

# The National Minimum Wage, earnings and hours in the domiciliary care sector

Ioulia Bessa

Chris Forde

Sian Moore

Mark Stuart

February 2013

# Acknowledgements

The authors of this report would like to thank all those who spared time to be interviewed as part of this research. We also acknowledge the support of the Low Pay Commission for the research.

#### Contents

Execu	itive Summary	4
1	. Introduction	9
1.1	Background and policy context	9
1.2	Research objectives	12
1.3	Structure of the report	12
2.	Research Methods	13
2.1	Introduction	13
2.2	The National Minimum Data Set-Social Care (NMDS-SC)	13
2.3	Limitations of the dataset	15
2.4	Key variables	16
2.5	The Case studies of local authorities	19
3. the N	Wages, hours and conditions of work for domiciliary care workers: findings from MDS-SC	21
3.1	The domiciliary care workforce	21
3.2	Care workers at or below the NMW	23
3.3	Changes in the composition of the care workforce	28
3.4	The importance of hours	30
3.5	Multivariate analysis of pay and hours	32
3.6	Comparison between these findings and those in other datasets	36
4.	The case studies	38
4.1	Introduction	38
4.2	Shaping the market	38
4.3	Commissioning arrangements-the move to framework agreements	40
4.4	Charge rates	43
4.5	Recruitment	45

4.6 Hourly pay	46
4.7 Compliance with the National Minimum Wage	48
4.8 Pay and hours	48
4.9 Visit lengths and travel time	51
4.10 The payment of a Living Wage	54
4.11 Training and workforce development	55
4.12 Management and Procedures	57
4.13 Alternative commissioning and the future	58
5. Conclusions and Recommendations	61
References	64
Appendices	66
Appendix 1: Logistic regression results on below National Minimum Wage indicator	67
Appendix 2: Logistic regression results on distance of hourly pay from NMW	69
Appendix 3: Logistic regression results on weekly pay	73
Appendix 4: Logistic regression results on zero-hours contracts	76
Technical Appendix	80

#### **Executive Summary**

#### Quantitative analysis of the National Minimum Dataset for Social Care (NMDS-SC)

- The analysis is based upon 265,683 records for adult domiciliary care workers contained in the National Minimum Data Set for Social Care (NMDS-SC) for England between 2008 and 2012, supported by five case studies of local authorities highlighting the arrangements for the commissioning of domiciliary care;
- The dataset shows that the vast majority of domiciliary care workers (84%) were female and 20 per cent were born outside the UK. Nearly three quarters (72%) worked for private providers, with just over one in ten (13%) employed directly by public providers and the same proportion (13%) by the not-for-profit sector;
- The NMDS-SC shows that without adjusting for unpaid travel time, the median pay for all domiciliary care workers (including managers and senior care workers) was around 15 per cent above the NMW. However, between October 2008 and April 2012, 3.4 per cent were paid at or below the NMW, with 1.1 per cent paid below. In individual periods between these dates the proportion paid below the NMW varied between 0.4 and 0.8 per cent, but this increased between October 2011 and April 2012, to 2.5 per cent (6.1 per cent paid at and below). This suggests that a relatively small but possibly rising proportion of domiciliary care workers were paid under the NMW;
- The figures for care workers only (excluding managers and senior care workers) were very similar to those for the domiciliary workforce overall, with 3.4 per cent paid at or below the NMW and 1.0 per cent below between October 2008 and April 2012. Once again there had been an increase between October 2011 and April 2012, with those below the NMW rising to 1.9 per cent and those at or below to 5.6 per cent. For managers the proportions below the NMW figures ranged from 0.2 and 1.3 per cent between 2008 and 2011; rising to 2.9 per cent in 2011-12. The proportion of senior care workers paid under the NMW ranged from zero to 0.3 per cent between 2008 and 2011, but in 2011-12 this rose substantially to 10.1 per cent. This has occurred at the same time as a marked reduction in the proportion of senior care workers and increased convergence of the median hourly rates of care workers and senior care grades, and possibly a consequent freezing of pay for these roles, although we have no way of directly testing this in the study;
- The proportion of the domiciliary care workforce at or below the NMW was statistically significantly higher in October 2011-April 2012 than in both previous periods (October 2010 March 2011 and April 2011 to October 2011). Whether this reflects a longer-term trend remains to be seen, although the case studies show that this increase comes at a time of increased volatility in the sector, due to budgetary pressures, changes to commissioning processes and changing employer strategies. This finding suggests increased pressure on all employees (including managers and senior care workers) in this sector, although eight out of ten of those at or below the NMW are care workers, a much higher proportion than for senior care workers;

- In 2011-12 overall over half (56%) of domiciliary care workers were employed on zero-hours (also known as permanent variable hours) contracts. Eight out of ten workers employed by private providers were on zero-hours contracts. The proportions of those on zero-hours contracts have fluctuated between 2008 and 2012, although there looks overall to be a clear upward trend. The volatility around this trend may again reflect turbulence in the sector during this period, with commissioning processes within constrained budgets impacting upon employer strategies;
- Workers who have completed their induction or training are less likely to be paid at or below the NMW than workers who have not. This contrast has intensified since April 2011. Similarly, qualified workers are less likely to be paid at or below the NMW than workers without qualifications;
- The composition of the care workforce has shifted over recent years with the ratio of senior care workers to care workers declining markedly from seven per cent of the workforce (excluding managers) in 2008, to four per cent in 2012. There is volatility around this downward trend, which may reflect periodic pressures on the commissioning process;
- Multivariate analysis reveals that, controlling for a range of personal and employment characteristics, being employed on a zero-hours contract is, in some time periods, statistically significantly associated with being paid less than the NMW, although this association was not statistically significant in the most recent time period;
- Whilst hourly rates are not significantly different for those on zero-hours, during the period October 2011-April 2012 contracted working hours were positively associated with hourly pay which implies that care workers with fixed contracted hours are in a more favourable position. In line with this, weekly pay for those on zero-hours is significantly less than for those on fixed contractual hours;
- The study confirms the divergence between contractual hours and actual (and indeed normal) working hours. Median weekly hours for those on zero-hours contracts was 24 compared to 30 for those not on zero-hours contracts, yet median weekly *contractual* hours *overall* were 20 – whilst the divergence is sharpest for those on zero-hours contracts it affects all workers;
- Multivariate analysis reveals that non-British workers are employed on lower average hourly
  rates than their British-born colleagues. In terms of hourly rates there are no significant
  differences by gender. However, analysis for weekly pay tells a different story; non-British
  workers are paid more per week than their British colleagues, whilst male workers earn
  higher weekly pay than females in both cases due to more hours worked. Age is positively
  associated with weekly pay throughout all periods. These differences between hourly and
  weekly pay underline the importance of hours worked;
- The multivariate analysis shows that care workers employed by public providers are generally paid at a higher hourly rate than those employed by private providers after

controlling for a range of other factors. Those employed by private providers are more likely to be paid at or below the NMW than those working for third sector/voluntary providers;

- Similarly, those working for public sector and non-for-profit providers generally have higher weekly pay compared to their private sector counterparts. However, the gap between those working for public and private providers decreased in 2011, which may reflect the transfer of domiciliary care work to the private sector even though overall average hours have declined;
- Other studies (Hussein 2010a, 2010b, 2011) have also utilised the NMDS-SC to look at wage rates. In comparison we find that lower numbers of workers are paid at or below the NMW; however, these results are not directly comparable with those of Hussein (2010a, 2010b). Firstly, the focus of the present study is on domiciliary care rather than the wider social care sector including residential care. Secondly, our calculations should be seen as providing a conservative or lower bound estimate of numbers under the NMW, since we make no assumption about the inclusion (or not) of payment for travel time in hourly rates. In addition our study looks at weekly earnings, which reflect not just hourly rates, but also hours worked here we point to the sector's dependence on zero-hours contracts.

#### The Case studies

- The case studies suggest that there is a move away from guaranteed volume block contracts with discounted prices (cost and volume), to spot or framework agreements. In part this reflects the drive to individualised care through personal budgets or direct payments; although the case studies suggest that whilst there has been some move towards this it is still partial.
- The introduction of Framework Agreements<sup>1</sup>, whereby providers must be registered in order to then submit tenders for care packages, may involve the introduction of a single charge rate for all categories of care and client groups on a 24 hour, seven days per week basis with payment for contact time only. This places the onus on the provider to pay any enhancements for weekend and evening rates and for travel time - but there is a disincentive to do so unless there are substantial staff shortages in the locality;
- Whilst the inclusion of providers upon a Framework may be on the basis of quality, the allocation of care packages, which may be achieved through micro and/or e-tendering, is likely to be largely on the basis of cost;
- Across the case studies providers were unhappy about the rates that they could pay their workers and asserted that the move away from guaranteed volume meant they had to employ care workers on zero-hours contracts they believed that this affected the quality of

<sup>&</sup>lt;sup>1</sup> Local authority documentation states that a framework agreement is a general term for agreements with a provider, or providers, which set out terms and conditions under which specific purchases can be made throughout the term of the agreement. They are used for products, works or services where requirements are needed on a repeated basis, but where the exact quantities are unknown. They are particularly useful, because once a framework is established, the process for awarding individual purchases is faster and less costly than would be the case if the requirement was procured separately.

the service they could provide. They reported difficulties in recruitment and an awareness that rates of pay in domiciliary care could not compete with those at major supermarkets;

- Service specifications necessarily focus upon the quality of care and rights for service users. They outline the expectations of workers with regard to the provision of the service, but are generally silent about the treatment that workers might expect. None of the local authorities in the case studies specified payment of the NMW in their contracts or systematically monitored compliance;
- Despite often being employed on zero-hours contracts care workers generally waived their rights under the Working Hours Directive and often could not predict the amount of hours they worked on a weekly basis. Regularly working additional hours above contractual hours was perceived to affect access to sick pay and paid holiday entitlement, whilst there were incentives to keep employees below National Insurance thresholds and this could affect workers' rights to regular benefits;
- Whilst a number of the case study authorities were attempting to move away from 15 minute visits these were still in evidence; there was variation as to whether enhancements were paid for short visits which might compensate for travel time between visits;
- In the case studies it was assumed that travel time would be costed within the overall hourly charge rate, but also some awareness by care commissioners that charge rates would not include travel time between visits. In one case a recommendation had been made to a Local Authority Cabinet that travel time should be costed into hourly charge rates, and that tender documents would ask providers to consider this when submitting tenders;
- Electronic monitoring was increasingly a feature of domiciliary care work across the case studies; this may facilitate 'pay and charge' whereby staff get paid for the minutes between logging on and off, with implications for care workers' pay;
- A number of the case study authorities were considering introducing a living wage for staff, including for domiciliary care workers on contracts and there are no barriers to specifying this in contracts. However, there was evidence that this could be accommodated by the removal of enhancements for evening and weekend working, which could mean an actual reduction in weekly earnings for care staff;
- There was evidence that pressure upon rates and staffing was squeezing time for training and senior staff resources to support accreditation. It also discouraged providers from taking on apprentices;
- A number of providers and workers expressed the view that care workers were being asked to take on extra tasks and responsibilities, including in some cases medical procedures that they were not trained to do;

- Lone working and isolation was a real issue for care workers and this is intensified by the reduction in supervisory staff, it also undermines the development of worker voice and representation;
- The focus upon safeguarding involves increasing regulation of staff by authorities and in some cases safeguarding procedures may pre-empt staff disciplinary procedures which guarantee care workers' rights to representation;
- Despite attempts to diversify provision a number of respondents anticipated that Framework agreements would promote concentration of supply in the market and that smaller providers would not be able to survive.

#### 1. Introduction

'I think everybody, including myself who works here, thinks that care workers are underpaid, without a shadow of a doubt we think they're underpaid ...and I think there's a clear correlation between the rates of pay and the quality of service. There's absolutely a correlation and personally speaking I think we contribute because there is a clear drive at the moment because of all the circumstances for councils to drive costs down, drive quality up ... But there is absolutely a correlation for me between what we pay and what we get.' [Contracts manager for local authority]

#### 1.1 Background and policy context

In the context of an ageing population (Office for National Statistics, 2012) the domiciliary care sector is one of continuing growth. Skills for Care (2010) reported that there were 675,000 jobs in domiciliary services in England in 2009, and the UK Commission for Employment and Skills (2010) has identified it as a sector in which there is likely to be expanded demand for care assistant roles. The Low Pay Commission (LPC) defines social care as a low-paying sector with a large number or high proportion of minimum wage workers. According to their research the proportion of jobs paid at or below the Adult Minimum Wage increased from 6.2 per cent in 2009 to 7.9 per cent by 2011 (Low Pay Commission, 2012: 39).

The Local Government and Public Involvement in Health Act 2007 underpinned the role of commissioning in public service delivery, promoting markets in public services and encouraging diversity in provision. This has seen the decline of 'in-house' care and the directly employed care workforce (Skills for Care, 2010), a trend that is reinforced by the individual purchasing of care, (where service users are directly or indirectly given their own budget and control their choice of care service through the local authority). In 2011 the Equality and Human Rights Commission (EHRC) published its inquiry into older people and human rights in home care. This looked at whether the human rights of older people wanting or receiving care in their own homes in England are fully promoted and protected. Its report emphasised that home care providers are highly dependent on local authority contracts. Just over half of independent sector providers do 80 per cent or more of their work for local authorities. There are now almost 6,000 registered home care providers – ranging from large national private and voluntary sector organisations with multiple branches to small providers often operating from a single office. The vast majority (84%) of publicly funded home care is provided by private and voluntary organisations commissioned by local authorities.

Budgetary cuts have intensified pressures on local authority contracts for homecare. A survey by Community Care (16.2.11) found that two thirds of 238 social care providers had had their fees cut by Councils in 2010-11, threatening to force some providers out of business - the vast majority expected further cuts. The UK Homecare Association (UKHCA), which represents homecare providers from the independent, voluntary, not-for-profit and statutory sectors, has raised a number of issues about the impact of commissioning on workforce pay in the context of cuts to adult social care budgets and reduced or frozen fees (submission to LPC, September 11 2011). A survey of its members found that prices are constrained and suggested that there is increasing pressure on what is costed in contracts, which may involve no costing of payment for travel costs and time, training,

accreditation, supervision and induction time for workers. This means that local authorities effectively pay only for 'contact time' with the commissioning process resulting in shortened visit lengths. The UKHCA has argued that this is having an impact upon recruitment and retention and financial viability as well as on training and accreditation. The UKHCA's 2012 commissioning report 'Care is not a commodity' highlights:

- Short homecare visits being commissioned by councils to undertake intimate personal care, with risks to the dignity and safety of people who use services;
- Continued downward-pressure on the prices paid for care, where lowest price has overtaken quality of service in commissioning decisions;
- Contracting arrangements which have resulted in visit times and the hourly rates paid for care as the decisive factors in the viability of the sector.

In terms of short homecare visits their survey emphasised the persistence of not only 15 minute slots (ten per cent of homecare visits commissioned by councils), but also 16-30 minute visits which accounted for approaching two thirds (63%) of commissioned visits. The report also discusses the increasing trend towards 'minute by minute' charging supported by electronic monitoring and predicts that these processes will pose 'risks to providers' ability to comply with the NMW regulations and providers' financial viability' (UKHCA, 2012). The UKHCA has suggested that the rules for calculating the NMW are difficult to interpret because of the episodic nature of homecare:

'A simple summary would be that workers' pay, when divided by the time spent in the service user's home and applicable travel time should be equal to, or above, the prevailing rate of NMW. In addition, any out-of-pocket expenses incurred by the careworker (e.g. petrol and vehicle depreciation) incurred while working and not reimbursed, must be deducted'.

The Low Pay Commission's 2012 report reiterated issues detailed in its 2011 report about compliance with the NMW in the provision of home care. It drew attention to the commissioning of home care by local authorities and the possibility that care workers were paid 'on the basis of payment for visit contact time only', with shorter - 15 minute and 30 minute - visits increasing. While providers may be paying an average hourly wage above the NMW, they may not be paying for travel time between visits. In March 2012 the Department for Business, Innovation and Skills (BIS) issued guidance on travel time stating that the NMW must be paid for time when the worker is 'required to travel in connection with their work' and that 'any rest breaks taken during the time the worker is travelling count as time worked'. The Low Pay Commission has recommended and the government accepted that:

'The commissioning policies of local authorities and the NHS should reflect the actual costs of care, including the NMW'.

The EHRC Inquiry concluded that commissioning bodies have considerable scope to influence the way care services are organised and delivered, but that in practice commissioning documents 'only superficially' address human rights issues with few substantive requirements. In the EHRC's survey, a third of local authorities had negotiated contracts on lower payment terms in the previous 12 months and a further 19 per cent expected to do so in the following 12 months. Around two thirds

of providers in their survey doubted that they could promote and protect human rights for clients under the rates paid by local authorities in rushed visits. There were also concerns about local authorities appointing fewer larger providers at low rates, with smaller higher quality providers being displaced. Although the EHRC report focusses upon the human rights of older people it does highlight the relationship between the quality of care and the terms and conditions of care workers:

'Although the National Minimum Wage (NMW) Regulations do not require workers to be paid for travelling time, their pay when averaged over all qualifying working hours must be at least the NMW level. Qualifying working hours for these purposes includes time spent travelling between visits. It is estimated that travelling time between visits adds approximately 20 per cent to a care worker's paid time, which would imply a minimum hourly pay rate from 1 October 2011 of £7.29 to meet NMW levels'.

Women predominate in the domiciliary care workforce, with migrant workers also forming a substantive proportion particularly in London (Skills for Care, 2010). The EHRC concurs that:

'There is a lack of investment in care workers, influenced by commissioning practice and the workforce being predominantly female and part time, leading to low pay and status, in sharp contrast to the level of responsibility and skills required to provide quality home care. Poor pay and conditions also affect staff retention, causing a high turnover of care workers'.

The EHRC report noted that only a very small number of the local authority service specifications made any reference to the terms and conditions of home care workers, and only one mentioned that pay rates should be above the NMW to take travelling time into account. It recommended that before October 2012 local authorities should review their policies and practice including examination of:

'The extent to which their commissioning supports the delivery of care by a sufficiently skilled, supported and trained workforce'.

In July 2012 the Department of Health published the 'Caring for our future: reforming care and support' White Paper, which 'sets out the vision for a reformed care and support system'. This raised issues about the quality of care, which was described as 'variable and inconsistent'. The government committed itself to 'put in place more training and development opportunities, so that people are confident that the care workforce will be compassionate and sensitive to their needs'. Key actions included training more care workers to deliver high-quality care and to double the number of care apprenticeships to 100,000 by 2012, but also to 'place dignity and respect at the heart of a new code of conduct and minimum training standards for care workers'. Importantly, the report also ruled out 'contracting by the minute', which it stated 'can undermine dignity and choice for those who use care and support'.

The White Paper highlights the implications of 'prescriptive commissioning practices of some local authorities' and states its belief that 'commissioning practices which put tight constraints on how care and support is provided are unacceptable and cannot be part of the reformed care and support system'. These include 'specifying particular tasks that are unrealistic to be carried out in a 10-to 15-minute home care appointment', which 'also risk disempowering care workers'. For the government,

good commissioning should be measured on the basis of outcomes, including the experience of service users and carers. In the White Paper the Department of Health committed itself to:

# 'Working with the Low Pay Commission and local authorities to understand and challenge the reasons behind cases of non-payment of the minimum wage by employers to care workers'.

# 1.2 Research objectives

Within the policy context outlined above the research documented here evaluates the impact of the National Minimum Wage (NMW) on what has been described as a monopsony market in domiciliary care. To what extent has the NMW become inscribed as a benchmark for pay in adult domiciliary social care and, in the context of commissioning and public spending constraints, has this meant a reconfiguration of pay and hours? While it is clear that social care is a low paying sector, there is less evidence of the impact the NMW has had on the labour market for care. In particular there is little research on the relationship between the NMW and the hours, earnings and employment of domiciliary care workers. This is of importance in a period of recession when cuts in local authority budgets are placing pressure on contracts and providers.

The overall objectives of the study were to:

(i) Map the extent to which the National Minimum Wage has become the benchmark for hourly pay in domiciliary care, reflecting changes to the rate between 2008 and 2011;

(ii) Examine the extent to which there has been a reconfiguration of pay and hours over a period in which domiciliary care has increasingly been outsourced to the independent sector and the pressure upon contracts has increased;

(iii) Assess the impact of any reconfiguration upon the earnings and working arrangements (including increased reliance on zero-hours) of domiciliary workers over time;

(iv) Explore the impact of the contracting process on paid induction and NVQ training, accreditation and supervision and, related to this, on workforce composition and the ratio of senior care workers to care workers.

# 1.3 Structure of the report

The remainder of the report is structured as follows. In Chapter 2, we outline the methodology used in the research project, including a discussion of the NMDS-SC dataset, and the five case study sites. In Chapter 3, we report the findings from the quantitative analysis of the NMDS-dataset. Chapter 4 provides an analysis of the case studies, whilst Chapter 5 provides some conclusions and recommendations.

## 2. Research Methods

#### 2.1 Introduction

The research utilises both a quantitative and qualitative approach, to ensure triangulation and avoid common method variance which may result from same respondent studies. It comprises:

- Firstly, longitudinal analysis of raw data from the National Minimum Data Set Social Care (NMDS-SC), managed by Skills for Care for the Department of Health.
- Secondly, the use of case studies: to track and illuminate the tendering process for the most recent domiciliary care contract in five local authorities; to develop a more detailed understanding of some of the issues raised in the quantitative part of the research; and to explore the process of commissioning and its effects on wages and outcomes.

## 2.2. The National Minimum Data Set – Social Care (NMDS-SC)

The NMDS-SC is a rich national data set providing information on the pay and conditions of care workers, including those employed by a substantial sample of domiciliary care providers in both the public and private sector between 2008 and 2012 (see Appendix 5 for more details). This dataset provides a unique opportunity to analyse changes in hourly pay and earnings, hours (contracted, additional and total), working arrangements and workforce characteristics. A key benefit of this dataset is that it contains establishment level data, along with detailed individual-level data on workers within these establishments. Thus, offering the potential to control for a range of factors which might determine pay outcomes and the relationship between pay, hours and income. Existing analysis of pay levels and labour turnover (Hussein and Manthorpe, 2011; Hussein, 2010a, Hussein, 2010b), have offered some insight into pay in the care sector, but have not looked in detail at the domiciliary care workforce. Other datasets such as ASHE and the Labour Force Survey are used more frequently to look at pay, but not only are these based on much smaller samples of undifferentiated care workers, they do not provide the detail on the domiciliary care workforce that can be found in the NMDS-SC dataset. The relationships between pay and hours in this sector thus remain relatively under-explored in the literature to date. The NMDS-SC is thus a relatively underused dataset which has the potential to produce genuinely new insights into the impact of the NMW and low pay within domiciliary care. The quantitative analysis aimed to:

- (i) Identify how far the NMW has become a benchmark, and if there is variation, what organisational characteristics predict this;
- (ii) Establish, controlling for workplace and individual level characteristics, the relationship between the NMW and hours worked, and working arrangements (zero-hours);

The NMDS-SC includes information on care workers working in a wide range of job roles and at different professional levels (e.g. care workers, senior care workers, managers and professionals). The data made available at the time of the research by Skills for Care was from 2008 to April 2012. The NMDS-SC dataset is updated monthly and providers upload details of their workforce and are incentivised by Skills for Care to keep records up-to-date (for example, completion of workforce)

details is required to access benchmarking data and certain skills funding). The data uploaded to the NMDS-SC are in two parts: employee and provider. NMDS-SC matches the establishment level data to individual records, and it is this resultant individual based dataset that is used in this research. Despite limitations (see below) this dataset is increasingly recognised as one which can provide a robust picture of the social care workforce – Skills for Care state that it is recognised as the 'leading source of workforce intelligence for adult social care' (NMDS-SC briefing 19, 2012). They estimate that there are around 1.25 million workers in the sector and that in 2012 the NMDS-SC dataset had entries for over 750,000 individuals. In total 27,357 establishments are covered, categorised according to size: micro, small, medium and large. The majority of the participant establishments are small (51%), and 30 percent of those are micro. Only 0.6 percent of the participant establishments are large<sup>2</sup>. Out of these 27,357 the largest proportion (13.7 percent) are domiciliary care establishments and this is reflected in the distribution of employees (27.2 per cent of the total number of employees covered by the dataset are domiciliary workers in adult services). Domicilary care workers are concentrated in medium (63%) establishments, with one in five (21%) in small, just over one in ten (12%) in large and four per cent in micro establishments. Our research focussed upon these domiciliary care workers and two cuts of the dataset each year were utilised, for March and September. This resulted in nine separate smaller datasets on which the study is based: (1) up to March 2008; (2) April 2008 to September 2008; (3) October 2008 to March 2009; (4) April 2009 to September 2009, (5) October 2009 to March 2010; (6) April 2010 to September 2010; (7) October 2010 to March 2011; (8) April 2011 to September 2011 and (9) October 2011 to April 2012. The reasoning behind the choice of these cut-off points was to capture the full impact of the uprating of the NMW in October of each year and additionally to include a mid-year point as this was considered crucial for comparative analytical purposes (accounting for delays in uprating and in reporting uprating), to see whether changes to the NMW had an effect at different points during a given year. Moreover, creating smaller datasets with specific time frames was necessary in order to remove duplicate overlapping information for individual employees and to therefore examine the longitudinal effect of the NMW for individuals. Further details on overlapping cases are provided in the Technical Appendix at the end of the report. Table 1 provides some detail on the variables used in the study.

The study isolated a particular group of workers in an attempt to explore key explanatory variables:

- a) The analysis focused on domiciliary care workers who work with adults. For the descriptive analysis we look at the full domiciliary care workforce. This workforce comprises care workers, senior care workers (typically with supervisory responsibilities) and other managerial/professional staff. For the multivariate analysis we focus on care workers only.
- b) Only employees over 21 years old were included, so that the study could focus on a single minimum wage rate (excluding apprentices or students)<sup>3</sup>.
- c) With the exception of the variable 'size', which is only available in the provider dataset, the employee datasets were used in the multivariate analysis.

<sup>&</sup>lt;sup>2</sup> This militates against some of our findings reflecting organisational size.

<sup>&</sup>lt;sup>3</sup> The analysis took into account the fact that those aged 21 were not covered by adult rate until October 2010.

#### 2.3 Limitations of the dataset

The NMDS-SC dataset was chosen because, unlike existing large-scale publicly available datasets, (i.e. ASHE and the Labour Force Survey), it allows for the identification of a large sample of domiciliary care workers. However, and in common with large datasets, there are some issues with the data, including limitations due to the voluntary nature of participation in the survey. Whilst employers are incentivised to input data on a regular basis not all providers add their workforce details to the database and different providers may update their records at different points of time in the year. Yet data provision, although voluntary, is consistent to a large extent; and when compared with other datasets, selectivity bias does not appear to be an issue. Response rates have varied over time, but the number of employers uploading details to the NMDS-SC has increased (see Hussein, 2010a; Hussein, 2010b). As with any survey which relies upon employer entry, questions can be raised about the accuracy of the information. However, much of the information required is based on documented evidence (e.g. timesheets documented and submitted, information on payment from the tax and revenue department, contracts, etc.) and in this sense, the dataset does not necessarily contain any more bias than other 'employer' or 'establishment' based datasets (e.g. WERS). Indeed, unlike many other employer datasets, very few questions in NMDS-SC dataset are based on attitudinal data from employers.

Obvious data errors, such as outliers, were corrected; but there were problems with regard to the recording of hours. First, pay figures can be reported by providers in terms of annual, monthly or hourly pay. Although most entries reflected hourly pay for each employee, a number of entries were on an annual basis. Nearly one fifth (19.6 per cent) of annual entries did not have information for hours worked per week. These cases did not allow for an hourly pay calculation and were excluded from the analysis. There were similar problems, but in fewer cases (6 in total), for monthly pay entries, which were also excluded.

A second problematic area was the data for those on zero-hours contracts. When asked to report hours worked three different replies were given for employees on zero-hours contracts:

- 1. Those where contracted hours were input as 0 (as stated in the contract) with the actual hours worked in one week reported under 'additional hours' (the mean here was 26 hours worked per week);
- 2. Those where contracted hours reflect the hours normally worked per week (the mean here was 24), but where there was also a small number of hours reported under 'additional hours' (typically up to four additional hours per week);
- 3. Those where 0 (zero) was input in contracted hours and also 0 (zero) in the additional hours. These were the most problematic cases providing no information on hours worked. This category represented 60 per cent of the employees working under zero-hours contracts, with categories 1 and 2 representing 40 per cent.

The analysis of hours was based upon the remaining 40 per cent as the 60 per cent in category 3 were excluded. This does not create major problems, due to the size of the dataset and sample which allows for robust statistical analysis. Appendix 5 shows that when the two groups (those in category 1 and 2 and those in category 3 - zero-hours contract employees who reported their hours

and zero-hours contracts employees who did not report their hours) were compared across a range of characteristics there are no significant differences between them.

For the remaining 40 per cent, there was information on contracted hours or additional hours (and sometimes both). To deal with the missing data in these cases, a new variable was created that calculated actual hours worked (either by including only contracted hours, or only additional hours, or by adding those two when needed). The resultant variable is 'total hours worked per week' by each employee (see Table 2). For those reporting that they were on zero-hours contracts, we set contracted hours equal to zero, and allocated all hours as 'additional hours'. These issues with the data reflect the reality of zero-hours contracts where contractual hours do not necessarily bear any relationship to actual (and indeed normal) hours worked. It should be noted that there are very few in-depth studies of zero-hours working and in this the research is distinctive and exploratory.

Thirdly, there are some inconsistencies in the variables included in the dataset over time. Most importantly, whilst the sector variable is available in the employer dataset from 2008 (and is used in the descriptive analysis), in the employee dataset, the variable 'sector' has only been included since 2010 and 'nationality' has only been recorded since 2009. These inconsistencies in the data mean that for the multivariate analysis, which utilises the employee-level variables most extensively, only the last three cuts of the dataset were used.

Finally and crucially, there are widely recognised limitations with the NMDS data in terms of its ability to shed light on payment for travel time. Hussein (2011), for example, notes that it is not possible to identify from the NMDS-SC whether any allowance is made in hourly rates to cover enhanced payments or travel time. She utilises information on travel time and payments from other datasets to make an adjustment to the NMDS-DC data. For the purposes of this research we make no such adjustments to the rates completed by providers in the NMDS-SC dataset. We would thus suggest that our figures provide a lower bound estimate of the number of workers paid at or below the NMW and this assertion is supported by the case studies, which look at travel time payments in more detail.

#### 2.4 Key variables

Principal and additional variables used in the descriptive and multivariate analysis are as follows (see Tables 1 and 2 and the Appendices for further discussions how these were used):

- a) Total working hours worked by an employee (Tothours) were created from either contracted or additional hours, or the sum of those two. A limit of 45 hours' worked per week was set, based on Skills for Care recommendations;
- b) At and below or above the NMW (NMWbelow) calculated by whether the hourly pay is above or below the NMW rate in place at the time the wage entry was recorded in the database;
- c) Distance from NMW (NMWDistance) calculated by the distance of each employee's hourly pay from the NMW in percentage and adjusted for every year's NMW, including employees both below and above the NMW.

Main	Definition
Variables	
Sector	This categorical variable reflects the sector in which each establishment is based,
	found both in the employee and provider datasets. There are four categories:
	private; third/voluntary; statutory local authority; other.
Region	The variable addresses the region in which each establishment is based, found both
	in the employee and provider datasets. The regions are Eastern, East Midlands,
	West Midlands, North East, South East, North West, South West, Yorkshire and
	Humber, London.
Gender	This categorical variable addresses the gender of the employee.
Age	The variable is continuous and addresses the age of the employee.
Time Period	The categorical variable Time Period was created and used for the purposes of the
	longitudinal analysis. Specifically, [TimePeriod=7] refers to October 2010-March
	2011; [TimePeriod=8] refers to April 2011-September 2011; and [TimePeriod=9]
	refers to October 2011-April 2012.
Total work	Total work hours is a continuous variable, created by the sum of the variables
hours	contracted hours and additional hours, found in the employee dataset. A limit of
	45 hours per week was set, in line with advice from Skills for Care; there were very
	few cases of employees working above 45 hours and these were considered either
	outliers or a result of inaccurate data entry. Existing literature suggests that median
	working hours are around 38 hours per week.
Contracted	This continuous variable addresses the hours per week found in the contract of
hours	each employee.
Zero-hours	A binary variable reflecting individual employee data, with 1 indicating a zero-hours
contracts	contract and 0 a non zero-hours contract.
Below	A binary variable taking the value of 1 if the workers' pay is below the NMW at the
National	time the wage entry was included in the database
minimum	
wage National	In order to examine the hourly new rate of each worker in relation to the NMM/ we
Minimum	In order to examine the hourly pay rate of each worker in relation to the NMW, we measured the relative distance (in percentages) from the NMW. E.g. if the hourly
Wage (NMW)	pay is 6.15 when the NMW is 6.08, the variable NMW distance is equal to 1.15%
distance	(6.15/6.08*100=101, 15%), referring to employees both below and above the
	NMW
Weekly pay	This continuous variable was created in order to measure the weekly pay of an
	employee, calculated as the product of the total hours worked (contracted and
	additional) and the hourly rate.

 Table 1: The main variables and the definitions used in the study

Variable	Definition
Nationality	Employees were asked whether they were born in Britain or not (British noted
	with 1 and other with 0).
Employment	The variable included the employees' status in their main job role. The
status	categories given were: permanent; temporary; bank or pool; agency; student;
	volunteer and other.
Full-time/	Employees were asked whether they work part-time, full-time or neither of
Part-time	those two employment statuses.
Distance	The variable refers to the distance between the employee's work and another
from work	reference point (home, agency, provider etc). The variable is categorical (e.g.
	less than 1 mile; more than 1 and less than 2; more than 2 and less that 3; up to
	100 miles). In the regression models this is treated as a continuous variable
	taking the values 1-4. This variable was included to see whether distance from
	home to work had any impact on the dependent variables being studied, and
	not as a proxy for well-recognised problems with travel-time between visits
	which are known in this sector.
Training	The employees were asked whether their induction and training has been
	completed; whether it is in progress; or not applicable in this case.
Size	Size was the only variable taken from the provider dataset. It included four
	categories: micro; small; medium; and large organisations.

#### Table 2: Additional variables and the definitions used in the study

The analysis focuses on providing a descriptive and multivariate understanding of pay and hours for domiciliary care workers. There is a longitudinal element to the research, in that data from individuals is obtained at various points in time. In this research an 'unbalanced' longitudinal design is used. Longitudinal research can be conducted through balanced or unbalanced designs. In the former, repeated measurements of the same individuals over time are included (Fitzmaurice and Ravichandran, 2008). This ensures that a number of individual characteristics remain steady over time, thus reducing the risk of not controlling for particular variables (i.e. gender, age, region, sector, etc.). Nevertheless, this comes at the expense of many individuals being "lost" over time, thus significantly decreasing the sample (Huang and Fitzmaurice, 2005). Moreover, it is uncertain whether the individuals continue to be a representative sample of the study population. Finally, the balanced design may not provide for optimal analysis when interest lies in the direct effect of control variables, in addition to adjusting for their effect, as in our case. The dataset therefore used information from all available workers at each point, thus forming an unbalanced longitudinal design (Huang and Fitzmaurice, 2005). A balanced panel estimation, which may be more robust, is beyond the scope and objectives of the present study.

In this paper we differentiate between 'care workers' - those in adult domiciliary care in care roles; 'senior care workers' - those in adult domiciliary care with formal supervisory responsibilities; and 'managers' - those in adult domiciliary care sector but not in front-line domiciliary care roles. Whilst descriptive analysis is based upon the entire domiciliary workforce, the multivariate analysis is based upon care workers only.

#### 2.5 Case studies of local authorities

The statistical analysis is complemented by five case studies of local authorities, focusing in particular on commissioning processes. The selection of the five case studies aimed to capture variation in terms of labour markets, socio-economic profile of the local authority - including the demographic and geographical profile and political complexion - and in particular to reflect the issue of travel time in more rural areas. They were drawn from a range of English regions. The case studies were anonymised because of the sensitive nature of commissioning but are characterised as follows:

- *City A* an urban local authority;
- *City B* a largely urban authority;
- *Rural* a rural authority;
- *City C* a largely urban authority;
- Semirural a mixed rural and urban local authority.

In total, 27 interviews with key actors were conducted between May and September 2012. These key actors were involved in the tendering of domiciliary care, and included local authority commissioners, contracts officers, service managers, social workers, providers (including representatives of large national providers as well as a range of smaller private and not-for-profit organisations), representatives of local authority trade unions and domiciliary workers themselves. These were supplemented by a detailed examination of tender, contract and policy documentation where these were made available.

Methodologies used in conducting the case studies adhered to the Social Research Association Ethical Guidelines based on: voluntary participation; informed consent; confidentiality and anonymity. Interviews were based upon semi-structured topic guides and digitally recorded with the consent of participants and then transcribed. Interviews lasted, on average, around 60 minutes, and varied from 30 minutes to two hours in length. Field notes and transcripts were analysed to extrapolate and code key themes, which were drawn out to illuminate the statistical findings.

#### Table 3: Overview of the five case studies

Case study	Description
City A	The authority spends between £10 and £25 million on domiciliary home care supporting between 2,000 and 5,000 people in their homes, over half of
	whom are 65 or older. This amounts to the delivery of between 10,000 and
	25,000 hours of care per week. <i>City A</i> does not directly employ any
	domiciliary care staff, but up to 500 are employed through contracts. There
	are two main, large national providers, with more than ten others providing
	specialist care on a spot purchase basis. The authority was planning to move
	to a Framework contract in 2014.
City B	The budget for externally provided services was between £150 and £200
	million for home care and care homes, providing community-based
	homecare services to between 5,000 and 10,000 clients aged 65 and over.
	There were over 100 domiciliary care providers The authority directly
	employed over 500 domiciliary care staff directly in short-term care or
	reablement, serving over 500 plus service users. The authority was moving
	from block contracts to a Framework agreement where providers would
	tender through micro-procurement.
Rural	In Rural between 2,000 and 5,000 individual care packages were being
	delivered by over 50 external providers with reablement the only in-house
	provision. The authority was moving to a framework contract in 2013 and
	this would be an overall tender worth around £250 million over four years,
	but based upon geographical areas.
City C	<i>City C</i> spends between £10 and £25 million on domiciliary care provision a
	year (with an additional £20 million in direct payments). This supports
	between 2,000 and 5,000 people in their homes, with between 25,000 and
	50,000 hours of care per week provided by over 1,000 domiciliary care
	workers. Within this between 10,000 and 25,000 hours are provided in-
	house in short-term intervention services by over 500 staff. The authority is divided into over 20 contract areas and these were covered by around ten
	providers in 2007, but this had since reduced through acquisitions and
	mergers, with all but one national and the exception having an owner
	manager, but as a franchise from a national company. Under block contracts
	a provider had almost exclusive rights to deliver a service in a particular area
	with 60 per cent of hours guaranteed. The authority was moving to a
	Framework Agreement.
Semirural	Semirural spends between £25 and £50 million a year on home care for
	older and disabled people, supporting between 5,000 and 10,000 individuals
	in their homes and providing between 25,000 and 50,000 hours of care per
	week. Over 1,000 domiciliary care staff are employed through over 50 block
	and spot providers. Semirural has established a Working Group to look at
	quality in home care, and since 2010, this has sought to look at safeguarding,
	home care capacity, terms and conditions for domiciliary care workers,
	including payment of travel time and payment for training. Semirural is
	currently reviewing its commissioning framework and is establishing a select
	list of providers through which it will tender for and commission block and
	spot contracts, although it reserves the right to re-open the list to bring in
	more providers, or to conduct separate procurements outside of the list

# 3. Wages, hours and conditions of work for domiciliary care workers: findings from the NMDS-SC

#### 3.1 The domiciliary care workforce

Table 4 provides descriptive statistics on the domiciliary care workforce, including care workers, senior care workers and managers. Pooling the datasets from 2008-2012, there are entries on 265,683 domiciliary care workers (35.6% of all workers in the dataset). Averages over the period 2008-2012 show that females and British employees predominate (approximately 84% are females and 80% are British throughout the years 2008-2012), although both these groups are over-represented in the domiciliary care workforce, compared to the workforce and the population in Britain as a whole (calculations from Nomis, 2012). Nearly three quarters of the domiciliary care workforce work for private providers. Just over half (56%) of care workers were employed on zero-hours contracts and 3.3 per cent were estimated to have earned an hourly wage at or below the NMW. A comparison between the characteristics of the domiciliary care workforce and the non-domiciliary care workforce covered by the NMDS-SC can be found in Appendix 5.

Additional descriptive analysis (not reported in Table 4) highlights some interesting variation. There are some important regional differences, particularly between London and the rest of the UK. First, data on care workers' ethnicity illustrate that in London care workers are more likely to be black than in other regions. (37% of care workers are black in London, compared with 29% across other regions in the UK). Second, with regards to nationality, non–British care workers predominate in London (53%), whereas British born care workers are the majority (81%) in the rest of the UK. Non-British workers are over-represented in the domiciliary care workforce in all areas of the UK, compared to the working population as a whole. The majority of managers in the domiciliary care workforce in both London and the rest of the UK are British born.

With regards to reasons for employees changing establishment, employers stated that the main one was to transfer to another employer and/or to a private organisation, indicating a move towards the private sector, as we consider further below.

Table 5 presents descriptive statistics on the main continuous variables in our analysis: age, hours, pay and national minimum wage distance. The average age of a domiciliary care worker is 42, a finding in line with other studies (Hussein and Goldthorpe, 2012). The average (median) weekly hours of a domiciliary care worker are 28 hours per week, yet for those on zero-hours contracts it is 24 hours compared to 29.5 for those not on zero-hours contracts. Interestingly median fixed contracted hours are 20 – suggesting a fluid and uncertain relationship between contractual hours and hours worked. According to NMDS-SC, the majority of care workers on zero-hours contracts declare that their employment can be categorised neither as full-time nor as part-time (57.2%), whereas the majority of care workers on contracts other than zero-hours ones (47.4%) report their employment as part-time. The average pay (median) in domiciliary care is 15 per cent above the national minimum wage.

Table 4: Descriptive statistics for care workers, senior care workers and managers (categoricalvariables) - Averages for the years 2008-2012

Variable		%
Sector	Private	72.1%
(2010-	Statutory local authority	12.8%
2012)	Third/volunteer	13.1%
	Other	2%
Region	Eastern	10.9%
	East Midlands	8.4%
	West Midlands	11.7%
	South East	13.5%
	South West	10 %
	North East	6.0%
	North West	15.2%
	Yorkshire and Humber	11.2%
	London	13.1%
Gender	Females	84%
	Males	16%
NMW	At or Below National Minimum Wage	3.4%
Zero-hours	Zero-hours contracts:	55.7%
contracts		

Variable	Mean	Std. Error	Median	2.5%	97.5%
				percentile	percentile
Age	41.46	12.60	42	21	65.00
Total work hours for all employees	26.65	10.12	28	8	40
Total work hours for <u><b>non</b></u> -zero-hours contracts	27.27	9.44	29.50	8	40
Total work hours for zero-hours contracts	24	10.87	24	4	40
Contracted hours for all employees	18.31	14.77	20	0	40
Contracted hours for <u>non</u> -zero-hours contracts	26.37	9.88	28	3	40
Contracted hours for zero-hours contracts	0	0	0	0	0
National Minimum Wage (NMW) distance (%)	19.07	19.99	15	0	63.86
Weekly pay (pay*hours rate)	190.16	77.63	192.40	56	325.60

# Table 5: Descriptive statistics for care workers, senior care workers and managers (continuous variables) - Averages for years 2008-2012

# 3.2 Care workers at or below the NMW

Figure 1 looks in more detail at the proportion of the domiciliary care workforce paid at or below the National Minimum Wage between 2008 and 2012. The proportion paid below was 1.1 per cent over the period; this varied between 0.4 and 0.8 per cent, but increased in the final period, between October 2011 and April 2012, to 2.5 per cent – a relatively low but rising percentage. It is important to recognise the volatility of the period under study and it remains to be seen whether this rise will form a longer-term trend. Along with the figures on distance from the NMW, it suggests a relatively small proportion of workers under the NMW threshold. However, our caveat from Chapter Two is worth emphasising again here, this is a lower bound estimate, since we make no adjustments in these calculations for payment or non-payment of travel time within stated hourly wages.



Figure 1: The proportion of the domiciliary care workforce with an hourly rate at or below the NMW

Table 6 shows how far the National Minimum Wage has become a benchmark for pay in domiciliary care, identifying in more detail the number of workers who are paid close to, at and below the NMW. Those paid below the minimum wage are in the top two rows of the table. Taking the period as a whole, between October 2008 and April 2012, 3.4 per cent of workers were at or below the NMW (6899 out of 211, 023 workers). Of those at or below the NMW, 67% (4622) were paid exactly the minimum wage and 2277 (33%) were paid below the minimum wage.

Given that the domiciliary care workforce includes different roles, it is important to break down the headline figures and look at wage levels of groups individually and Figure 2 shows the numbers at or below the NMW by job category. As Table 6 demonstrates, looking at care workers only, between 0.5 and 0.7 per cent were paid below the NMW between 2008 and 2011, with the figure rising to 1.9 per cent in 2011-12. For those at or below the NMW the figures ranged from 3.6 to 1.7 per cent, but rose to 5.6 per cent in the most recent period. As illustrated in Figure 3 care workers have experienced an increase on average in their hourly rate from £6.70 in 2008 to £7.10 in 2012. Managers and senior care workers, in contrast, have seen recent falls in their hourly wages, and this has seen some managers and senior care workers dip under the NMW and in the most recent period the proportions below the NMW are higher than for care workers. Table 7 shows that in the case of senior care workers, between zero and 0.3 per cent were paid below the NMW between 2008 and 2011; in 2011-12 this rose dramatically to 10.1 per cent. Those at or below the NMW ranged from zero to 1.3 per cent between 2008 and 2011, but was 11.5 per cent in the latest period. This has happened at the same time as a marked reduction in the proportion of senior care workers (see below) and convergence between the median hourly rates of senior and direct care workers. For managers Table 7 reveals that the proportion below the NMW ranged from zero to 1.3 per cent in the period to 2011, but increased to 2.9 per cent subsequently. Those at or below the NMW fluctuated between zero and 2.1 per cent between 2008 and 2011 rising to 5.7 cent in 2011-12. However, it should be born in mind that proportionately, there are far fewer senior care workers and managers than care workers: care workers comprise 80 per cent of the domiciliary care workforce at and below under the NMW.

		Time period								
Relationship to NMW		Oct08- Mar09	Apr09- Sep09	Oct09- Mar10	Apr10- Sep10	Oct10- Mar11	Apr11- Sep11	Oct11- Apr12		
	All	0	2	5	142	99	69	258	575	
More than 10%	Domiciliary care	.0%	.0%	.0%	.5%	.1%	.3%	.5%	.3%	
below	Care workers only	0 .0%	0 .0%	3 .0%	139 .6%	95 .1%	68 .3%	225 .4%	530 .3%	
Up to 10% below	All Domiciliary care	46 .6%	41 .4%	118 .8%	43 .2%	305 .4%	48 .2%	1101 2.0%	1702 .8%	
	Care workers only	46 .7%	30 .4%	109 .8%	42 .2%	229 .4%	46 .2%	791 1.5%	1293 .7%	
Exactly at NMW	All Domiciliary care	200 2.7%	55 0.6%	372 2.4%	550 2.0%	1411 2.0%	268 1.2%	2021 3.6%	4877 2.3%	
	Care workers only	193 2.9%	51 .6%	344 2.5%	477 2.0%	1347 2.1%	250 1.2%	1890 3.7%	4552 2.4%	
Up to 10% above	All Domiciliary care	1797 24.1%	1909 20.5%	3901 25.1%	5286 19.5%	20575 28.5%	7797 33.6%	14856 26.3%	56121 26.6%	
	Care Workers only	1684 25.4%	1741 21.8%	3610 26.6%	4956 21.2%	19455 29.9%	7269 35.9%	13939 27.1%	52654 28.0%	
More than 10%	All Domiciliary care	5408 72.6%	7305 78.4%	11166 71.8%	21059 77.8%	49895 69.0%	15026 64.7%	38146 67.7%	148005 70.1%	
above	Care Workers only	4719 71.0%	6154 77.2%	9483 70.0%	17812 76.0%	43911 67.5%	12592 62.3%	34620 67.3%	129291 68.7%	
Total	All Domiciliary care	7451 100.0%	9312 100.0%	15562 100.0%	27080 100.0%	72285 100.0%	23208 100.0%	56382 100.0%	211025 100.0%	
	Care Workers only	6642 100.0%	7976 100.0%	13549 100.0%	23426 100.0%	65037 100.0%	20225 100.0%	51465 100.0%	188320 100.0%	

Table 6: Percentages below, at and above the NMW - all domiciliary care workers and care workers only

		Time period							
Relationship to NMW		Oct08- Mar09	Apr09- Sep09	Oct09- Mar10	Apr10- Sep10	Oct10- Mar11	Apr11- Sep11	Oct11- Apr12	
	Senior	0	0	0	0	0	0	13	13
More than 10%	Care Workers	.0%	.0%	.0%	.0%	.0%	.0%	.9%	.2%
below	Managers	0	1	1	2	0	0	6	10
		.0%	.4%	.2%	.3%	.0%	.0%	.7%	.2%
Up to 10%		0	1	2	0	5	0	127	135
below	Care Workers	.0%	.2%	.3%	.0%	.3%	.0%	9.2%	2.1%
	Managers	0	1	5	0	12	1	20	39
		.0%	.4%	1.1%	.0%	1.0%	.2%	2.2%	.9%
Exactly	Senior	0	0	2	6	18	1	19	46
at NMW	Care	.0%	.0%	.3%	.5%	1.0%	.1%	1.4%	.7%
	Workers								
	Managers	0	0	2	13	14	1	25	55
		.0%	.0%	.5%	1.6%	1.1%	.2%	2.8%	1.3%
Up to 10%	Senior	44	37	60	89	258	106	179	773
above	Care Workers	14.5%	7.2%	9.6%	7.6%	14.5%	14.5%	13.0%	11.9%
	Managers	7	11	21	39	85	58	95	316
<b>N</b> A a wa	Conton	4.8%	4.5%	4.8%	4.9%	6.9%	10.0%	10.5%	7.3%
More than	Senior Care	259	476	561	1081	1496	625	1041	5539
10%	Workers	85.5%	92.6%	89.8%	91.9%	84.2%	85.4%	75.5%	85.1%
above	Managers	140	229	412	738	1124	519	761	3923
		95.2%	94.6%	93.4%	93.2%	91.0%	89.6%	83.9%	90.3%
	Senior	303	514	625	1176	1777	732	1379	6506
Total	Care	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Workers								
	Managers	147	242	441	792	1235	579	907	4343
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

# Table 7: Percentages below, at and above the NMW -senior care workers and managers



Figure 2: Numbers of employees (in thousands) at or below the NMW by job category





These figures, then, provide some initial indication of the experiences of different groups of domiciliary care workers: whilst managers have experienced recent declines in hourly rates, they make up a relatively small proportion of the domiciliary care workforce, and quantitatively, relatively few are paid under the minimum wage. Care workers have seen recent increases, on average, to their hourly rates, but it is in this group that low pay is concentrated. The recent rises in the proportion of care workers paid at and below NMW could reflect volatility in the dataset, but the change does come during a turbulent period in domiciliary care because of intense budgetary pressures on local authorities which are increasingly reflected in commissioning processes. These pressures will be explored in more detail in the case studies.

The importance of notional travel time to the NMW is illustrated by the fact that if the Equality and Human Rights Commission (EHRC) proposed hourly rate, which includes estimated travel time (adding approximately 20 per cent to a care worker's paid time) is taken into account, around 60 per cent of the domiciliary care workforce in the MDS-SC dataset would have been below the EHRC's

projected minimum hourly rate of £7.29 from October 1 2011. As noted in the methodology chapter, we make no assumption that any travel time has been included in the hourly rates reported in the MDS-SC dataset, but the case studies suggest that generally it is not.

## 3.3 Changes in the composition of the care workforce

Figure 4 highlights the dominance of the private sector in domiciliary care. Given that this analysis focuses on the sector variable, taken from the employee dataset, we limit our analysis here to the periods where detailed sector information is available. By 2012, seven out of ten workers in domiciliary care were employed by private sector providers, with statutory providers employing only one in seven workers<sup>4</sup>.





The composition of the care workforce has shifted over recent years in terms of the ratio of senior staff to care workers. As Figure 5 shows, even if we take the rise to 12 per cent in April 2008-September 2008 as an outlier, senior care workers have declined markedly, falling from seven per cent of the non-managerial care workforce in 2008, to four per cent in 2012. The case studies suggest that reflects the effects of commissioning with more tasks and activities being allocated to care workers, and with senior care worker posts being phased out in some cases, as a means of reducing costs within tendering processes.

<sup>&</sup>lt;sup>4</sup> The 'other' category might include workers employed in more than one establishment, or who perceive that they are working via different arrangements, for example via an agency (although no detailed information is available on this through Skills for Care).



Figure 5: Ratio of senior care workers to care workers 2008-2012

Figure 6: Total hours per week worked by care and senior care workers



Alongside this, Figure 6 reveals that total hours for care workers per week increased between 2008 and 2012, particularly during 2011-12. Hours for senior care workers, in contrast have fallen. Again, this may reflect the effects of the commissioning process, or a more general trend in the sector for redistribution of tasks and activities to more junior care workers. Differentiating this by sector (Figure 7) reveals that in the private sector, weekly hours for care workers *fell*, on average, between 2009 and 2012, particularly between 2011 and 2012; whilst they rose for senior care workers. In contrast, average hours for care workers in the public sector have risen. For senior care workers in the public sector, hours have fallen since 2010, although average hours remain at the level they were in 2009. The most likely explanation for falling average hours amongst private sector care workers is the rise of zero-hours contracts – this may result in lower average total working hours for individual workers in any given week. As noted earlier, the ratios of senior care workers to care workers has declined over the 2008-2012 period, and the lack of any clear trend in hours worked for this group may reflect the fact that their role is changing (and may vary) across local authority areas.





#### 3.4 The importance of hours

One of the most striking trends in domiciliary care is the increased prevalence of zero-hours contracts (Table 8). In 2012, nearly 60 per cent of care workers were on zero-hours contracts. In most of the six monthly cuts of the data, the figure on zero-hours contracts has been above 50 per cent (with the exception of April 2011-September 2011), averaging 56 per cent between 2008 and 2012. Managers are also increasingly likely to be on zero-hours contracts (over one in four of the managerial workforce in 2012). Overall then, a majority of the domiciliary care workforce are on zero-hours contracts. The case studies show that this is likely to reflect changes in the commissioning process and well-documented falls in 'block contracts', where providers are given guaranteed numbers of hours of care under local authority contracts. In line with this and as Figure 8 confirms, workers employed by private providers are much more likely to be on zero-hours contracts. In 2012, almost eight in ten domiciliary care workers in the private sector were on zerohours contracts, whereas the figure for those employed by statutory providers was five per cent. The volatile nature of the trend in zero-hours contracts (Table 8) may reflect a combination of factors, including the effects of tendering and changing contractual arrangements between local authorities and providers. This might involve the movement of staff from a local authority to the private sector under TUPE arrangements initially protecting contractual hours for transferred workers, who might subsequently be replaced by workers on zero-hours contracts – this process may temporarily boost pay and hours in the private sector and introduce fluidity. Whilst this is speculative, the broad trend is clear with a rise in zero-hours contracts over the 2008-2012 period.

Table 8: Percentages of zero-hours contracts over the years for care workers, senior care workers and managers

	Oct08- Mar09	Apr09- Sep09	Oct09- Mar10	Apr10- Sep10	Oct10 Mar11	Apr11- Sep11	Oct11- Apr12
Managers	1.9%	3.4%	8%	11.5%	36%	11.9%	27.1%
Senior Care workers	42%	44.5%	28.4%	33.1%	27.5%	33.1%	21.5%
Care workers	50.2%	50.8%	52.2%	48.3%	70.1%	39.8%	59.4%

#### Figure 8: Proportion of care workers on zero-hours contracts in the statutory and private sectors



There does appear, from the descriptive analysis to be some association between zero-hours contracts and being paid under the NMW; as Figure 9 shows in 2008 30 per cent of those paid at or below the NMW were on zero-hours contracts, but by 2012, that figure had risen to 70 per cent. Despite some fluctuations zero-hours contracts have become the norm in the private sector and we look at the impact of this trend in more detail in multivariate analysis and in the case studies.

Figure 9: Proportions of the domiciliary care workforce (care, senior care workers, and managers) paid at or below the National Minimum Wage on zero- hours contracts, 2008-2012



# Table 9: Weekly pay (median) for domiciliary care workforce (care, senior and managerial) in pounds (£) by sector

	Oct09-Mar10	Apr10-Sep10	Oct10-Mar11	Apr11-Sep11	Oct11-Apr12
Statutory Local Authority	133.57	138	210	218	200.25
Private Sector	202.50	216	187.50	192	198.30

Finally, it is worth highlighting some differences in weekly pay between private sector and statutory local authority providers (Table 9). Statutory Local Authority (SLA) workers have seen a rise in weekly pay from the year 2009 to the years 2010 and 2011. Again, it is important to recognise the volatility in some of the figures above – a sharp rise in median pay for SLA workers in particular was observed in the October 2010-March 2011 period. A comparison of figures for the last three periods amongst local authority workers finds a slight fall in weekly pay in the period October 2011 to April 2012. In contrast, in the private sector, weekly pay has remained relatively constant, reflecting an overall decline in average weekly hours worked across the period (see Figure 7).

#### 3.5 Multivariate analysis of pay and hours

Multivariate analysis was conducted in order to explore those organisational and individual factors that may impact on hours and pay as well as on zero-hours contracts. It should of course be noted that the analysis can reveal correlations, but cannot go beyond this to establish causality. Four regression models were created in order to examine those relationships with the following dependent variables:

a) Being paid at or below the NMW (whether a worker has an hourly rate below the level of the NMW in place at the time the entry is recorded in the NMDS-SC database) – this

definition was used because there were insufficient observations under the NMW to provide reliable results;

- b) NMW distance<sup>5</sup> (distance of hourly pay rate from the NMW, in other words the hourly rate of each employee);
- c) Weekly pay (the product of hourly rate by the hours worked per week);
- d) Zero-hours contracts (being employed on a zero-hours contract).

A range of organisational and individual factors were utilised as independent variables. The measures and the definition of these variables have been previously provided in Tables 1 and 2. It includes independent variables related to the organisation of care (sector, region and size of the establishment) as well as those related to the characteristics of individuals (gender, age, total work hours, contracted hours, nationality, employment status, full-time/ part-time, distance from work (in miles), training and qualifications). Interactions of organisational and individual indicators over time were also undertaken to examine their longitudinal effect. Due to the inconsistencies of the variables provided in the dataset over time (outlined in Chapter 2) three time periods (October 2010-March 2011, April 2011- September 2011 and October 2011 to April 2012) were utilised in the multivariate analysis.

## a) Being paid at or below the National Minimum Wage

In line with the descriptive data, multivariate analysis showed that workers in the private sector are more likely to have an hourly pay rate at or below the NMW than voluntary/third sector workers. The multivariate analysis also confirmed that the proportion of workers at and below the NMW has significantly increased in the latest time period. When controlling for the full range of personal and employment characteristics, we find that zero-hours contracts significantly increases the likelihood of being paid at or under the NMW in certain time periods (in October 2010-March 2011, and April 2011-September 2011), although not in the most recent time period. Again, this perhaps reflects the volatility of the period under study, and the fluctuating proportions working under zero-hours contracts during this time.

Where workers had not received induction or training the likelihood of being at and below the NMW are higher than for workers who had completed their induction or training. This contrast intensified between April 2011 and April 2012. Qualified workers are less likely to be paid at or below the NMW than workers without qualifications.

Workers in medium–sized establishment are more likely to have an hourly pay rate at and below the NMW when compared to those in large establishments. With regards to individual characteristics, younger workers and part-timers are more likely to have an hourly rate at and below the NMW. In contrast with the period October 2010 to March 2011, non-British workers have become significantly more likely to be paid at and below the NMW in the most recent period. Compared with

<sup>&</sup>lt;sup>5</sup> Extended results of the regressions and the regression tables can be found in the appendices. Appendix 1 is for the Below Minimum Wage regression, Appendix 2 is for the NMW distance model, Appendix 3 addresses to the weekly pay and Appendix 4 addresses to the zero-hour contracts model.

London the proportion of workers at or below the NMW is higher in the East Midlands, but lower in the North West.

# b) Hourly pay (distance from the NMW)

The results reveal that statutory sector workers are generally paid at a higher hourly rate compared to those in the private sector, after controlling for a range of other factors, although the gap decreased between October 2011 and April 2012. There is also a gap between hourly pay rates in the voluntary/third and private sectors and this similarly declined in the most recent time period. This suggests that after controlling for a range of characteristics wages have been depressed in the public sector in the most recent period as opposed to those in the private sector rising faster. Larger establishments generally provide higher hourly pay; the difference has reduced since the period April 2011-September 2011, although they are still significant.

As for individual factors, non-British workers had lower hourly pay rates than their British colleagues throughout the time period of the study, whilst for older employees distance from the NMW has increased. In terms of hourly pay there is no evidence of a significant gender pay gap in any of the time periods of the study.

With regard to hours worked during the period October 2011-April 2012 contracted working hours were positively associated with hourly pay. This implies that care workers with fixed (rather than zero-hours) are generally paid more (per hour). Total working hours (contracted plus additional hours including zero-hours) are also associated with higher hourly rates, implying that additional working hours also provide some reward. In relation to employment status, during the latest time period, agency care workers have higher hourly pay than permanent care workers after controlling for other factors. In contrast, temporary care workers are paid less than their colleagues on permanent contracts.

As might be expected, qualified workers are being paid at higher hourly rates when compared to their non-qualified colleagues and this premia appeared to increase in the latest period. Workers for whom training is not applicable were paid less than those where it was, but this was no longer the case in the latest time period. It is unclear why training might not be applicable, whilst it could suggest that staff had already received training, more worryingly it could also reflect recent changes in requirements as regards training and accreditation (see below). Those who have completed their training were paid at higher rates when compared to those whose training was in progress. With regard to the relationship between travel to work and pay: whilst there had been a positive association this has declined in the recent time period and again this might reflect the commissioning process.

# c) Weekly pay

Statutory sector and voluntary/third sector workers generally have higher weekly pay compared to their private sector counterparts. However, and contrary to hourly pay, the gap between the statutory and private sector decreased most recently (October 2011 – April 2012), suggesting some equalisation of weekly pay rates (the case studies suggest that local authorities may be removing premia for their directly employed workers). Likewise, the gap between the voluntary and private

sector is smaller since April 2011 – September 2011. Large establishments generally provide higher weekly pay, but the differences have reduced since the period April 2011-September 2011.

As for individual characteristics, non British workers are paid more than their British colleagues on a weekly pay basis. Results also reveal that in the case of weekly pay, a gender pay gap exists, with male workers having higher weekly pay than females throughout the time period of the study reflecting hours worked. Age is positively associated with weekly pay throughout all periods, therefore the older the worker the more they are paid.

As for employment status, temporary or bank/pool workers generally have lower weekly pay than those employed under permanent contracts. In particular, for temporary workers, since the period April 2011 – September 2011, the average difference increased by a mean of 14.66.

Workers with at least basic qualifications have a higher weekly income when compared to their nonqualified colleagues, a finding that remained relatively constant throughout the period covered. This is still the case during the latest period, and there is a further contrast between the categories of 'any other qualification relevant to social care' and 'no qualifications'. There was a difference between those whose induction or training was still in progress and those who have completed it, but since the time period April 2011 – September 2011 it was no longer significant.

Our analysis suggests there are important differences between hourly pay and weekly pay. A key finding is that workers employed under zero-hours contracts have generally lower weekly pay. This is likely to be a reflection of their lower average weekly hours, compared to those on fixed hours contracts and, with no guaranteed contracted hours, it is unsurprising that average weekly pay is lower. Nevertheless this difference decreased during the latest period.

#### d) Zero-hours contracts

Employees in the private sector are significantly more likely to be employed on zero-hours contracts when compared to other sectors. Some fluctuations aside, the difference between zero-hours contracts in the private sector compared to the voluntary sector and statutory sectors intensified over the time period studied. In large establishments the odds of zero-hours contracts employment are generally higher.

There are some notable demographic characteristics of those working on zero-hours contracts. Female workers are more likely to be employed on zero-hours contracts than males, but non-British workers are less likely to be on zero-hours contracts than their non-British counterparts: an association that increased in the most recent time period.

Results further illustrated that workers with at least basic qualifications are less likely, when compared to their non-qualified colleagues, to have zero-hours contracts. This is still the case during the recent time period, but the contrast between these categories has been reduced. Workers having completed their training are more likely to be employed under zero-hours contracts, although it is unclear why this might be unless those who have received training are less likely to be qualified. Nevertheless, the difference in the odds during the recent time periods has decreased. With regard to zero-hours contracts, results reported that the longer the travel to work distance, the less likely an employee is to be under a zero-hours contract, something that has been constant in all
time periods examined and which may reflect the need to retain workers in more rural area. Table 10 shows some of the variation highlighted in this section.

Variable	At or below NMW	Hourly pay (NMW distance)	Weekly pay (pay by hour * hours per week)	Zero-hours contracts
Sector	Private sector more likely than third sector/voluntary	Higher amongst statutory sector workers	Higher amongst statutory sector workers	More likely in the private sector
Gender	Not significant	No gender gap	Males are paid more	Females more likely
Nationality	Not significant	Non-British paid less	Non-British are paid more	British more likely
Employment status	Part-timers less likely to be below NMW	Agency employees paid higher and temporary paid lower hourly that workers in private sector	Temporary employees are paid more	Not significant
Zero-hours contracts	Employees on Zero-hours Contracts more likely to be at or below in some time periods	Not significant	Employees on zero- hours contracts are paid less	Not applicable

Table 10: Summary of multivariate analysis in relation to hourly and weekly pay during 2010-2012

## 3.6 Comparison between these findings and those in other datasets

Information from the NMDS-SC and other datasets (notably ASHE and the LFS) has been used in other studies to look at wages and pay for care workers. How do the findings of the present study compare to these?

The ASHE dataset does not specifically distinguish domiciliary care workers; these would be subsumed into 'care assistants and home carers'. Hussein (2010a, 2010b, 2011) has raised a number of questions as to how far ASHE accurately represents the care sector, particularly its reliance on PAYE data. She suggests that the small samples of both ASHE and the LFS are also likely to underrepresent workers at the bottom of the pay distribution.

The Labour Force Survey (LFS) has three relevant categories of care workers; 'care workers and home carers', 'senior care workers' and 'care escorts', but does not distinguish domiciliary care

workers. At the same time as the occupational classification does not allow the identification of domiciliary care workers, the industrial classification is also not specific. The NMDS-SC is unique in its ability to shed light on the domiciliary care workforce.

Hussein's work (2010a, 2010b, 2011), like ours, is based upon the NMDS-SC data base. However, her estimates of the probability of care workers' paid under the NMW are based upon data on adult social care workers from the NMDS-SC in which she does not distinguish domiciliary from residential care workers. However, her methodology does (conservatively) adjust hourly pay rates derived from the NMDS-SC for travel time using a survey of care workers who were asked if they travelled between clients (2011). This methodology produces a mean of around ten per cent paid under the NMW (Hussein, 2011: 5). Our findings (of between 1% and 6% being paid at and below the NMW) are also likely to be conservative, in that we make no assumptions about what is included in the hourly rate found in the NMDS-SC dataset.

In a separate analysis of the NMDS-SC Hussein does show that in December 2009 care workers in care homes with nursing provision earned less than those in domiciliary care (£6 compared to £6.77 on average). Inclusion of residential workers may thus depress rates of compliance with the NMW.

As in our study, Hussein (2010) looks at pay in adult social care in relation to job role, region, sector, establishment size and some individual characteristics such as gender and ethnicity/nationality. However, in our study additional factors in relation to pay, particularly working hours, but also type of contract, age, training and distance travelled to work, were considered. Whilst, in Hussein (2010 which reference) 's studies, the period for pay covered the calendar year 2009, in our study data from 2008 until April 2012 were used. In Hussein (2011)pay was modelled using multiple (mixed effects) regression models in cross sectional data from 2009, whereas in our study unbalanced longitudinal regression models were used covering three 6-month periods from October 2010 until April 2012 and statistical analysis provides information on how these relations changed over the last two and a half years. Our study looked at pay in combination with two additional elements, i.e. working hours and type of contracts. Analysis based on unbalanced longitudinal multiple regression models was presented for these additional elements.

Overall, then, direct comparison between the headline percentage paid under the NMW in the current study and in Hussein's (2011) work is neither desirable nor possible. Rather, we simply highlight the different methodologies employed in order to understand the different figures reached for the proportion paid under the NMW. We do, however, emphasise the importance of hours and, in particular, the impact of zero-hours contracts. The relationship between hourly rates and weekly pay suggests an intensification of work for those on non-contractual and/or zero-hours, but also that care workers may not be being paid for all of their working time

## Chapter 4: The case studies

## 4.1 Introduction

In this chapter we report the findings from the five case studies conducted in local authorities. These case studies explore: the 'market' for social care and the role of local authorities in shaping this market through commissioning activities; the move to framework agreements; charge rates; recruitment; hourly pay; compliance with the NMW; the relationship between pay and hours; visit lengths and travel time; the notion of a living wage; training and workforce development; management and procedures; and alternative commissioning and the future.

The case studies illuminate what the hourly rates cited in the NMDS-SC dataset might represent and the complexity of translating hourly pay into earnings. It suggests that the hourly rates quoted in the statistical data may vary in the extent to which they reflect travel time/enhancements for shorter visits and/or unsocial hours payments, but that it is increasingly unlikely that these rates are an accurate reflection of working time. The case studies confirm the findings of the statistical analysis, in terms of the importance of the configuration of pay and hours and evidence of work intensification and further reveal a care system at least partially dependent upon the unpaid labour of a largely female workforce.

## 4.2 Shaping the market

Government policies aim to support diversity in the provision of social care (Department of Health, 2012). The case studies suggest that increasingly local authorities see their role as 'shaping the market' as opposed to direct service provision. For some local authorities this may mean expanding the number of providers and the diversity of the services offered; for others (one case study below) it may mean reducing the number of providers to ensure stability and quality provision. This role means that increasingly authorities have staff tasked with monitoring the care market to ensure against the type of market failure that was witnessed with Southern Cross. For one procurement manager:

'I see commissioning and procurement as two distinct professions. Now, the profession of commissioning in my view is the profession where you have groups of people, groups of experts who understand services, who understand markets, who understand market management. Who then use that knowledge and use their expertise to obtain the right tools, the right demographic tools, do the right research ... They do that, then what they would do is pass the baton on to me and my team, so saying OK, we now understand what we want to buy, how we want to buy it, can you go to the market and ensure we buy it and we obtain a level of interest which will allow us to make informed decisions'.

In *City B*, the Council was separating strategic commissioning from operational commissioning, the former looks at the business environment and performance over the market including monitoring financial viability, while operational commissioning looks at account management with providers.

In all of the case studies the authorities outsourced longer term domiciliary care. Four out of the five retained a directly provided enablement or re-ablement service covering those with shorter-term recovery and rehabilitation needs, whilst services for those with longer term needs were contracted out. In *City B* the Council delivered some specialist domiciliary care for those with complex needs in-

house – but was shifting this into an enablement service on the basis that prevention was more cost effective – it would then decide whether enablement should stay in-house on the basis of a business case and assessment of cost returns. The Council employed over 1,000 permanent domiciliary carers in-house, although these had been heavily reduced. A comparative strategy was in evidence in Semirural, where permanent domiciliary care workers employed by the Council were limited to enablement. These workers were on guaranteed weekly hours. Similarly City C was 'rebalancing' services so that clients got six weeks re-ablement (preventative) care provided in-house and were then passed to the independent sector. The reconfiguration of the service meant that it had avoided having to transfer staff under TUPE regulations as existing staff were moved into re-ablement and longer term provision was contracted out as a new service. This also served to justify the divergence in pay rates between in-house and external providers, since domiciliary care workers were not providing an identical service. Here, those employed directly by the local authority had been regraded following the introduction of a new Pay and Rewards Structure, conducted following a nationally agreed Single Status Agreement harmonising pay and conditions for manual and administrative, professional, clerical and technical workers. This was in the light of concerns about equal pay and an Equality Impact Assessment was carried out during the process. Job evaluation took into account a range of factors involved in care, including lone working:

'It was the equal pay stuff that all councils had to look at. And the length of time that it takes them to become skilled in their job and all that sort of thing. They look at working conditions as well as part of this process and obviously as a lone worker out there, working in some difficult and traumatic situations occasionally, having to use their own judgements, all of that. Their working condition scores were high and it's that that moved it up and it moved it up a whole grade'.

Directly employed care workers were moved onto £16,830-£19,621. Harmonisation was funded corporately, but accommodated by removing a senior support worker grade. In-house care workers are permanent staff with most on 30 hours per week and some on 20-25 (full-time hours are 37). They work split shifts, meaning they work a six hour block in the morning or afternoon/evening. They work alternate weekends. There is an overnight service with a separate workforce.

Diversity in provision varied across the case studies. In *City A* there were two main, large national providers, with two dozen others providing specialist care on a spot purchase basis. In *City C* over 20 contract areas had been covered by around ten providers in 2007, although these had since reduced through acquisitions and mergers, with all but one national and the exception having an owner manager, but as a franchise from a national company. Under block contracts a provider may have had almost exclusive rights to deliver a service in a particular area with 60 per cent of hours guaranteed. For the authority this had allowed for provider stability, with a number of spot contracts providing backup for larger contracts or specialist care. The service provider was expected to deliver a service between 7.00 am and 11.00 pm including staffed telephone cover at all times. In *City B* there were over 100 providers, in *Rural* authority over 50, with a similar number in *SemiRural*, although at the time of the interviews, one third had secured the majority of the hours available through block and spot contracts, with around one quarter on block contracts. The list represented recent efforts by the authority to increase the number of providers that were registered.

The Chief Executive of a not-for-profit provider in one of the case study areas expressed the view that the local authority now set their strategic direction in the market and had 'made us into an agency' less differentiated from other suppliers. At the same time one local authority manager pointed to the tensions inherent in procurement:

'So historically, the public sector procurement was always about value for money, the big concept of value for money. Now it's not solely value for money. You've got to ensure that you are hitting other bases including social value. So how much of the service and the way you go to the market and what you ultimately end up with allows for greater capacity building and structural building within your local community. So any organisation which is awarded a contract creates a local base, creates local employment, and all the benefits, social benefits that has. So it's not just about the cash, even though that is very important and a lot of the time, what the public sector is currently ending up with is being between a rock and a hard place because you can't necessarily – some of the agendas that you're trying to hit are in conflict with each other sometimes. And it's about how you actually do that, which I suppose in a way comes back to the nature of your study. It's a big theme within the public sector at the moment, [is] affordability. What do we pay, do we pay the National Minimum Wage, do we pay the living wage? And so it all comes down to those questions'.

## 4.3 Commissioning arrangements – the move to framework agreements

The case studies confirmed that there has been a move away from guaranteed volume block contracts (cost and volume) with discounted prices, towards spot or framework agreements. In part this reflects the drive to individualised care through personal budgets or direct payments, although the case studies suggest that although there has been some move towards this it is still partial. The UKHCA's 2012 survey found that the majority of councils' contracting arrangements offered no guarantee of volume, with less than one quarter (24%) of providers holding contracts with any guarantee of purchase. It suggests that local authorities expect to retain the discounted prices for guaranteed volume block contracts under spot or framework agreements.

Four of the case study authorities were in the process of moving to framework agreements for the provision of domiciliary care. Interviewees at *SemiRural* said that their development of a 'select list' of providers did not constitute a Framework Agreement. Two calls had seen sent out to providers in 2012 to apply to be on the select list. This stopped short of being a framework agreement in that the authority reserved the right to re-open the list, or procure from providers outside this list. Framework Agreements generally set out the conditions that providers will need to meet to deliver services purchased by the authority (through a Pre-Qualification Questionnaire to test how far potential suppliers are capable of performing a contract); providers must be registered on the framework in order to then submit tenders for specific care packages. For *City A* 

'The procurement strategy as we approach the market will be to deliver a framework. That allows in our opinion, a level of competition right through the life of the contracts as opposed to just at the point of tender. It also allows for what we call a menu of choice which fits into the value for money agenda as well as fitting into the personalisation agenda, which allows service users to say actually we don't want your service, we want it from here'.

The Council was re-procuring all 'community support contracts' including domiciliary care for elderly people, but also services for children, young people, older people and in mental health and learning disabilities. This was to allow for a range of providers to offer more choice in the context of personalisation and allow for back-up if a provider failed. It was designed to promote a diverse market since an Equality Impact Assessment had suggested there was not enough diversity in what was provided – in particular services meeting a range of cultural needs. It also aimed to address an issue about larger companies subcontracting services, which did not allow the authority sufficient control over quality. For a council manager at *City B* the introduction of a Framework was to promote flexibility:

'The whole point is to have a competitive market so it's a price driven approach which we are taking with the framework agreement so we don't set a price and we don't go out with a indicative budget. Whilst at the moment providers do not have to specify a price because it is set by the block contract, under the framework providers will submit an offer for a package of work, demonstrating how they can meet the specification and including a price quotation'.

In the case of *City C* the Council was moving from cost and volume towards a Framework (referred to as cost and control) where the tendered rate would be the full and inclusive price for all categories of support and tasks, with services tendered on a 24 hour day, seven days per week basis and including Bank Holidays, with payment for contact time only. These restrictions place the onus on the provider to pay any enhancements for weekend and evening rates and for travel time - but there is a clear disincentive to do so. A council manager explained that the thinking behind the introduction of the Framework was a prevailing view that cost and volume was restrictive and the Framework would allow more flexibility, with clients having a choice of provider that would not be proscribed by geography. The Council would have some overview of the capacity of providers and would go to those who could deliver. The Framework Agreement would be based upon 'rostering activity sheets' reflecting actual service delivery (the length of visits), but allowing worker(s) sufficient travelling time between visits. However, the implication was that providers must allow for travel time and since the authority was only paying for contact time, absorb these costs. There was also a recognised provider list which was separate from the Framework, but gave some quality benchmarking via the Council (a 'kitemark').

In *Semirural* the trend in the authority was towards more spot contracting, although a council manager argued that the ideal was some combination of block and spot contracting, taking the view that block arrangements gave the authority more control, and made it less vulnerable to the sensitivities of the market. Thus, whilst the authority was looking to move towards a larger number of providers, by developing a 'select list' of more suppliers, the manager argued that the authority was 'going more cautiously than some' towards using the market.

*Rural* had no history of block tendering, but had an approved list of providers that had been closed for some time. As a result of capacity issues in more remote areas of the county they had identified two providers in each of three areas to whom they had paid a retainer to be on call for crisis care cover. Whereas in other authorities the Framework Agreement was designed to increase the range of providers in *Rural* the authority aimed to reduce the number in order to improve monitoring; although at the same time, as a council manager put it, 'What we don't want is a monopoly

situation'. The move to a Framework was expected to introduce a clearer and more stringent methodological approach to procurement, involving the introduction of a two tier system based upon geography:

'It's to manage and to establish better quality, through a full tendering process and a robust contract. One of the things that we're trying to do is try to define geographic areas for the delivery of service. Whilst some services can and will work across the whole of the county, what we are trying to do is have a primary provider to provide a service in a primary geographical area. Actually that should minimise time as much as possible, because ideally they will be local to those areas. It doesn't stop the provider providing across the other end of the county, but then they would be like a Tier Two provider under that. The idea is that we'd have a standard rate across all of the county. What we have tried to do is match it with low volume and higher volume. What we don't do in any of this is guarantee business. Because it's individually purchased, we can't guarantee a business, therefore we can't guarantee a set number of hours'.

The Framework would allow the authority to address capacity issues by giving providers less control over which care packages they tendered for, which was not sustainable for the authority – for providers this may mean they have to service more rural and remote areas with implications for travel time. The authority would expect services to be delivered on a 24 hour seven day a week basis and it would be up to providers whether to pay enhanced payments.

Geography was also important in *Semirural*, and the authority was in the final stages of agreeing a two-tier charge system, with the rate determined by the area that the contract covered. Over the next two years, as existing block contracts expired, the region would be split into geographic areas, categorised as 'standard' or 'hard-to-reach'.

While in *Rural* and *Semirural* providers were to be categorised on the basis of geographical area, in others it might be on the basis of service category or service type, although there was also a move towards generic rates for provision. Once providers are registered on a Framework authorities may introduce competitive micro-tendering to select the provider that can, as specified in the documentation of one of the case study authorities, 'deliver the best value service to meet the citizens' needs'. Micro-tendering may be achieved electronically; in City A tenders were to go out on the authority's E-procurement website. In City B, the brokers who were currently employed directly by the council to facilitate care through contracted providers were to be replaced by an automated system allocating providers in the Framework – to facilitate 'supplier selection in a consistent, controlled and transparent manner'. The system automatically scores provider responses by attributes (a feature or characteristic of a citizen's care that the provider must be able to deliver), outcomes (the end-result or consequence that the citizen would like to achieve from the care they receive) and price – generally there is a 60:40 ratio between quality (attributes and outcomes) and price. In Rural E-Tendering would allow greater control over tendering with providers e-mailing in response to micro-tenders with their pricing and availability, although for one provider this confirmed that price was the main criteria for the allocation of work.

Providers had reservations about moving to Framework Agreements. The Chief Executive of one provider in *City B* had been selected as a preferred supplier, but said that because there would be no guaranteed volume, hourly charge rates would become 'an educated guess'. She assumed that

micro tendering meant that local authority care managers would ask for quotes for a care package from two or three providers and then go with the cheapest and anticipated that her organisation would make a loss. Providers were waiting to find out if the Council would retain two rates for specialised and non-specialised care or move to one generic rate. If there was a single rate she predicted that her organisation, which was specialist, would not be able to compete with other providers. She described the squeeze on profits in the previous years based on the increased cost of living and also the price freeze imposed by the authority, perceiving the changes as 'abysmal' with organisations not able to pay above the NMW, employing staff who did not know the job and who had insufficient training. She felt that there would be less choice for clients and a real possibility that quality will be compromised. Providers at *Semirural* also voiced some concerns about the move to a (larger) select list of providers, expressing the view that this might put more pressure on pricing and drive down wages further in the sector.

Another provider had established a social enterprise offering other services as a profit making concern to subsidise the losses it predicted the organisation would incur on contracted work; this would effectively subsidise local authority work. The provider was intending to resist the pressure to reduce rates, despite the threat that the organisation would lose work; it hoped that it would be able to absorb initial losses, but that under direct payments/individualised care clients might subsequently choose to have less care at a higher quality and price.

One provider was also concerned that under the Framework Agreement she would not be able to afford to pay staff transferred under TUPE. Under TUPE providers are expected to take on all costs and liabilities arising from transfers arising from tendering exercises. A representative of one major national provider reported that in one tender a Council required the provider to pick up the costs of a local authority pension scheme – it consequently decided it would be inappropriate for the company to tender on this basis. The Chief Executive of another smaller provider reported that she had in the past taken on work and staff from another organisation, but had to make them redundant and to rehire them in order to get around TUPE.

## 4.4 Charge rates

The UKHCA survey showed that the weighted average charge paid by councils in the UK for one hour of weekday, daytime homecare was estimated at £12.87. However, it also found that rates as low as £9.55 and £10.04 were reported by providers in Wales, the West Midlands, the North West and Northern Ireland. It made the point that as well as the price being fundamental to capacity and to employing trained and motivated staff it should also allow 'independent sector providers and their backers to receive a sufficient return on capital to remain and continue to invest in the sector, and to allow voluntary sector providers to make a sufficient surplus to remain viable and invest in new services'.

The case studies suggested that prior to the move to Frameworks Councils had established a maximum price for homecare and this is confirmed by the UKHCA survey where over half of providers reported that the Council they commissioned with had done so. This is deemed to include all employment costs including any enhancements, as well as overheads including indemnity and liability insurance. As a respondent from a major national provider suggested:

'I actually think if councils continue to commission by capping the charge rates ... so anything under £12 I think is just an unviable charge rate to moving forward because it doesn't allow you to pay your care workers appropriately. And when you add minute by minute billing you start to escalate a care workforce problem'.

The representative of another national provider reported that the organisation had contracts with around approaching 100 local authorities and PCTs, with different rates for each. In *Rural* the maximum hourly rate was £16.28. The owner of one provider in the area recounted that the charge rate had been cut and she had absorbed this by paying new staff a lower hourly rate, her profit rates had reduced and she struggled financially:

'To be an approved provider, you've got to be price compliant. So currently it's £16.28 an hour and basically in 2009 the providers were told that they had to give their best hourly rate and 45 and 30 minutes, all pro rata. So for the 45 minutes and the 30 minute visits, it had to be pro rata. And from what I can remember, they had to be no more than £15.50 an hour at that time. It was recommended no less than £13.50 an hour but actually quite a few did come in less than that. But once they set it, they couldn't increase it'.

At *SemiRural*, block rates varied from £12.91 to £14.56 per hour, and hourly spot rates were slightly higher at £15.50 per hour. These rates were determined by the type of domiciliary care being provided and the area of *SemiRural* in which it was being offered.

A number of respondents mentioned issues around equity because services for older people have been delivered at a lower rate than services for other client groups, for example those with learning disabilities or mental health issues. For one provider in *City B* charge rates were £12.96 per hour for adults and £14.85 per hour for children. Such differentiations were being addressed in procurement through an equalisation of charges, or a move towards single charge rates, as in *City A*:

'That's one of the things we actually want to address through this re-procurement because we're effectively paying a premium for learning disability and mental health services; but if somebody's got high needs, they've got high needs, it doesn't make any difference'.

The individualisation agenda meant local authorities were also aiming to 'move away from prescriptive task focused care towards more flexible outcomes for service users and their Carers' (*City C*). This could involve further differentiation (including in cost) of services distinguishing between care and meeting social needs, as one manager stated:

'Because what we are trying to do with personalisation is, rather than them thinking X hours a week, we want them to look at their aspirations and their attributes and think how can I do that differently. Some of it might be if someone needs social interaction and you may not need someone being paid £12.50 an hour to take them to lunch club. You may only need someone who is billed at a cheaper rate than that. When they are putting in their prices we are asking for blended rate, what's the rate per week? For some things, the personal care, lifting and handling side you want someone who is more qualified in those sorts of areas whereas other ones you might want to think about employing other staff for different types of roles'. The UKHCA survey found that most providers reported experiencing real-term fee reductions during the financial year 2011-12 with almost 90 per cent of providers stating that they were required to maintain (or reduce) their prices over the life of their contracts, or that the council maintained a unilateral right to grant or refuse price increases. Over three-quarters of providers had received no price increase in 2011-12 and 15 per cent reported actual price decreases. In line with this UNISON's survey of home care workers found that over half reported that their terms and conditions had got worse over the previous year in terms of reduced pay, adverse changes to hours and increased duties (UNISON, 2012).

In the case studies a provider for *City B* reported that there had been no cost of living increase for four years, although providers had lobbied for uplift on the basis of fuel costs, the two extra bank holidays in 2012 and the introduction of pension requirements on businesses. Respondents from this authority (and *Semirural*) portrayed a more positive picture in reporting that it had not renegotiated contracts downwards despite budget reductions. In *SemiRural*, rates had not increased for four years, despite some pressure for uplifts from individual providers. At *City B* budget cuts of 25 per cent had generated 'enormous pressures' with the service reconfigured towards re-ablement in the hope that 'A, that saves us money and B, that gives us enough head room to safely alter volumes and therefore fees'. In *Rural* there had been an uplift of five per cent following the freezing of contracts in the previous years. In *City A* one provider reported that the authority had repeatedly attempted to renegotiate the contract, on the first two occasions the provider did reduce prices, but protected care worker pay rates; on the third occasion it refused to renegotiate, 'we said we can't because we don't want to take anything away from the care worker'.

### 4.5 Recruitment

Across the case studies providers reported difficulties in recruitment. There was some evidence of an increasing proportion of men entering the sector, although these workers still formed only a small minority of the workforce. In *City C*, two worker respondents were young male graduates who had not been able to find other work, although they were committed to the care work and clients, despite their criticisms of the terms and conditions upon which they were employed. In *Semirural*, one provider on spot contracts, with a care workforce of fewer than 50, indicated that only two were male. This was attributed in part to the spot contracting regime and the inability of the firm to be able to guarantee hours for most of its workers. References to Tesco recurred throughout the case studies – an awareness that rates of pay in domiciliary care could not compete with those at local major supermarkets and the impact of this on local labour markets and staff recruitment and retention. As one council manager put it:

'Because an analogy that's used quite often is well actually, if we are paying carers the same money that Tesco is paying those people putting cans of beans on their shelves, why would somebody come in and get all the grief of that. They might as well go and work for Tesco. So there's obviously that issue there'.

For one respondent the implication was that care workers were either so dedicated that they 'would do the job for nothing', or were people 'who can't get a job on the till at Tesco's'. One provider in *Rural* had particular problems because of competing with the holiday industry, she had a permanent advert in the Job Centre, but got no response to this and she reported that her company could be a lot bigger if she could attract staff. She commented that potential recruits often did not have an

understanding of what the care worker role was and that it had become more complex than being 'a home help'. A provider in *City B* was able to recruit students, because she was located near to a university. A large national provider reported that they employ 90 per cent women and that there were increasingly younger workers coming into the sector, but that this could cause issues with the clients. The company employed migrant workers and used agencies to recruit them, in some cases arranging accommodation and transport; it was always looking for care staff as there was high turnover. The respondent from another provider confirmed that the workforce was 'transient' and, in *City A* at least, largely migrant.

At *Semirural*, a common theme in the interviews was the dedication of care workers, many of whom had long tenures with individual providers. Turnover was said to be lower than in many other local authorities, but was still at around 20 per cent per annum. The workforce was female dominated, and the average age of a domiciliary care worker in the providers interviewed at *Semirural* was over 40. Migrant workers were increasingly common in the domiciliary care workforce in *Semirural*. Students were also utilised by homecare providers.

## 4.6 Hourly pay

Service specifications necessarily focus upon the quality of care and rights for service users. They outline the expectations on workers with regard to the provision of a quality service, but are generally silent about the treatment that workers might expect. For one authority a senior manager clarified that it would not expect to play a role in how care workers were employed:

'We are really clear that this is their business, very clear about this. Our business is, are we getting the support plan that we have commissioned, preferably in outcome terms ... They tend to have to meet requirements under CQC, we put some expectations around complying with employment legislation within our contracts, but beyond that we are trying to get away from ... obviously we want quality of care in the market but we need them to provide quality and care and then they manage their own business models themselves. I don't think we've ever been specifically prescriptive about how they need to run their business'.

In City A the Council had scrutinised provider pay rates with a view to renegotiating contracts. It looked at the rates paid by three of its providers; one paid two rates - £6.60 per hour excluding holiday pay and £7.40 including holiday pay in both cases for all hours including evenings, weekends and bank holidays – this provider charged the Council £12.45 per hour. A second provider charged the Council £12.49; all its rates included holiday pay, but ranged from £6.54 for standard hours to £7.06 for evenings, £7.66 for weekends and £10 for bank holidays. The third provider charged the Council £15.91 for days and evenings, but £18.18 for weekends and £21.60 for bank holidays. In terms of hourly rates for care workers all included holiday pay and were £7.25 for days and evenings, £8.00 for weekends, £14.00 for bank holidays. This scrutiny exercise found that a number of specialist agencies were paying higher than average rates which the authority considered to be 'unreasonable'. Rates were renegotiated downwards and it was thought that this had been done by employing new staff on lower rates; so existing staff were on 'significantly higher' rates. A manager from one authority suggested that rates for domiciliary care staff could not go much lower without affecting quality, 'there is a tipping point'. City B had commissioned an external agency to scrutinise pay rates in residential care and found significant differences in pay rates and contracted hours – it found that those services that had higher pay, with increments and longer working hours per staff

member, had significantly higher National Insurance employer contributions to pay than those who operated on the basis of lower contracted hours with standard rates of pay. This was seen to indicate that some providers were more 'efficient' than others.

In *City B* one specialist provider reported paying £6.65 per hour in the week and for days and an enhanced rate of £8 for evenings and weekends. In *City C* Council respondents reported that some providers might pay enhancements for weekends, but these would not be time and a half or double time as might have been the case for local authority workers in the past. A worker employed in the council reported that staff were paid £6.70 per hour, but may get £7.50 at weekends, another working for a non-for-profit organisation got £7.20, but new starters got £6.70; there were no increments. A number of the providers interviewed as part of the case studies were unhappy about the hourly rates that they offered their staff, as one provider in *Rural* argued:

'I cannot offer a decent wage for the level of responsibility my staff undertake given the complex clients that they now care for. I have always wanted to provide staff with contracted hours and a wage reflecting their skills, qualifications and training so as to provide a high quality service to the clients, but this is becoming more difficult. This is not what I signed up for when I started my company 12 years ago and my values won't allow me to provide a poor service, but my values are being eroded. It is all down to money and how much local government and the Government as a whole can cut costs which then reflects back on providers and their staff and clients, instead of looking at how domiciliary care is now a professional service in its own right'.

In *SemiRural*, quality assurance standards were detailed, and regulated and assessed through ongoing evaluation, annual quality inspections and surveys. In terms of employee treatment, these standards did cover training issues, but not pay. However, an All Party Working Group had been established in 2009 to look at Quality in Homecare provision, and included representatives from the local authority providers and users. The remit of this group was to look at quality of care provision and as part of this the group had considered pay rates and other terms and conditions for domiciliary care workers. A confidential survey of providers had been conducted in 2010. From this survey, basic pay offered by providers varied, although it was clustered around the minimum wage. Differences could be mostly explained by the level of enhancements provided by individual providers (travel time, enhancements for weekend pay). In turn, some of these differences were determined by whether providers were on spot or block contracts, and whether the provision was in-house (for enablement services) or not.

Interviews with two providers gave an insight into the factors that determined wage levels. One provider, who had been allocated a block contract, indicated that starting rates were £6.25 per hour, and that this increased once staff had passed NVQ Level 2 qualifications. Another provider, on spot contracts, paid £6.20 per hour for a care worker, rising to £6.50 for workers with NVQs. There were enhancements for weekday evening, weekend and bank holiday working; weekday evening rates were £6.50, weekend £6.95 and Bank Holiday £12.40. No separate payment was made for travel time.

A report from the All Party Working Group in 2011 had highlighted variation in rates of pay, and terms and conditions of employment for care workers. This had recommended a feasibility study

into the impact of including payments for travel time and mileage between visits, and the provision of uniforms (see section 4.9).

## 4.7 Compliance with the National Minimum Wage

'That is their business, that's not something that we would get involved in. It is up to them how they deliver'.

Hussein (2011) has recently estimated that the incidence of care workers affected by low pay (under the NMW) in the UK is much higher than previously anticipated. Using data from the NMDS-SC and the Longitudinal Care Study (Hussein et al. 2010), she calculated that of a total estimate of 1,695,598 care workers in the country, between 156,673 and 219,241 are likely to be paid under the NMW – a mean of around ten per cent (Hussein, 2011: 5). Hussein's work covers both domiciliary and residential workers and thus cannot be directly drawn upon in this research.

None of the case study local authorities specified payment of the NMW in its contracts or actively monitored compliance, although two had undertaken research on provider pay rates as part of budget scrutiny exercises and in another case the commissioning manager was very aware of pay rates through contract monitoring. Another council manager said that the authority would not monitor compliance, but it 'may assume that if a provider was paying below NMW that it would affect quality'. A manager from one council commented:

'We don't specify anything other than they've got to pay the workers and they need a contract and that sort of thing, but there's nothing that says you will pay them 'x' and that will probably be the case unless we go down a different radical route. So nothing like that, but the hourly rate, it is the hourly rate based on contact time as we call it - but if you put the travel time in and the rest of it, the hourly rate plummets'.

A representative of a major national provider reported that headline hourly pay rates – for example £7 an hour - could include enhancements for shorter visits, paid training, holidays, sick pay and some notional travel time OR just the time spent with the client. When her organisation tendered they generally offer an hourly charge rate to the authority stating the hourly rate for workers, their overheads and their target return rate (profit). The hourly charge rate was generally £7 an hour + 12.08 per cent for holiday pay (statutory accrued hourly) + National Insurance and their target return rate. She noted that private domiciliary care work is costed separately with higher hourly rates – generally this is a separate workforce though some work may be shared.

Respondents at *Semirural* indicated that the NMW was not specified in contracts, but that the All Party Working Group that had been established to look at quality of care was actively looking at what was included in pay rates across providers, with a view to making recommendations about some of the factors that were known to impact upon hourly wage rates (notably travel time).

## 4.8 Pay and hours

As indicated in the previous quote, the relationship between hourly rates and hours worked are intimately linked to the earnings of domiciliary care workers. UNISON's survey of homecare workers found that over half of respondents received between the NMW and £8 per hour, but that the majority did not receive set wages – 61 per cent received a varying amount of take home pay per

month and this was largely because they were employed on zero-hours contracts. Zero-hours contracts were prevalent across all the case studies and were directly attributed to local authority commissioning and predicted to increase with the move away from block contracts, as a manager from one large national provider put it:

'It would be difficult to not sustain a zero-hours contract because you don't have any guaranteed or block hour contracts from the local authority, because they're all commissioned and frameworks, there's no guarantee of business, it's difficult to guarantee a workforce business or work'.

One provider in City B had 'spot contracts' with the authority with no guaranteed hours and the Chief Executive described how this had affected the way they employed staff, with the majority on zero-hours contracts because, if they had been kept on permanent contracts the organisation 'would have gone bust within two months'. While she reported that some staff like zero-hours as it gives them flexibility over if and when they work (in particular those with second jobs, students or those with other commitments), she regretted the move to zero-hours as it gave staff 'no continuity'. While a small number of permanent salaried staff on 36.5 hours contracts (considered full-time) were paid above Statutory Sick Pay, those on zero-hours were only paid at the statutory rate; whilst salaried staff got paid leave according to service, those on zero-hours contracts got paid holiday pro rata only for the hours they worked. Another provider in the same area had resisted the pressure to move to zero-hours contracts, but contracted staff for the hours that they worked (with one third on full-time shifts of 35 hours and the remainder contracted on 15 hours, but expected to work up to five hours over and above this). Her previous business partner had tried to persuade her to move to zero-hours and to employ staff below the National Insurance threshold, but she said that she was 'committed to treating staff fairly'. She had employed staff from other providers who have been employed on zero-hours contracts and they reported that for what was effectively five hours on call, they were paid for three hours' work. She acknowledged that there were peak times when clients wanted visits and that it was more and more difficult to fill gaps between visits, in particular changes in local authority criteria meant that clients' needs were more critical so shorter less complex visits were less common. Working time was made up of three shifts between 7am and 2pm per week or two 7am to 11am shifts plus a couple of evenings (4/5 hours). Full-time workers did three to four evenings a week and got every other weekend off. She did not require staff to waive their rights under the Working Time Directive.

In the *City C* case study one worker for a large national organisation reported that the numbers on contractual hours had been reduced and whereas they used to be 37.5 hours a week, the maximum contract was now 30 hours, with half of staff on zero-hours:

'If you are given a 30 hour contract and you are constantly given 40-50 hours a week what that means that your statutory hours like sick pay and holiday ... is not given to you on a plate. If they know you are going to be working over those hours regularly give a contract with those hours! Don't save money – give them a contract with the rights they deserve for the hours they work!'

In general there appeared to be confusion over whether zero-hours contracts attracted the same rights to sick pay and holiday pay as staff on fixed contractual hours, but respondents reported that sick pay and holiday pay were not paid on additional hours. Another provider employing staff on

zero-hours contracts reported that there was an issue with her staff about their family tax credits because their hours fluctuated from week to week and they could not predict what they would earn in a month. A UNISON officer also commented that the unpredictability of zero-hours meant that care workers dipped above and below tax credit thresholds and thus could not claim benefits. At *City C* a manager noted that often workers could not provide flexibility if they could only work 16 hours because of benefits.

Similar issues arose in the *Semirural* case – providers on spot contracts highlighted how the lack of guaranteed hours constrained their ability to offer anything other than zero-hours contracts. Guaranteed hours for individual workers could only be offered for those workers operating in 'double teams' where there was a high demand and where manual handling regulations required more than one person to be present with a client.

At the same time as being generally employed on zero-hours contracts, domiciliary care staff generally waive their rights under the Working Time Directive. One provider stated that skilled staff can generally get as much work as they want. A worker employed by a national private provider reported that most staff were on zero-hours, but could work up to 57 hours a week and that it was very hard to negotiate hours downwards. Both he and another worker in a not-for-profit organisation reported that in both organisations staff worked substantial additional hours (in one case regularly up to the WTD limit – 47 hours) whether or not they had a contract and that it was usual to sign over rights under the Working Time Directive. One also reported that hours were used as coercion, citing an example of an older woman who complained about working a 65 hour week, but was told it was either that or 18 hours. As one worker put it:

'I can't plan my life, not knowing when exactly I am going to be working, I can't plan things, what seems to have happened invariably is because we have lost a few service users, some of them they've gone into hospital, is that I have gappy rotas, periods when I am not working, odd half hours, I take a book with me, I know that I am not getting paid, sometimes it's really depressing, one of my colleagues said she was going out from 3pm to about 7pm and actually there was only two payable hours in that whole period...'

The implications of zero-hours for earnings are evident in arrangements stipulated in contracts for hospitalisation. *City C* had a three week rule with regard to hospitalisation so that a care package is kept open for three weeks and then temporarily suspended, but on the basis that it could be picked up again within 24 hours. This meant that theoretically care workers should get paid for when they were rostered for the first three weeks, but were not necessarily paid after this. In *Rural* one of the providers reflected upon the problems when clients go into hospital as she is expected to keep the slot open, but does not get paid for this and may only get 24 hours' notice – if four or five clients go into hospital it has implications for her finances and staffing and staff may be paid for turning up for a visit on the first day, but not beyond that. One medium sized provider reported that she provides an on-call service where her staff will go out in the middle of the night even though she cannot pay them for this and it is not required or funded by the local authority, 'Clients go to us if they are worried, we are more than just a service, clients rely on us, it is a holistic approach'. In some of the case studies commissioning managers reported that it was unlikely that packages for which providers were still paid when clients were hospitalised, would be kept open under moves to Framework agreements.

#### 4.9 Visit lengths and travel time

Visit lengths raise issues about the quality of care, but are also crucial to domiciliary care workers' pay because of the impact upon travel time between visits. The UKHCA survey found that in England almost three quarters of homecare visits being commissioned by councils were reported as being for periods of 30 minutes or shorter, with one in ten visits commissioned for 15 minutes or less. In the case studies a representative of a major national provider argued that 15 minute visits are not appropriate to deliver any kind of quality care providing dignity and respect to clients. UNISON's survey found that well over half (58%) of respondents were not paid for travel time between visits and eight out of ten respondents said that their work was arranged so that they had too many visits too close together or 'call cramming', resulting in their having to rush their work or leave a client early to get to their next visit on time (UNISON, 2012). In terms of visit times *Rural* had 15 minute visits but were trying to steer away from them:

'We should not be commissioning 15 minute visits. Well, we've always said that we don't commission 15 minute visits because we're an authority that only provides services for people whose assessed eligible needs are substantial and critical - so why 15 minutes? So we're saying, that shouldn't be happening ... just because, well partly providers saying realistically what can we do in 15 minutes? Also it's the fact that from the providers' point of view, it's quite costly for them to provide that service because of any travel involved. And just really looking at, what is that visit achieving because actually if you're trying to meet somebody's outcome, a 15 minute visit probably isn't achieving more than just a welfare check. So there are probably other ways of achieving that.'

The authority was aiming for 30 minute visits and paid proportionately (pro rata the hourly rate), with 15 minute visits paid at the half hour rate. In *City A* council managers said that it did provide 15 minute visits. In contrast in *City B* the Council reported it had dropped 15 minute visits as it did not make sense in terms of administration. In *City C* the Council did not put a limit on visits, but they were not less than 15 minutes. It did not pay enhancements (i.e. it paid proportionately), but did band calls building in tolerances (so anything between 27 and 32 minutes would be paid at 30 minutes) and there was a notional five minute travel time between visits. *SemiRural* only used 15 minute visits in rare cases 'for example, just to warm up a ready meal', although the use of 15 minute visits even for this had decreased.

The UKHCA survey showed that the overwhelming majority of councils expected providers to cover careworkers' travel time and travel costs out of the hourly rate paid for the time spent in the service users' home. Fewer than two per cent of providers in England were paid anything at all towards careworkers' travel time (with 8% in Scotland, but none in Wales and Northern Ireland).

In the case studies it was assumed that travel time would be costed within the overall hourly charge rate, as a manager in *City B* put it; 'We don't require it. We don't stipulate that, that's a business issue. We just want to know the rate that we pay'. He then clarified that he was aware that charge rates would not include travel time between visits. A provider in the area paid mileage, but not travel time, however, she provided a more specialist service which did not undertake short visits so travel time was minimised and she would not accept visits of under one hour as 'you cannot provide a service in that time'. In *City C* the service specification was clear:

'Separate payment shall not be made for any costs associated with travelling to and from the Service User's home. These costs shall be included in the tendered-for price'

A manager for the authority stated that all providers had very similar terms and conditions and that travel time was not paid for, although some may pay mileage on top of the hourly rate, but this might be 20 pence (whereas the council pay 45 pence), others may pay 10 pence a call, but this has caused consternation as some staff walk and some drive. However, a worker employed by a provider commissioned by the authority reported that the length of his visits varied and that although the standard travel time between visits was five minutes this was not paid and that he might make 30 visits a day.

A commissioner at one case study council reported that travel time was not included in hourly rates:

'It's another dilemma. Most of them don't include travel time and we know the impact of not paying travelling time. However, if it were to be included, it's probably going to make the service unaffordable for us. It's a dilemma. It doesn't sit comfortably.... In terms of finance, I can't give you a figure because we haven't done that piece of work. But yes, it would be significant, it would make a significant difference to the cost of the service at a time when we're having to make huge cuts.

For a manager in the same authority this had an impact on the service:

'So we're not allowing for the cost of travel if you like, and what we are seeing as a result of that is carers potentially shaving minutes off the time they are meant to be at somebody's place'.

In *Rural* a provider reported that care workers had to have their own car - this was a problem because of the socioeconomic profile of the area – a number of single parents worked for her and could not afford to have decent cars. She allowed five minutes between visits, so workers were paid for travel time and petrol was compensated.

At *Semirural*, the All Party Working Group had asked quality assurance officers at the local authority to consult with home care providers about the cost implications of allowing for travel time, the provision of uniforms and petrol allowances, in response to findings that pay rates (and enhancements) varied markedly across providers and that travel was a major factor for workers in this location. This exercise had revealed that allowances for travel time, provision of uniform and petrol allowances of 40 pence per mile would add around £2 per hour to costs for providers. Of this, payment for travel time made up approximately half this figure. The authority had produced a recommendation to Cabinet that travel time should be included in hourly rates. In practice, tendering documents would ask providers to consider travel time as part of their calculations of an hourly rate.

One way of recognising travel time within hourly rates is to pay enhanced rates for shorter visits. The UKHCA survey asked providers whether their council(s) applied an hourly charge rate on a pro-rata basis or paid enhanced rates for shorter visits. Nationally, only just over one quarter (28%) of providers were paid a higher rate for undertaking visits of less than one hour.

One provider reported that providers were attempting to convince the council to recognise that shorter visits should be paid at a higher rate to recognise travel time and costs. This provider paid £8 per hour in the week and £10 at the weekend, but £5.40 for 30 minutes (£6.50 at weekends) and £3.50 for 15 minutes (£4 at weekends). These rates included some notional (rather than paid) travel time and the provider allowed ten minutes between visits for travel, so 1 hour 20 minutes for two calls. This was a higher rate than the authority wanted to pay, she suggested that other organisations would provide only ten to fifteen minutes contact in a 30 minute visit – but the provider said that it refused to 'skimp'. It also paid above statutory sick pay and holiday pay (28 days), had a stakeholder pension and a limited health plan.

A worker employed by a national not-for-profit provider reported that he found his payslip extremely difficult to understand, so he could not tell what rates he was being paid for what – there were different rates according to the service provided and the needs of the service user.

A survey by the LGiU (Local Government Information Unit, 2012) found that over one in ten authorities (13%) paid domiciliary care providers by the minute; a further 24 per cent by the quarter of an hour; another 30 per cent by the half an hour and 26 per cent by the hour (2012). The UKHCA survey revealed that increasingly providers are paid for the actual visit time (often to the nearest minute) as recorded on a paper-based timesheet, or through electronic monitoring and it expected this to become more widespread. The UKHCA believed that 'this system poses risks to providers' ability to comply with the National Minimum Wage regulations and providers' financial viability'.

It was noted by local authority respondents that electronic monitoring can protect the careworker from complaints by clients, accusations that they haven't turned up or spent sufficient hours or that they do not get continuity in care workers. A representative of a national provider reported that increasingly local authorities were using electronic call monitoring, which may just be used to monitor whether staff turn up and stay for the allotted time, but they may also introduce 'pay and charge' which means that staff get paid for the minutes between logging on and off – which may be only 11 minutes within a 15 minute visit time, excluding the time that is spent waiting at the door or greeting the client. For this respondent minute by minute billing represented a move towards paying by the minute rather than hour and was designed to ensure cost reductions, with major implications for care workers' pay. For example she described how one authority had been paying £20 to include travel and enhanced shorter calls, but had recommissioned on a minute by minute basis in which any tender charging above £14 was unsuccessful - she predicted that the hourly pay rate would consequently be reduced to £7/8 an hour. In Rural the Framework Agreement would require providers to adopt the electronic call monitoring system. In City C a council manager confirmed that all providers had electronic scheduling and staff log-in and it was introducing electronic log-in and rostering for in-house staff so rotas would be sent by mobile phones. A worker for a national not-forprofit organisation described how workers had to electronically log in and out when visiting client's homes and that the lack of flexibility meant they had to rush to their next visit; he suggested that it was possible to manipulate the system, but that:

'People are only tempted to do this when they understand that they are essentially being cheated out of pay, it's not as though these people would rather spend less time at someone's house ... that's often why this is done, It becomes a game of how quickly can I

drive from A to B, rush this call and still get paid for it - it becomes a game, how quickly can I get there and still get paid'.

Electronic logging was about to become compulsory in his organisation with 15 pence per hour paid for this and disciplinary measures threatened if it was not complied with. A council manager linked the move away from 15 minute visits in their authority to the requirement for electronic log-in:

'We banned the calls because we identified that very early on ... knock on the door, Mrs Smith's got to get to the door, because what we said was we wanted to avoid the 100 metre dash where Mrs Smith opens the door, it's like get out of my way, where's your phone! So we banned the calls so that that allows time to get in and get out between getting to and from the phone ... so that allows the care worker to ring the doorbell to get in, or to access the key safe or whatever. But it allows them to get in, to make the call and then likewise, coming out, make the call to log out, say cheerio and leave. It doesn't matter if they're there on time or not or to the exact time. It logs in when they're there and if they're running five minutes late we'd expect them to leave five minutes late'.

A provider pointed out the rigidities introduced by electronic monitoring, in that in an evening a client may not want staff hanging around if they have finished after 25 minutes, but they have to log out after 30 minutes and are penalised if they leave before then.

## 4.10 The payment of a Living Wage

A number of the case study authorities were considering introducing a living wage for staff, including for domiciliary care workers on contracts. There appeared to be no barriers to doing this, the respondent from one national provider said that they dealt with two authorities that required payment of a Living Wage. *City A* was about to jointly commission a welfare catering service with two other councils and one of the requirements was for the provider to pay all staff working on the contract the Living Wage. Thus the Invitation to Tender document relating to this requirement asked a Method Statement Question: 'Will you confirm that you will ensure that all staff directly employed in the delivery of these contracts be paid at the minimum at the Living Wage'. This was a pass or fail question 'A "No" response would mean that the Contractor would be eliminated from the process, and bid no longer considered'. The commitment included the requirement to provide evidence that all of the Contractor's employees were being paid the Living Wage at any time the Client requested; and at least once annually (not later than one month prior to the anniversary of the Commencement Date). In this case, 'subject to the Client being satisfied that the employees are receiving the Living Wage, the Client on each anniversary of the Commencement Date during the Contract Period shall adjust the Contract Price to cover any additional cost imposed on the Contractor in complying'.

*City B* had agreed to write a Living Wage of £7.20 an hour into their tenders. They were paying all their directly employed staff this rate, but it had coincided with the removal of evening and weekend enhancements for care staff. The Chief Executive of a provider predicted that if she was required to pay a Living Wage by removing enhancements staff would be worse off as there was substantial evening and weekend work – she was 'disgusted by the Council's cynicism' and felt it was a purely political initiative by councillors who did not understand the reality of service provision.

Another representative of a major provider described how it was possible for providers to show that they were paying a Living Wage, by including enhancements in the headline hourly pay rate so the enhanced/non-enhanced tariff could be:

Enhanced	non-enhanced
£7 for 1 hour visit	£7
£6 for 45 minutes	£4.75
£5 for 30 minutes	£3.50
£3 for 15 minutes	£1.75
So 4x15minute visits=£12	so 4x15 minute visits = £7

Thus in a four hour shift a careworker could do two one hour shifts at £7 (so £14), then four 30 minute shifts at £5 (so £20), thus overall they earn £34, which is £8.50 an hour, although their actual hourly rate is £7. Thus headline hourly pay rates may not have any relationship to what careworkers get paid and could show that care workers are paid at higher hourly rates.

## 4.11 Training and workforce development

Specifications generally include a requirement for induction, for regular and professional supervision and appraisal and the identification of training and development needs in line with Domiciliary Care National Minimum Standards and associated Regulations. One Framework Agreement drew attention to the providers' obligations under Independent Safeguarding Authority requirements, adult protection policies and equality legislation. In *Semirural*, training was included in contract standards for home care, to ensure compliance with the national minimum standards (covering induction health and safety etc.). In *Rural* a council manager stated that the authority had a list of areas that they wanted to see staff trained in, including basic health and safety training such as manual handling and safeguarding, to more specialist training on autism and dementia, but also training in human rights and equality and diversity: 'when the service improvement officers go out, it's one of the first things they do is to look at the training'. As in other case studies the authority provided some free training to care workers, although in one authority the care services manager was not sure whether care workers were paid for attending such training.

A number of respondents suggested that care staff are being required to do additional duties for which they may not be trained. A respondent from one national provider commented:

'I think that we expect more and more and more of people who are essentially unqualified, even if they have an NVQ. They're not nurses, they're not trained for three years and what we expect of them goes up in every tender. Seriously, the expectation, not only in what they're expected to do in 15 minutes or 20 minute visits or half an hour visits - sort of cramming that call full of everything - but also in the level of competence that's needed for that and yet, to pay them minimum wage or close to ... that is directly linked to commissioning'.

A representative of another national provider reported that it was being asked to take on the data reporting requirements that local authorities used to do, but also had even been asked to do assessments, something she described as 'terrifying', since staff were not trained or paid to do this. Other respondents reported that an increasing number of tasks were being pushed onto providers, including brokering and organising client's care.

A number of respondents agreed that care workers were being asked to take on an increasing number of tasks, including medical procedures, which can be delegated to them if staff receive the appropriate training (although there were also indications that staff were taking on these tasks without adequate training). City C required that workers were trained in the authority's medication policy, which prescribed what care workers can and cannot do with regard to medical procedures, for example on open wounds or peg feeding. The authority insisted that those delivering provider training had attended a trainers' course on the policy. In this authority directly employed care workers received five to six days' training a year - the mandatory CQC training - and then specialist training. However, a worker employed by an organisation in the authority reported that induction was good, but there was little training beyond this and was concerned that he had had no training in procedures for dealing with epileptic seizures and that training was often rushed with workers having to leave to attend shifts - so although they got accreditation this could be relatively meaningless. In another case study a provider reported her experience of agencies whose staff were changing feeding tubes with no training. This is reflected in UNISON's survey of homecare workers where over one third (41%) were not given specialist training to deal with clients' specific medical needs.

Induction was generally done through shadowing existing staff. A number of respondents raised concerns about the quality of induction with one local authority respondent stating that this could comprise watching a DVD, with workers going out on their own on their first day. Care workers in *City C* employed by two separate organisations said that induction was paid, but their union officer suggested that this was not always the case.

Whilst CQC requirements that employers train at least 50 per cent of their staff to NVQ Level 2 accreditation have been relaxed, in the case studies private sector employers suggested that providing training placed further financial pressures upon them. One reported that it did try to train to Level 5 QCF (the Level 5 Diploma in Leadership for Health and Social Care and Children and Young People's Services replaced the Level 4 Leadership and Management in Care Services NVQ and Level 4 Health and Social Care NVQ on the Qualifications and Credit Framework - QCF). However, this was expensive in terms of registration, having to pay for the actual training, but also in providing staff resources for assessment. Another provider said that she was always 'being bombarded to take apprentices', but she could not take on adult apprentices because she could not afford to pay 'passengers' – the organisation's finances were too marginal to do so, although she would have been happy to do otherwise. A respondent from a national company reported that it had some adult apprentices, but confirmed that they required 'a lot of investment'.

#### 4.12 Management and procedures

The quantitative analysis revealed a reduction in senior care to care worker ratios, when looking at aggregate figures in the domiciliary care sector. The case studies respondents also identified a reduction in managers and senior staff. One care services manager suggested that where providers had to make savings they could do so by reducing back office staff, but that this then raised questions about the quality of local management, which concerned the authority as it wanted continuity and 'change always has an impact'. One worker for a national not-for-profit organisation reported that managers had been cut by half with support workers having to take on extra work with no supervision, meaning less time spent with service users and increased stress. In *City C* with regard to supervision directly employed careworkers could expect six formal contacts including two observations and an appraisal over the course of a year. They also had weekly group meetings so there was regular contact with management and peers.

The absence of workplace meetings for staff in the private and independent sector meant careworkers could be isolated and unsupported. One worker reported that he did not meet other workers; although the provider he worked for had an administrative office, workers only went there infrequently for training or to sort issues out. He and another worker recounted that increasingly they worked alone - 'we support people with challenging behaviour on our own' - and only got a sense of other workers activities through care notes and service users gossip! Rotas were often texted, emailed or posted to care workers, although in one case there was a 'rota drop' in a local pub car park. Staff were required to use their own mobile phones for work. A UNISON officer described the difficulty of gaining access to care workers to provide them with representation, something reinforced by the isolated nature of the work.

Representation is an issue for care workers in the context of increasingly strict safeguarding procedures and amidst public fears about staff behaviour in the wake of the Winterbourne scandal. Service specifications generally require providers to have written grievance and disciplinary procedures and some authorities may provide for the 'immediate removal' of a worker from a contract without having to give the service provider reason or written notice. Authorities may also want to be involved in the disciplinary process. At the same time one local authority manager also commented that

'In the past there has been this argument between us as a department, us as a commissioner of service and an organisation providing the service, where they sort of say "well actually you can't tell us how to run our own employment processes" and so on. So we tend to actually gauge it on the point that we expect, in any event, we don't ask for dismissal necessarily, but we say this person must not work on our service'.

He also made the point that a careworker who has been dismissed may move on to work for another provider. Where workers are directly employed the procedure may work alongside the Council's disciplinary procedure with trade union involvement. One authority reported that in terms of safeguarding there was an alert system and triage service which determined if an incident was a safeguarding issue, which worked in parallel with employment law, 'the criminal element first then the disciplinary, but one is not dependent upon the other'. However, in another authority a provider reported an instance where there was alleged abuse by a care worker and they were interviewed about it by two social workers without it being clear which process this was being conducted under.

Here there was no relationship between the safeguarding process and any organisational disciplinary procedure which would have given the worker rights to representation – the relationship between safeguarding and employee disciplinary and grievance procedures is a particular issue where providers may have no employee representation systems. This was confirmed by a provider who expressed a concern that the increased demand for scrutiny and regulation to meet Quality and Safeguarding standards meant that where previously issues could be sorted out informally over the telephone, they now became instantly formalised and that local authorities could insist upon staff dismissals without any employee representation or recourse to natural justice.

## 4.13 Alternative commissioning and the future

The Joseph Rowntree Foundation has commissioned work calculating a fair market price for residential care (Laing, 2008) and such an approach could be extended to domiciliary care. The principal aim of the report was to provide local authority and NHS commissioners of care services with 'a transparent and robust means of calculating the reasonable operating costs of efficient care homes for frail older people and older people with dementia in any given locality'. It calculates fee levels necessary to sustain delivery of adequate care services by independent sector providers that fairly reflect local market conditions. This includes staff pay levels based upon Office for National Statistics (ONS) average earnings, a benchmark staffing input in terms of hours and a return on capital benchmark (12%) required to incentivise providers to invest in new care. It concludes that in 2008 fees paid by most social services departments throughout England remained below the 'fair market price' rates calculated and suggests that calculating fee rates from a cost model – rather than tendering or some other negotiating process – is the most practical way of determining fair levels of remuneration for care homes for state-funded clients, but that fee rates should be calculated locally rather than nationally.

The Association of Directors of Adult Social Services (ADASS) has developed a number of Fair Cost Building Block Principles which include a need to promote a common understanding of the real costs of delivering care, with greater transparency of costs and how they are comprised as well as modelling costs that enable providers to generate confident investment, including an adequate margin and/or return on capital. The principles recognise that true costs may exceed actual costs e.g. where salary rates have had to be held down and are inadequate to recruit and retain good quality staff.

A recent report by LGiU and supported by homecare provider Mears (2012) makes the case for outcome-based commissioning in adult social care. In the context of the personalisation agenda it states that:

'Commissioning on the basis of individual outcomes, rather than outputs, shifts the emphasis away from systems and processes and onto the quality of the service and the impact on the individual'.

However, the report, based upon a survey of local authority social care departments, recognises that paying providers on the basis of outcomes is not widespread; the vast majority (90%) paid providers according to the time they spent with a service user rather than outcome even though three quarters of respondents asserted that 'a culture of running services on a time-task basis' was a barrier to outcome-based commissioning. The report highlights the example of Wiltshire County

Council where providers are paid by outcomes, with financial penalties when these are not achieved and rewards where customers recover faster than planned. It cites the Council's belief that 'buying outcomes instead of hours is a commercial incentive to improve the pay and skills of the care workforce'. There are other examples of payment by results in reablement.

In the case studies, one local authority contracts manager suggested that domiciliary care services could be based upon a 'fair fee model' where authorities could give a specified rate for pay and for overheads with capacity for increases to the NMW. He suggested that an even more radical model would be an 'open book' approach on the basis of a real partnership with providers driven by quality so the authority would pay whatever the service costs and then allow a certain percentage profit:

'Unless you do go down the route of the fair fee model where you say this is what you will pay, then it is the competitive market that will determine that. So then you've got the dilemma of providers saying well actually, I know what the solution is, we need to have reasonable rates of pay, we need to have people on contracted hours rather than zero-hours, but that's going to put my rate up to fifteen quid an hour and if I do that Joe Blogs is going to come in at £10 an hour and I'm going to be on the street'.

A representative from a national provider reported that it had a contract with a local authority and a PCT for clients with mental health needs where it was paid according to outputs based upon hourly blocks and designed to prevent a revolving door in terms of mental health admissions – this specified permanent 34/36 hour contracts for staff, who were part of a care team. It was not based on contact time alone, but on providing a flexible service. She argued that in the context of a service where clients want visits at particular peak times and which it is not possible to provide:

'Good local authorities will be very clear about peoples' expectations about what they can and can't receive, different local authorities won't and they will put things like, "if it's more than 15 minutes after the commission time and you arrive after 15 minutes, generated by ECM which is the telephone in-and-out system, that's classed as a missed visit and you won't get paid ... they go in at say 9.32 for a visit and they leave at 10 o'clock and it's a half hour visit, the two minutes, don't get paid. But if they stay 32 minutes, they don't get paid for that either, there's no flexibility. It's all one sided, there is no flexibility anywhere on that'.

As a contracts manager conceded, 'flexibility costs money' and in this context respondents were not positive about the future and personalised care. A representative of a national provider said that direct payments were generally paid at less than a block or Framework price and do not necessarily provide a better quality service. For the organisation direct payments meant a loss of staff because they can become self-employed and they can then get a higher rate as there are no overheads. However, there is then no management, supervision, training, provision for sickness absence. In terms of clients they had experiences of clients going direct then returning to a provider. In *Rural* a manager said that around 30-40 per cent purchased their care directly which would be in line with national trends, but they tended to be younger, confirming the perspective of other respondents that older clients found direct care alien.

A number of providers feared that the impact of Framework Agreements would be that some organisations will go out of business and there would be mergers, with national companies 'hoovering up' despite the authority's aim of diversity of provision. In *City C* a council manager

reported that cost and volume had been seen as restrictive and that the Framework had been introduced in the belief that it would encourage more small providers with more flexibility to offer a different type of or less prescriptive service. Yet in the same authority a manager perceived that larger providers were 'swallowing up' the smaller ones. A representative of a national provider described the company's 'buy and build' strategy of acquiring smaller companies who were not surviving in the market - 'this business is really about size - you have to have scale'. It takes on businesses as they stand, so they remain legal entities and this means TUPE does not apply, but this allows it to reduce overheads. In another authority under its new framework it was reported that three quarters of providers had gone out of business or chosen not to take part in the initial procurement exercise, although some may have decided to go for the self-funding market. The Council was aiming to restrict the number of providers and to move onto a more robust contractual basis, 'to manage and service improve with a lower number of providers. So it makes it easier to manage the market'. One of its existing providers was aware that the authority intended to divide the county into geographical areas and she had to decide whether she should focus on those areas where she had staff and was not clear if there would be differential rates to address areas where there were capacity issues (this appeared to be unlikely). She was worried that she would not get through the initial Pre-Qualification Questionnaires (PQQ) process (which facilitates entry onto the framework) – if this happens she said that her organisation 'will be finished'.

### 5. Conclusions and Recommendations

This research confirms previous LPC evidence defining social care as a low-paying sector. The NMDS-SC dataset shows that whilst average pay is around 15 per cent above the minimum wage, a proportion of domiciliary care workers are paid below the minimum wage (1.1% of workers, taking the period October 2008-April 2012 as a whole) and this figure rose sharply in 2011/12. The proportion of domiciliary care workers paid at or below the NMW (6.1% at or below and 2.5% below the NMW) in 2012 is slightly lower than the LPC figure of 7.9 per cent for the proportion of jobs in the wider category of social care paid at or below the April 2011 NMW (LPC, 2012) and below Hussein's for all care workers recorded in the NMDS-SC (2011). However, we suggest that our calculations are likely to be a conservative estimate of those paid under the minimum wage, because it is unclear whether hourly rates in the NMDS-SC data set recognise travel time. From our case study research on this issue, we conclude that it is increasingly unlikely that these hourly rates are an accurate reflection of working time.

The research highlights the complexity of translating hourly pay into earnings and the importance of examining the configuration of hours and pay. Thus whilst the average pay (median) for care workers was 15 per cent above the NMW, in the context of local authority commissioning, there is evidence that this benchmark is sustained through the widespread use of zero-hours contracts and the intensification of paid work. Following the financial logic of the outsourcing of domiciliary care, this is most evident amongst private providers, where eight of ten workers are on zero-hours contracts. In order to win local authority tenders, whilst complying with the NMW, homecare providers are increasingly unable to guarantee careworkers fixed and contracted weekly hours. This has implications for sick pay and holiday pay and entitlement, whilst providers often do not pay overtime or unsocial hours premiums and in many cases they do not pay for travel time between visits. This element of unpaid labour is in addition to the uncertainty that zero-hours contracts introduces into the lives of those working in the care sector

The relationship between zero-hours contracts and pay is not straightforward, and requires an analysis of the interaction of hourly and weekly rates. Thus hourly rates are not significantly different between those on zero-hours contracts and those on fixed contractual hours, although the majority of those paid under the NMW (68%) were on zero-hours contracts in the 2011-12 period, suggesting, at a descriptive level at least, some relationship between this form of contracting and payment under the NMW. Further, after controlling for a range of personal and employment characteristics, we find that being on a zero-hours contract has, in some time periods, had a significant effect on being paid under the NMW. Overall, there is an association between hours and pay, with those working more hours less likely to be paid below the NMW hourly rate. During the period October 2011-April 2012 contracted working hours were positively associated with hourly pay. Importantly, weekly rates for those on zero-hours are significantly less - overall all workers have to work beyond their contractual hours to ensure a living wage, but this is particularly true for those on zero-hours contracts. This relationship between hourly and weekly pay is particularly important for non-British born workers who are employed on lower average hourly pay rates, but are on higher weekly pay because of hours worked. Similarly while there is no gender pay gap in terms of hourly rates, male workers earn higher weekly pay rates than females because of hours worked. The intensification of work is also evident for managers and senior care workers; both

groups have seen recent falls in their hourly pay, while an increasing proportion of managers are employed on zero-hours contracts.

The decline in the ratio of senior to care workers also suggests that the latter are taking on additional responsibilities and this was confirmed by the case studies. The reduction in supervisory resources intensifies the isolation of domiciliary care workers' working lives and the case studies suggest that electronic monitoring is likely to reinforce this. The organisation of work undermines employee voice and representation in a situation where they are vulnerable in the context of strict regulatory processes.

The research puts the spotlight on the commissioning process. Whilst the case studies reveal widespread dissatisfaction amongst providers, workers, trade unionists and some local authority commissioners and service managers, the procurement process is generally silent on the terms and conditions of care workers. None of the local authorities in the case studies specified payment of the NMW in their contracts with care providers or systematically monitored compliance. Whilst in some authorities there were attempts to look at the inclusion of travel time and/or the specification of a living wage in procurement processes, the evidence suggests that the introduction of Framework Agreements and the move away from block contracts, in the context of the personalisation of care, is unlikely to relieve the intense pressure upon a care system which is at least partially dependent upon the unpaid labour of a largely female workforce.

## Recommendations within the remit of the Low Pay Commission

- 1. Local authorities should be required to ensure contracted providers can pay at least the National Minimum Wage to domiciliary care workers and they should monitor compliance;
- 2. In line with the requirements of National Minimum Wage legislation, local authorities should explicitly state that contracts expect external providers to pay care workers an hourly rate for all working time, including the time required to travel between visits;
- 3. There should be transparency in procurement processes and contractors should be required to state what hourly rates comprise in terms of working time and specifically whether travel time is included, whether there are enhanced rates for visits that are shorter than one hour and whether there are enhancements for evening and/or weekend and/or bank holiday working;
- 4. Further research is needed to explore the relationship between travel time, enhanced payments and pay, and to assess the extent to which travel time and enhanced payments are included in hourly pay rates;
- 5. More precise recording of this by providers within datasets, through the development of more specific questions/recording systems in the NMDS-SC would help to develop this understanding;

- 6. The LPC should continue to monitor the impact of the NMW upon working time and particularly the use of contractual arrangements such as zero-hours contracts as a possible means of accommodating the cost of compliance;
- 7. The emergence of Framework Agreements in the context of personalised care is likely to have further implications for the hourly rates of domiciliary care workers and these developments should be reviewed in the forthcoming period;

### Wider recommendations beyond the remit of the Low Pay Commission

- 8. The relationship between the pay and conditions of domiciliary care workers and the quality of care for service users must be recognised, particularly in the commissioning process, but also in resource allocation. This should include consideration of the compatibility between CQC standards and commissioning practices within the context of government finances;
- 9. Procurement processes should require contractors to state how they cost staff training, supervision, sick pay and holiday pay into quoted charge rates;
- 10. There should be consideration of how government policies on apprenticeship can be operationalized in situations where commissioning processes place pressures upon contractor resources and their ability to take on apprentices;
- 11. The EHRC should monitor and regulate the impact of local authority contracting in terms of equality not only for service users, but also contractor workforces. In particular it should explore how far any conditions inserted in contracts with regard to the pay and conditions of workers apply across all contracts let by an authority (rather than to particular contracts and/or workforces) in order to be compliant with equality legislation;
- 12. Attention should be paid to the isolation experienced by care workers through lone working and the organisation of their work and consideration given to the resulting weakness in employee voice and access to representation.

#### References

Community Care 16.2.2011 'One-fifth of social care providers expect to close next year'.

Department for Business, Innovation and Skills (2011b) National Minimum Wage Annual Report for 2010/11. URN 11/280. October.

Department of Health (2012) Caring for our Future: Reforming Care and Support, Department of Health, London.

Equality and Human Rights Commission (2011) Close to Home, an Inquiry into Older People and Human Rights in Home Care, November, EHRC, Manchester.

Fitzmaurice, G.M. and Ravichandran, C. (2008) A Primer in Longitudinal Data Analysis. Circulation. 2008; 118: 2005-2010.

Huang, W. and Fitzmaurice, G. M. (2005), Analysis of longitudinal data unbalanced over time. Journal of the Royal Statistical Society: Series B (Statistical Methodology), 67: 135–15.

Hussein, S. and Manthorpe, J. (2011) Longitudinal Changes in Care Worker Turnover and Vacancy Rates and Reasons for Job Leaving in England 2008-10, Social Care Workforce Periodical, Social Care Workforce Research Unit King's College, London.

Hussein, S. (2010a) Pay in Adult Social Care in England, Social Care Workforce Periodical, 6, Social Care Workforce Research Unit King's College, London.

Hussein, S. (2010b) Modelling pay in adult care using linear mixed-effects models, Social Care Workforce Periodical, 7, Social Care Workforce Research Unit King's College, London.

Hussein, S. (2011) Estimating Probabilities and Numbers of Direct Care Workers Paid Under the National Minimum Wage in the UK: A Bayesian Approach. Social Care Workforce Periodical, December, King's College, London.

Laing, W. (2008) Calculating a fair market price for care: A toolkit for residential and nursing homes - third edition. Joseph Rowntree Foundation, York.

Local Government Information Unit (2012) Outcomes Matter: Effective Commissioning in Domiciliary Care. LGIU, London.

Low Pay Commission (2012) National Minimum Wage. Low Pay Commission Report 2011, Cm 8023, April (The Stationery Office)

Low Pay Commission (2011) National Minimum Wage. Low Pay Commission Report 2012, Cm 8302, April (The Stationery Office)

NMDS-SC Briefing (2009) Issue 8 – Pay. Skills for Care, Leeds.

Nomis (2012) Annual Population Survey (2012) Wizard analysis http://www.nomisweb.co.uk/query/select/wizpopular.asp Office for National Statistics (2012) Population Ageing in the United Kingdom, its Constituent Countries and the European Union, ONS: London

Skills for Care (2011) The size and structure of the adult social care sector and workforce in England 2011, Skills for Care, Leeds.

Skills for Care (2010) The State of the Adult Social Care Workforce in England, 2010, Skills for Care, Leeds.

UK Commission on Employment and Skills (2010), Skills for Jobs: Today and Tomorrow, UKCES, London.

UK Homecare Association (2012) Care is not a commodity, UKHCA, Sutton.

UK Homecare Association (2012) Response to the Low Pay Commission, 22.09.2012.

UNISON (2012) Time to Care: A UNISON report into homecare, UNISON, London

Appendices

Appendix 1: Logistic regression results on below National Minimum Wage indicator (\* indicates a p-value between 0.01 and 0.05, \*\* a p-value between 0.001 and 0.05, \*\* a p-value between 0.001 and 0.01 and \*\*\* a p value smaller than 0.001).

Variable	Category	Odds Ratio
Nationality	Non British vs British	1.350
Nationality and Time Period	Change to Non British vs British contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.574*
	Change to Non British vs British contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.656
Gender	Males vs Females	1.617
Sector	Statutory local authority vs Private	0.377
	Voluntary/Third vs Private	0.432 ***
	Other vs Private	0.666
Induction Status	Not applicable vs Completed	4.938***
	In progress vs Completed	0.846
Induction Status and Time Period	Change to NA vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.253**
	Change to NA vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.071*
	Change to In progress vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.894
	Change to In progress vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.982
Qualification	Entry level, level 1 or level 2 (basic) vs No qualification	0.390***
	Level 3 or Level 4 vs No qualification	0.457***
	Other qualification relevant to social care (other relevant) vs No qualification	0.658**
	Other qualification vs No qualification	2.609***
Time Period	(Oct10 - Mar11) vs (Oct11 - Apr12)	0.253***
	(Apr11 - Sep11) vs (Oct11 - Apr12)	0.114***
Size of establishment	Micro vs Large	0.740
	Small vs Large	1.141
	Medium vs Large	1.503*
Zero-hours contract	No vs Yes	0.965
Zero-hours contract and Time Period	Change to No vs Yes contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	3.102***

	Change to No vs Yes contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	3.734**
Distance from work		0.999
Age		0.991*
Part time	Part time vs Full time	0.604*
	Other vs Full time	0.807
Region	Eastern vs London	0.954
	East Midlands vs London	0.254***
	North East vs London	1.084
	North West vs London	1.416*
	South East vs London	0.717
	South West vs London	0.804
	West Midlands vs London	1.235
	Yorkshire & Humber vs London	0.691

# Appendix 2: Logistic regression results on distance of hourly pay from NMW

Variable	Category	В
Intercept		114.643***
Sector	Statutory local authority vs Private	20.836***
	Voluntary/Third vs Private	2.158***
	Other vs Private	-0.814
Sector and Time period	Change to Stat. local authority vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.246
	Change to Stat. local authority vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	5.805***
	Change to Voluntary/Third vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	3.815***
	Change to Voluntary/Third vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-0.243
	Change to Other vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	9.024***
	Change to Other vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	8.277***
Nationality	Non British vs British	-1.205***
Employer Status	Temporary vs Permanent	-4.306***
	Bank or Pool vs Permanent	5.675***
	Agency vs Permanent	2.983***
	Student vs Permanent	-5.067
	Volunteer vs Permanent	2.008
	Other vs Permanent	-8.339*
Employment Status and Time period	Change to Temporary vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	3.795**
	Change to Temporary vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	5.910***
	Change to Bank/Pool vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-5.927***
	Change to Bank/Pool vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-7.505***
	Change to Agency vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	2.203*
	Change to Agency vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-7.289***
	Change to Student vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	6.631
	Change to Student vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	70.461***
	Change to Volunteer vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-2.757
	Change to Volunteer vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-5.639
	Change to Other vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.996
	Change to Other vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	8.088***

Distance from Work		0.038
Distance from Work and Time period	Change to Distance from Work coefficient between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.228*
	Change to Distance from Work coefficient between (Apr11 - Sep11) and (Oct11 - Apr12)	0.996***
Total hours worked		0.064***
Total hours worked and Time period	Change to Total hours worked coefficient between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.079**
	Change to Total hours worked coefficient between (Apr11 - Sep11) and (Oct11 - Apr12)	-0.049
Contracted hours		0.04**
Contracted hours and Time period	Change to Contracted hours coefficient between (Oct10 - Mar11) and (Oct11 - Apr12)	0.120***
	Change to Contracted hours coefficient between (Apr11 - Sep11) and (Oct11 - Apr12)	-0.058**
Part time	Part time vs Full time	0.087
	Other vs Full time	3.731***
Part time and Time period	Change to Part time vs Full time contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	2.770***
	Change to Part time vs Full time contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.026
	Change to Other vs Full time contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	6.257***
	Change to Other vs Full time contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-0.952
Induction Status	Not applicable vs Completed	-0.530
	In progress vs Completed	-1.125*
Induction status and Time period	Change to Not applicable vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-4.354***
	Change to Not applicable vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-2.718***
	Change to In progress vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.146
	Change to In progress vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.092
Qualification	Entry level, level 1 or level 2 (basic) vs No qualification	2.605***
	Level 3 vs No qualification	8.440***
	Level 4 or above vs No qualification	8.536***
	Other qualification relevant to social care (other relevant) vs No qualification	6.528***
	Other qualification vs No qualification	0.344
Qualification and Time period	Change to basic vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.118**
	Change to basic vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-0.573
	Change to level 3 vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	2.491***
	Change to level 3 vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-3.106**
	Change to level 4 vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.773
	Change to level 4 vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-4.183*
	Change to other rel. vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.213
	Change to other rel. vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-6.379***

	Change to other vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-4.216**		
	Change to other vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	2.611		
Size of establishment	Micro vs Large	-0.375		
	Small vs Large	-4.657***		
	Medium vs Large	-4.024***		
Size and Time period	Change to Micro vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-14.036***		
	Change to Micro vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	3.539		
	Change to Small vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-10.095***		
	Change to Small vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	2.780		
	Change to Medium vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-12.765***		
	Change to Medium vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.903		
Region	Eastern vs London	1.517*		
	East Midlands vs London	-7.917***		
	North East vs London	-12.753***		
	North West vs London	-9.796***		
	South East vs London	0.611		
	South West vs London	-4.732***		
	West Midlands vs London	-5.070***		
	Yorkshire & Humber vs London	-1.602*		
Region and Time period	Change to Eastern vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	6.049***		
	Change to Eastern vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-0.431		
	Change to East Midlands vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	9.348***		
	Change to East Midlands vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	3.418*		
	Change to North East vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	13.030***		
	Change to North East vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	8.016***		
	Change to North West vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	7.559***		
	Change to North West vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	5.183***		
	Change to South East vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	10.160***		
	Change to South East vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	4.021**		
	Change to South West vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	12.762***		
	Change to South West vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	9.308***		
	Change to West Midlands vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	7.654***		
	Change to West Midlands vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	2.907*		
	Change to Yorkshire/Humber vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	6.121***		
	Change to Yorkshire/Humber vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.827		
Time period	(Oct10 - Mar11) vs (Oct11 - Apr12)			
---------------------	------------------------------------	-----------	--	--
	(Apr11 - Sep11) vs (Oct11 - Apr12)	-6.225***		
Gender	Males vs Females	0.118		
Age		0.066***		
Zero-hours contract	No vs Yes	0.628		

# Appendix 3: Logistic regression results on weekly pay

Variable		В
	Intercept	208.600**
Sector	Statutory local authority vs Private	46.632***
	Voluntary/Third vs Private	5.699**
	Other vs Private	8.316*
Sector and Time period	Change to Stat. local authority vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-2.070
	Change to Stat. local authority vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	17.235***
	Change to Voluntary/Third vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	21.300***
	Change to Voluntary/Third vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.735
	Change to Other vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	19.052***
	Change to Other vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	4.618
Gender	Males vs Females	5.480***
Nationality	Non British vs British	5.163***
Employer Status	Temporary vs Permanent	-20.840***
	Bank or Pool vs Permanent	-28.020***
	Agency vs Permanent	-5.036
	Student vs Permanent	25.058
	Volunteer vs Permanent	-126.850*
	Other vs Permanent	-24.083***
Employment Status and Time period	Change to Temporary vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	14.660**
	Change to Temporary vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-1.017
	Change to Bank/Pool vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-1.662
	Change to Bank/Pool vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-5.708
	Change to Agency vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	10.506*
	Change to Agency vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-6.058
	Change to Student vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-22.976
	Change to Student vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	12.094
	Change to Volunteer vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	143.252*
	Change to Volunteer vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	165.596
	Change to Other vs Permanent contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	4.737
	Change to Other vs Permanent contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	35.785***
Zero-hours contract	No vs Yes	15.425***

Zero-hours contract and Time period	Change to non zero vs zero-hours contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.313
	Change to non zero vs zero-hours contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	9.503***
Age		0.138***
Distance from Work		2.005***
Induction Status	Not applicable vs Completed	1.007
	In progress vs Completed	-2.087
Induction status and Time period	Change to Not applicable vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	2.085
	Change to Not applicable vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	7.735
	Change to In progress vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-5.730*
	Change to In progress vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	4.687
Qualification	Entry level, level 1 or level 2 (basic) vs No qualification	9.755***
	Level 3 vs No qualification	26.039***
	Level 4 or above vs No qualification	10.942**
	Other qualification relevant to social care (other relevant) vs No qualification	34.249***
	Other qualification vs No qualification	9.526
Qualification and Time period	Change to basic vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-0.009
	Change to basic vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-0.711
	Change to level 3 vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-6.516*
	Change to level 3 vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-7.033
	Change to level 4 vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	10.057
	Change to level 4 vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-12.381
	Change to other rel. vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-3.346
	Change to other rel. vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-33.188***
	Change to other vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-17.958
	Change to other vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-13.206
Size of establishment	Micro vs Large	10.440*
	Small vs Large	-4.859
	Medium vs Large	-5.288*
Size and Time period	Change to Micro vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-24.279***
	Change to Micro vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-16.281*
	Change to Small vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-15.338***
	Change to Small vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-13.204**
	Change to Medium vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-19.738***
	Change to Medium vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-17.559***
Region	Eastern vs London	-8.154**

	East Midlands vs London	-12.619***
	North East vs London	-16.120***
	North West vs London	-9.060**
	South East vs London	1.737
	South West vs London	-2.296
	West Midlands vs London	-1.679
	Yorkshire & Humber vs London	11.146***
Region and Time period	Change to Eastern vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	11.966**
	Change to Eastern vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	3.585
	Change to East Midlands vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	17.744***
	Change to East Midlands vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-1.867
	Change to North East vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	20.091***
	Change to North East vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	20.514***
	Change to North West vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	12.558***
	Change to North West vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-4.781
	Change to South East vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	12.250**
	Change to South East vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-12.626*
	Change to South West vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	5.672
	Change to South West vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	5.063
	Change to West Midlands vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.193
	Change to West Midlands vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-9.152
	Change to Yorkshire/Humber vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	4.181
	Change to Yorkshire/Humber vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	-14.027**
Part time	Part time vs Full time	-90.579***
	Other vs Ful time	-62.062***
Part time and Time period	Change to Part time vs Full time contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.546
	Change to Part time vs Full time contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.362
	Change to Other vs Full time contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	16.441***
	Change to Other vs Full time contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	-2.052
Time period	(Oct10 - Mar11) vs (Oct11 - Apr12)	5.666
-	(Apr11 - Sep11) vs (Oct11 - Apr12)	10.104

# Appendix 4: Logistic regression results on zero-hours contracts

Variable	Category	Odds Ratio
Nationality	Non British vs British	0.643***
Nationality and Time Period	Change to Non British vs British contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.315***
	Change to Non British vs British contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.842*
Gender	Males vs Females	0.701***
Employer Status	Temporary vs Permanent	0.945
	Bank or Pool vs Permanent	1.028
	Agency vs Permanent	1.061
	Student vs Permanent	1.191
	Volunteer vs Permanent	0.668
	Other vs Permanent	0.402***
Sector	Statutory local authority vs Private	0.094***
	Voluntary/Third vs Private	0.571***
	Other vs Private	0.421***
Sector and Time Period	Change to Stat. local authority vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.482***
	Change to Stat. local authority vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.085
	Change to Voluntary/Third vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.873***
	Change to Voluntary/Third vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.980
	Change to Other vs Private contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.659**
	Change to Other vs Private contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.768***
Induction Status	Not applicable vs Completed	0.721***
	In progress vs Completed	0.760***
Induction Status and Time period	Change to Not applicable vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.851
	Change to Not applicable vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.553***
	Change to In progress vs Completed contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.684***
	Change to In progress vs Completed contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.079

Qualification	Entry level, level 1 or level 2 (basic) vs No qualification	0.742***
	Level 3 vs No qualification	0.627***
	Level 4 or above vs No qualification	0.666***
	Other qualification relevant to social care (other relevant) vs No qualification	1.861***
	Other qualification vs No qualification	3.134***
Qualification and Time period	Change to basic vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.813***
	Change to basic vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.863**
	Change to level 3 vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.692***
	Change to level 3 vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.811*
	Change to level 4 vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.780
	Change to level 4 vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.931
	Change to other rel. vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.353***
	Change to other rel. vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.161***
	Change to other vs No qualification contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.044***
	Change to other vs No qualification contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.194***
Size of establishment	Micro vs Large	0.174***
	Small vs Large	0.269***
	Medium vs Large	0.334***
Size of Establishment and Time period	Change to Micro vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.124
	Change to Micro vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	4.115***
	Change to Small vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.705***
	Change to Small vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	2.102***
	Change to Medium vs Large contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.749**
	Change to Medium vs Large contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	2.197***
Distance from work		0.967***
Distance from NMW (%)		0.999
Distance from NMW and Time Period	Change to Distance from NMW coefficient between (Oct10 - Mar11) and (Oct11 - Apr12)	0.989***
	Change to Distance from NMW coefficient between (Apr11 - Sep11) and (Oct11 - Apr12)	0.991***
Age		0.999
Age and Time period	Change to Age coefficient between (Oct10 - Mar11) and (Oct11 - Apr12)	1.006***

	Change to Age coefficient between (Apr11 - Sep11) and (Oct11 - Apr12)	1.003
Time period	(Oct10 - Mar11) vs (Oct11 - Apr12)	2.144***
	(Apr11 - Sep11) vs (Oct11 - Apr12)	1.356
Part time	Part time vs Full time	0.845***
	Other vs Full time	8.629***
Part time and Time Period	Change to Part time vs Full time contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.346***
	Change to Part time vs Full time contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.129*
	Change to Other vs Full time contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.894***
Region	Eastern vs London	0.354***
	East Midlands vs London	0.337***
	North East vs London	0.364***
	North West vs London	0.302***
	South East vs London	0.392***
	South West vs London	0.179***
	West Midlands vs London	0.349***
	Yorkshire & Humber vs London	0.364***
Region and Time period	Change to Eastern vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	3.153***
	Change to Eastern vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.291*
	Change to East Midlands vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.294*
	Change to East Midlands vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.087
	Change to North East vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.018
	Change to North East vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.122
	Change to North West vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.640***
	Change to North West vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.801*
	Change to South East vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	4.484***
	Change to South East vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.076
	Change to South West vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	3.449***
	Change to South West vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	1.343**

Change to West Midlands vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)			
Change to West Midlands vs London contrast between (Apr11 - Sep11) and (Oct11 - Apr12)	0.585***		
Change to Yorkshire/Humber vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	1.361**		
Change to Yorkshire/Humber vs London contrast between (Oct10 - Mar11) and (Oct11 - Apr12)	0.628***		

# **Appendix 5: Technical appendix**

### Further details on the Dataset, data selection and cleaning procedure

### How does Skills for Care collect data?

Employers from various care establishments (from different sectors) enter data for their employees and their establishments. The data is collected by Skills for Care, an organisation which works closely with these establishments. A connection has been created between Skills for Care and employers: employers are responsible for entering data on a monthly basis and Skills for Care, in exchange, provides incentives in the form of access to information, training and seminars. Participation by employers, and entry of data, although voluntary, is high, as Skills for Care incentivises and reminds employers to enter data as frequently as possible.

Data are supposed to be entered every month. Not all employers enter data on a monthly basis. Every establishment and every employee is allocated a unique identifying number allocated, which allows them to be traced when they change or no longer exist. This helps to ensure there is no duplication in the dataset.

#### The analysis

Our analysis used 6-monthly cuts of data. A key moment of interest each year is the implementation of the new NMW level in October. We also selected another point of interest, midway between two October points (ie April). Nine separate smaller datasets of different time periods were created, described as: [(1) up to March 2008; (2) April 2008 to September 2008; (3) October 2008 to March 2009; (4) April 2009 to September 2009, (5) October 2009 to March 2010; (6) April 2010 to September 2010; (7) October 2010 to March 2011; (8) April 2011 to September 2011 and (9) October 2011 to April 2012].

The NMDS-SC dataset is 'added to' with each monthly run of newly inputted data. Thus, the dataset at May 2012 contains all the entries from earlier periods. The dataset also allows providers to amend and update records. Thus there needed to be some initial cleaning of the data to ensure that each individual piece of the dataset would include only a single entry for each individual. One entry made in October 2008, for example, might be found again in subsequent years of the composite dataset. Therefore, the unique identification number of every employee and employer was located and each case was identified individually and linked to a particular cut of data. In each of the nine smaller datasets, we have made sure that there is a unique entry for an employee.

Information for a single employee may appear in more than one 6-month period, although this did not happened frequently, i.e. for 16.9% of the cases. The design can therefore be described as an unbalanced longitudinal design with repeated observations on an employer (mostly) and employee basis. The design is not completely nested since in principle an employee may change employers throughout the time period of the study.

### Data cleaning

The multivariate analysis targeted adult domiciliary care workers. One of the main aspects of our analysis is the information regarding the pay of each worker. In order to ensure uniformity we used the hourly rate as the basis. For some workers, however, information regarding annual or monthly pay was given. Some other workers were unpaid, and for others, no relevant information was available. The tables below provide the relevant information for each of the three 6-month periods used in the multivariate analysis.

	October 2010 – March 2011						
					Cumulative		
		Frequency	Percent	Valid Percent	Percent		
Valid	Not recorded	408	.4	.4	.4		
	Annual	13795	13.6	13.6	14.0		
	Monthly	10387	10.3	10.3	24.3		
	Hourly	76498	75.6	75.6	99.9		
	Unpaid	58	.1	.1	100.0		
	Total	101146	100.0	100.0			

Table A5.1: Pay data in the October 2010-April 2012 period.

April 2011 – September 2011

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Not recorded	409	1.1	1.1	1.1
	Annual	10756	28.8	28.8	29.9
	Monthly	892	2.4	2.4	32.3
	Hourly	25228	67.6	67.6	100.0
	Unpaid	13	.0	.0	100.0
	Total	37298	100.0	100.0	

October 2011 – April 2012

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Not recorded	395	.3	.3	.3
	Annual	31477	22.1	22.1	22.3
	Monthly	2754	1.9	1.9	24.3
	Hourly	107961	75.7	75.7	100.0
	Unpaid	62	.0	.0	100.0
	Total	142649	100.0	100.0	

Based on Skills for Care (SfC) recommendations we limited analysis to workers for which hourly or annual pay is provided. In the case of annual pay information, an estimate of the hourly rate was obtained by using information about contracted hours per week (if available). Specifically the estimated hourly rate was calculated (according to SfC suggestions) as the annual rate/(52 X contracted hours per week). At this stage only workers with either a recorded or an estimated hourly pay were kept in the sample.

Further data cleaning was performed by imposing upper and lower limits to the domiciliary care workers based on suggestions by SfC. Specifically we included hourly rates between £2.5 and £50 for direct care workers, £2.5 and £100 for professionals/managers and £2.5 and £200 for workers operating through agencies. Similarly annual rates were limited to between £500 and £100,000 for direct care and £500 and £200,000 for professional/manager/agencies.

After performing the above filtering operations the data were merged into a single file where a variable indicating the 6-month period in which the entry was made was created. Additional information regarding the size of the establishment was incorporated from the establishment level dataset by using the establishment unique identifier. Table A5.2 shows a breakdown of the remaining cases according to their broad job role.

					Cumulative
		Frequency	Per cent	Valid Per cent	Per cent
Valid	Care Workers	173065	88.3	88.3	88.3
	Senior Care	6922	3.5	3.5	91.8
	Workers				
	Manager/	8285	4.2	4.2	96.0
	Supervisor				
	Professional	1428	.7	.7	96.8
	Other	6361	3.2	3.2	100.0
	Total	196061	100.0	100.0	

Table A5.2: Broad job role group of workers (main job role)

Further data filtering was performed by examining the information regarding working hours and type of contract (zero-hours).

The amount of hours worked provides essential information for domiciliary care workers and was incorporated in our analysis. There are two relevant variables in the data: the first one contains the amount of contracted hours and the second one the amount of additional hours worked during the last week of data collection. Since the data were collected over continuum of time it is not unreasonable to assume that the additional hours worked during last week is a good proxy for the additional hours worked in general. As we explained in Chapter Two of the report, there is a potential source of confusion that intensifies in the case of workers under zero-hours contracts where the contracted hours are zero by definition. In order to obtain a common reference point for workers regardless of their type of contract we created the variable "total hours worked" as the sum of contracted and additional working hours. The variable "total hours worked" contains extremely

high outliers that could lead to distorted conclusions in the multivariate analysis. It is therefore essential to consider cases up to a certain threshold. After communication with Skills for Care we decided to set this threshold to 45. In addition to being a reasonable value it contains the vast majority of the observations; only 2.5% of the values were above this threshold. Hence, it is not very likely that this decision will have a substantial impact either.

As explained in Chapter Two we were forced to exclude the 60 per cent of zero-hours workers where the figure '0' was input for contractual hours and where there was no information on additional hours. We thus compared the group of zero-hours contract employees for whom hours were reported with those zero-hours contracts employees who did not report their hours, to look at the effects of excluding the latter from our analysis with respect to various characteristics (age, pay, sector, gender, nationality etc.). Figures A5.1 and A5.2 indicate no significant differences between the two groups and Table A5.3 confirms the results. Tables A5.4, A5.5 and A5.6 which examine sector, gender and nationality respectively reinforce this conclusion.

Figure A5.1: Box plots indicating the average age and the distribution of age between the two groups







	Domiciliary care workers under Zero-hours Contracts Statistic				
Age of worker	No missing values	Mean	41.64		
		5% Trimmed Mean	41.40		
		Median	42.00		
		Std. Deviation	12.711		
	Missing values	Mean	40.88		
		5% Trimmed Mean	40.55		
		Median	41.00		
		Std. Deviation	12.584		
Distance from NMW	No missing values	Mean	116.9095		
in percent		5% Trimmed Mean	115.4797		
		Median	114.6712		
		Std. Deviation	14.41962		
	Missing values	Mean	121.0034		
		5% Trimmed Mean	119.5917		
		Median	118.4211		
		Std. Deviation	16.43289		

### Table A5.3: Frequencies on age and NMW Distance between the two groups

#### Table A5.4: Sector with zero-hours missing

			Not missing	Missing	
Sector	Statutory local	Count	101	1184	1285
	authority	% within Zero-hours Missing	.7%	1.3%	1.2%
	Voluntary or third	Count	1789	7327	9116
	sector	% within Zero-hours Missing	11.8%	8.1%	8.6%
	Other	Count	66	1589	1655
		% within Zero-hours Missing	.4%	1.8%	1.6%
	Private sector	Count	13253	80552	93805
		% within Zero-hours Missing	87.1%	88.9%	88.6%
Total		Count	15209	90652	105861
		% within Zero-hours Missing	100.0%	100.0%	100.0%

			Not missing	Missing	
Gender of	Male	Count	1581	10929	12510
worker		% within Zero-hours Missing	10.4%	12.1%	11.8%
	Female	Count	13616	79482	93098
		% within Zero-hours Missing	89.6%	87.9%	88.2%
Total		Count	15197	90411	105608
		% within Zero-hours Missing	100.0%	100.0%	100.0%

# Table A5.5: Gender of worker with zero-hours missing

### Table A5.6: Worker's Nationality with zero-hours missing

			Not		
			missing	Missing	
Worker's	Other	Count	1632	8274	9906
Nationality		% within Zero-hours	10.8%	9.5%	9.7%
		Missing			
	British	Count	13467	78756	92223
		% within Zero-hours	89.2%	90.5%	90.3%
		Missing			
Total		Count	15099	87030	102129
		% within Zero-hours	100.0%	100.0%	100.0%
		Missing			

### Regression models:

Multivariate analysis consisted of four regression models for domiciliary direct care workers, on the data with all three 6-month periods, for:

- The indicator of being paid below or at NMW (logistic regression)
- The distance of hourly pay from NMW (in %) (linear regression)
- The weekly pay (in £) (linear regression)
- The indicator of being employed under a zero-hours contract (logistic regression)

The covariates included various individual characteristics (age, gender, training, education, distance travelled to work, type of contracts, hours worked etc) as well as establishment variables (sector, region, size etc). The time period was entered as a categorical covariate (with the latest time period as the reference point) to incorporate potential changes from the previous years. In addition to the direct effect of time, we also explored potential indirect effect on associations of the above response variables and covariates, through interactions. The models were built by beginning with all the above covariates and then gradually removing interactions with time that were not significant.

#### Comparison between the characteristics of the domiciliary care workforce and other care workers

The focus in this study is on domiciliary care workers – in most other studies this group is not distinguished from a wider category of care workers, largely working in residential care. How do the characteristics of domiciliary care workers compare to those of other care workers? The tables below provide some information on this. More specifically, here, we compare domiciliary care and non-domiciliary care workers included in the NMDS-SC, in terms of age, sector, gender and nationality. As indicated in Table A5.7 below the average age is relatively similar between the two groups. Median pay (distance from the NMW) is higher amongst domiciliary care workers compared to non-domiciliary care workers. Pay levels for non-domiciliary care workers has been considered by Hussein (2010a; b), and the finding above is broadly in line with hers. She finds that direct care workers in care homes with nursing provision earned less than those in domiciliary care (£6 compared to £6.77 on average). Inclusion of residential workers within the analysis would thus likely depress rates of compliance with the NMW. Table A5.8 demonstrates a difference between sectors (domiciliary care workers are more frequent in the private sector), whereas Table A5.9 includes gender, which shows no differences between the two groups. Finally, in Table A5.10 (nationality) we see that domiciliary care workers are slightly more likely to be British.

	Don	niciliary care worker	Statistic
Age of worker	Other care	Mean	42.06
	workers	5% Trimmed Mean	41.83
		Median	42.00
		Std. Deviation	12.882
	Domiciliary	Mean	41.15
	care worker	5% Trimmed Mean	40.84
		Median	41.00
		Std. Deviation	12.781
Distance from	Other care	Mean	124.2847
NMW in percent	workers	5% Trimmed Mean	118.9465
		Median	109.0461
		Std. Deviation	40.24684
	Domiciliary	Mean	119.9853
	care	5% Trimmed Mean	117.8698
	workforce	Median	117.1053
		Std. Deviation	20.94115

### Table A5.7: Age and Distance from NMW for domiciliary care workers versus other care workers

# Table A5.8: Establishment by sector - Domiciliary care worker versus other care workers

				Domiciliary	Total
			Other care worker	care worker	
Sector	Statutory	Count	99299	11919	111218
	local authority	% within	40.8%	15.6%	34.8%
		Domiciliary care worker			
	Private sector	Count	100188	52482	152670
		% within	41.2%	68.8%	47.8%
		Domiciliary			
		care worker			
	Voluntary or	Count	35773	10624	46397
	third sector	% within	14.7%	13.9%	14.5%
		Domiciliary			
		care worker			
	Other	Count	8018	1232	9250
		% within	3.3%	1.6%	2.9%
		Domiciliary			
		care worker			
Total		Count	243278	76257	319535
		% within	100.0%	100.0%	100.0%
		Domiciliary			
		care worker			

		•		<b>~</b> · · · ·	L
				Domiciliary	Total
			Other care	care	
			worker	worker	
Gender	Male	Count	45955	9771	55726
		% within Domiciliary care	19.1%	13.0%	17.7%
		worker			
	Female	Count	194420	65537	259957
		% within Domiciliary care	80.9%	87.0%	82.3%
		worker			
Total		Count	240375	75308	315683
		% within Domiciliary care	100.0%	100.0%	100.0%
		worker			

#### Table A5.9: Gender of worker - Domiciliary care worker versus other care worker

### Table A5.10: Worker's Nationality - Domiciliary care worker versus other care worker

				Domiciliary	Total
			Other care	care	
			worker	worker	
Worker's	Other	Count	33136	5479	38615
Nationality		% within Domiciliary care worker	20.1%	8.6%	16.9%
	British	Count	131538	58235	189773
		% within Domiciliary care worker	79.9%	91.4%	83.1%
Total		Count	164674	63714	228388
		% within Domiciliary care worker	100.0%	100.0%	100.0%