0029 (0.00)
Median age in LA	-0.2894 (0.00)***	-0.3292 (0.00)***	0.1203 (0.00)
LA age-standardised mortality ratio	0.0071 (0.00)***	0.0026 (0.00)**	0.0088 (0.00)***
Unemployment rate in LA	-0.0541 (0.00)	-0.0546 (0.00)	-0.2261 (0.00)***
LA tax base (include ASC percept)	-0.0001 (0.00)	0.0006 (0.00)	-0.0011 (0.00)
year=2015	0.0000 (.)	0.0000 (.)	0.0000 (.)
year=2016	-1.1592 (0.00)***	-1.9041 (0.01)***	2.0664 (0.01)*
year=2017	-3.1722 (0.00)***	-1.9260 (0.01)	1.7497 (0.02)
year=2018	-3.1632 (0.00)***	-0.4206 (0.02)	3.0310 (0.02)
year=2019	-4.4680 (0.00)***	-1.3598 (0.02)	3.1552 (0.03)
year=2020	-3.6412 (0.00)***	-2.8013 (0.03)	-0.1148 (0.04)
year=2021	-4.6661 (0.01)***	-3.5457 (0.03)	-1.4424 (0.05)
year=2022	-6.9178 (0.01)***	-5.2574 (0.04)	-3.2287 (0.06)
Constant	216.7144 (0.26)***	332.4751 (0.30)***	160.4556 (0.86)
Workers fixed effects	no	no	yes
Providers fixed effects	no	no	yes
Provider specific time trend	no	no	yes
Observations	521546	662276	447397
R-squared	0.0623	0.1009	0.8926

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. OLS, Ordinary Least Square; CRE, Correlated Random Effects; 2-way FE, includes worker and provider fixed effects; LA, local authority.
The OLS and CRE regressions include all the variables reported in Tables A3 and A4 below.
All the regressions control for the number of recipients of different benefits, index of multiple deprivation, population size and number of jobs in each local authority.

Table A15: Effects of time invariant providers characteristics on training incidence

2nd stage training regression	2-way FE
Older people with dementia: Yes	-7.7388 (0.00)***
Older people with mental disorders or infirmities: Yes	2.5990 (0.00)***
Adults with physical disabilities: Yes	-1.1527 (0.00)***
Adults with learning disabilities and/or autism: Yes	-0.4356 (0.00)*
Adults with mental disorders or infirmities: Yes	-2.0799 (0.00)***
Older people detained under the Mental Health Act: Yes	-4.0006 (0.00)***
Older people with learning disabilities and/or autism: Yes	0.3373 (0.00)
Older people with autistic spectrum disorder: Yes	-7.8694 (0.00)***
Older people with physical disabilities: Yes	1.1624 (0.00)***
Adults with dementia: Yes	4.6072 (0.00)***
Adults detained under the Mental Health Act: Yes	5.8827 (0.00)***
Main service: Care home services with nursing	0.0000 (.)
Main service: Care home services without nursing	5.3357 (0.00)***
Main service: Home care services (Adults)	-0.8080 (0.00)***
Main service: Any adult community care service	-29.2760 (0.02)***
Main service: Any adult day care services	5.1029 (0.01)***
Main service: Any other adult home care service	-18.8851 (0.01)***
Main service: Any other adult residential care service	23.0303 (0.01)***
Main service: Any other Services	-8.2998 (0.02)***
Sector: Private sector	0.0000 (.)
Sector: Local authority	4.0179 (0.01)***
Sector: Voluntary / Charity	-3.4328 (0.00)***
Other	-4.9905 (0.00)***
Chain ownership: Yes	-6.3648 (0.00)***
Constant	6.1753 (0.00)***
Observations	365073
R-squared	0.1807

Notes: *** p<0.001, ** p<0.0 1, *** p<0.05. Cluster robust standard errors are in the parenthesis. 2-way FE, the dependent variable come from 2-way FE regression of Table A13.

Appendix 2: Work package 2 - provider characteristics

In which region does your organisation operate?	n	%
Northeast	25	5.4
Northwest	57	12.8
Yorkshire and Humber	51	11.4
East Midlands	50	11.2
West Midlands	58	13.0
Eastern	31	7.0
London	23	5.2
Southeast	66	14.8
Southwest	85	19.1
Total	446	95.5
What best describes your organisation?		
Part of local chain	55	12.1
Part of national chain	71	15.7
Single establishment	325	71.7
Total	452	96.6
How many workers are there in your organisation?		
1-249	447	95.8
250+	20	4.2
Total	467	100
Which services do you offer?		
Residential	218	46.7
Home	239	51.2
Other	10	2.1
Total	467	100
In which sector does your organisation operate?		
Statutory local authority	41	8.98
Private sector	346	74.1
Voluntary or third sector	3	0.6
Other / mix	71	15.2
Total	461	98.7
What is the CQC rating of your organisation?		
Inadequate	9	1.9
Requires improvement	42	9.0
Good	345	73.9
Excellent	1	0.2
Total	422	90.4
What is your basic hourly rate for care workers?	Mean (£)	*SD*
	11.04	1.58

Appendix 3: Work package 1/2 - composite variables for linked analyses

Element	Survey question
Work-life balance	Q29. Care workers can work at times that match their preferences for specific hours/ days
	Q30. Care workers are able to take time off at short notice (e.g. child sickness)
	Q31. Care workers get adequate notice of their rotas/shifts
	Q35 (d) Offering flexible hours/ hours to suit worker preference
	Q27 (a) They are offered more convenient working times (optional)
Control over work	Q32. Care workers have discretion over how they do their work within the agreed care plan
	Q33. Care workers have control over the pace at which they work within the agreed care plan
	Q34. Care workers are involved in decisions over how their work is done (e.g. in a staff meeting)
	Q35 (f) Allowing care workers to exercise discretion over how to provide care (within care plan)
"Good" HR practices	Q35 (a) Offering opportunities for training
	Q35 (c Offering opportunities for internal promotion
	Q35 (g) Providing health and well-being support
	Q35 (h) Developing diversity and inclusion policies
	Q27 (g) They cannot gain promotion
	Q27 (f) They lack management and organisation support
	Q25. Care workers usually seek structured career pathways and promotion
	Q52. What kind of contracts do you offer for care workers?
	High levels of training and completion of qualifications?
High investment/ strategic use of reward/ total reward	Q16. In your organisation, the following are eligible for performance related payments/ bonuses
	Q17. Do you pay for your care workers DBS checks
	Q18. Do you pay for your care workers uniforms
	Q19. Do you pay care workers for induction training
	Q 20. Do you pay for care workers attending any other mandatory or non-mandatory training?
	Q14. (but home care only) For hourly paid care workers, what happens if there is a waiting time between two appointments?
	Q15. (home care only) For hourly paid care workers do you pay if the time spent with care recipient exceeds the scheduled time?
	Q35. (b) Pay increases
	Q4 (a) Individual performance
Worker voice/ pluralist/ involvement agenda	Q22 (g)To respond to trade union demands

|	
	Q22 (b) To improve the overall mental and physical wellbeing of care workers
	Q11. Is there a staff association or similar (e.g. trade union) recognised by management for negotiating pay for any sections of the workforce at this workplace
Public relations/ stakeholder business case	Q22 (d). To enhance your brand and reputation among care workers and care recipients
	Q22 (f).To meet concerns from investors
	Q22 (c To improve the performance of both the organisation and its people
	Q45. What is the CQC rating of your organisation?
	Q36 (a) Your workplace's financial performance
	Q36 (b) Your workplace's labour productivity
	Q36 (c) Your workplace's quality of service
External competition	Q24 (a) Competition from NHS
	Q24 (b) Local competitors other than NHS (e.g. supermarkets)
	Q24 (g) Shortage of qualified workers
	Q24 (i) Local market conditions (e.g. when job openings are plentiful and available workers are scarce)
	Q26. (a) to (d) inclusive
	Q.27 (b) They are offered better pay
Nature of care work	Q25 (b) It is difficult to retain care workers (in other words, hold onto them)
	Leave because of; offered more convenient working hours
	Leave because of; offered better pay
	Leave because of; unsuitable for work
	Leave because of; family responsibilities
	Leave because of; relocation
	Leave because of; lack management and organization support
	Leave because of; cannot gain promotion
	Leave because of; lack professional recognition
	Leave because of; society recognition
	Leave because of; care work is demanding
	Leave because of; working conditions are difficult
	Leave because of; reluctant to do training

Appendix 4: Work package 3 - provider characteristics

	Sector	Service	Employee numbers	Care worker numbers	Senior care worker numbers	Ownership	LA/self funding %	Commissioning status	Pay scales	Care worker pay rates	Senior care worker pay rates	Contract types	Visa sponsor
P1	LA spin out	Supported living	420	300	65	LA	86/14	Block	No	£11.39	£14.17	GHC	No
P2	Charity	LD	2000	c1700	N/A	Charity	100/0	Spot	No	£10.42 (£11 enhanced)	N/A	GHC	No
P3	Private	LD	32	20	4	Family	100/0	Spot	No	£10.50	£11.20	GHC	No
P4	Charity	R&N care	46	31	7	Charity	92/8	Spot	No	£11.89	£13.98	GHC 80%/ZHC 20%	Yes
P5	Private	Home care	45	31	5	Private	12/88	Spot	No	£12.50	£13.00	GHC 50%/ZHC 50%	Yes
P6	Private	Home care	102	62	19	Private	10/90	Spot	Yes	£14.50 - £16.00	£16 - £18.25	Guaranteed	No
P7	Private	R&N care	619	327	65	Private	75/25	Spot	Yes	£10.54 - £11.70	£11.92 - £14.21	GHC 85%/ZHC 25%	Yes
P8	Private	LD/ home care	700	c650	N/A	Employee owned	100/0	Spot - mainly	No	£11.50	N/A	GHC (shifts)	Yes
P9	Private	Home care	91	86	4	Private	75/25	Spot	Yes	£10.75 - £10.93	£11.40 - £11.80	GHC 25%/ZHC 75%	Yes
P10	Private	R&N care	296	139	34	Family	44/56	Spot	Yes	£10.42 - £11.50	£11 - £11.90	GHC 90%/ZHC 10%	Yes
P11	Private	Home care	850	C800	N/A	Private	5/95	Spot	No	£11.70	N/A	ZHC	No
P12	Private	Home care	69	59	3	Family	80/20	Spot/ framework	No	£11.00	£11.50	GHC	Yes
P13	LA spin out	Supported living	252	170	79	Employee owned	92/8	Block	No	£11.29	£12.56	GHC 75%/ZHC 25%	Yes
P14	Private	Home care	40	c35	N/A	Family	90/10	Spot	Yes	£10.75 - £10.95	N/A	ZHC	Yes
P15	Private	Home care	78	60	12	Private	0/100	N/A	No	£11.00	£11.30	GHC 50%/ZHC 50%	No
P16	Private	Residential care	25	17	2	Family	40/60	Spot	No	£11.20	£12.80	GHC	Yes
P17	Private	R&N care	356	322	34	Family	54/46	Spot - mainly	Yes	£10.50 - £11.00	£11.50	GHC 95%/ZHC 5%	Yes
P18	Private	Residential care	160	No info	No info	Family	70/30	Spot – mainly	No	£10.90	£11.99	GHC	Yes
P19	Private	R&N care	c.1900	c.11000	c.1500	Equity	75/25	Mixed	Yes	£10.47 - £12.50	£11.37 - £13.00	GHC 95%/ZHC 5%	Yes
P20	Private	R&N care	124	105	19	Family	61/39	Spot	Yes	£10.80 – £11.40	£11.80 – £12.30	GHC	Yes
P21	Private	Home care	12000	No info	No info	Private	Not stated	Not stated	No info	No info	No info	No info	Yes
P22	Private	All services	4000	No info	No info	Family	Not stated	Spot – mainly	No	£11.00	N/A	GHC (some shifts)	Yes

Appendix 5: Work package 3 - care worker demographics

Participant number	Gender	Job role	Service	Geographical location	Nationality and ethnicity	Age
CW01	M	Senior care worker	Home care	Devon	Kenyan	38
CW02	M	Care worker	Home and residential care	Devon	Ugandan	32
CW03	F	Care worker	Residential care	Bedfordshire	White British	52
CW04	M	Care worker	Home care	London	USA/South African	28
CWO5	F	Care worker	Home care	Wigan	White British	36
CW06	F	Care worker	Residential care	Southwest	UK	31
CW09	F	Care worker	Home and residential care	Bolton	White British	40-50 age
CW010	F	Care worker	Day care centre	Devon	White British	20-30
CW11	F	Care worker	Day care centre	Norfolk	White British	45
CW12	M	Care worker	Day care centre	Shropshire	White British	30
CW 13	M	Care worker	Home care	Surrey	British Asian	43
CW 14	F	Care worker	Home care and supported living	Midlands	White British	30
CW15	F	Care worker	Home care	Kent	White British	30-40
CW16	F	Care worker	Residential care	Lancs	White British	24
CW17	M	Care worker	Home and residential care	Midlands	White British	53
CW18	M	Care Worker	Learning disability day service	Manchester	White British	31
CW20	F	Care Worker	Residential care	Manchester	White British	24
CW 21	F	Care worker	Residential care and supported living	Southwest	White British	45
CW22	F	Care worker	Home care and supported living	Cheshire	White British	35
CW23	F	Senior Care worker	Home care	Cumbria	White British	50

Table A16: payment for DBS checks, uniforms, and induction training

Do you pay for your care workers DBS checks?	n	%
Yes	263	56.3
No, care workers pay	93	19.9
Employer pays but care workers pay if they leave within 12 months	74	15.8
Care workers pay but are reimbursed if they stay > 6 months	32	6.9
Total	462	99.0
Do you pay for your care workers uniforms?	n	%
Yes	265	56.7
No, care workers pay	22	4.7
Shared	15	3.2
Employer pays but care workers pay if they leave within 12 months	16	3.4
Care workers pay but are reimbursed if they stay > 6 months	1	0.2
Total	319	68.2
Do you pay care workers for induction training	n	%
Yes	396	84.8
No, care workers pay	5	1.1
Shared	6	1.3
Employer pays but care workers pay if they leave within 12 months	39	8.4
Care workers pay but are reimbursed if they stay > 6 months	2	0.4
Total	448	96.0
Do you pay for care workers attending any other mandatory or non-mandatory training?	n	%
Yes	396	84.8
No, care workers pay	5	1.1
Shared	11	2.4
Employer pays but care workers pay if they leave within 12 months	41	1.9
Care workers pay but are reimbursed if they stay > 6 months	0	0
Total	453	89.2
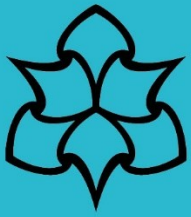
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