

# Tax exemptions on care vouchers for working carers

## An economic analysis: July 2007

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## **1 Executive summary**

### **Introduction**

The predicted increase in the years ahead in the numbers of older people in the UK will result, on the one hand, in an increase in the demand for social care support and on the other, in a reduction in the proportion of the population of working age. It is critical, therefore, that new ways of supporting working carers are identified, to enable them to carry on contributing to society in their dual role as members of the labour force and as providers of support for dependent people.

The 2001 Census noted that 11% of the population of England and Wales provided some level of informal care to others. Among those, more than three million combined caring with employment. For many, the burden of caring hinders their ability to participate in the labour market, and in some cases, causes them to withdraw from employment altogether.

The proposed scheme of 'care vouchers for working carers' under review in this paper aims to enable employees to continue providing support to a dependent person while minimising the impact on their own employment opportunities. In practice, the scheme would operate in a way similar to the current UK childcare voucher scheme, whereby employers provide workers with a voucher redeemable against qualifying care, in lieu of a portion of their income. The voucher would be exempt from both National Insurance contributions and PAYE on the part of the employee, and National Insurance contributions on the part of the employer.

The report describes the results of an economic evaluation of the care voucher scheme, based on a model exploring alternative assumptions about take-up rates and consequences of the care voucher scheme. Findings are therefore presented in the context of three alternative scenarios, corresponding to alternative hypotheses about the likely success of the scheme.

### **Existing evidence**

#### ***Welfare implications***

Numerous studies point towards the serious adverse effects that caring can have on the physical and mental health of the carer. A care voucher scheme as evaluated here would help address these negative impacts. Overall, the beneficial effects would be likely to extend to care users too, and there is significant evidence in the literature of the contribution to the wellbeing of people with support needs of measures aimed at empowering them and at alleviating their feelings of dependency. In some cases, however, carers and users interests can be in conflict, and some people in need of support may not wish to have the care provided by a trusted friend or relative replaced by formal care services.

#### ***Employment consequences***

The difficulties encountered in combining care-giving and employment severely limit the potential for carers to participate in the labour market. The paucity of care-friendly practices in the workplace coupled with significant pay differentials between carers and non-carers forces many into making an 'all-or-nothing' decision. Research suggests that mechanisms that limit the conflict between care-giving and employment lead to positive effects in terms of staff retention, employee stress and sick leave.

### ***Related schemes***

Tax credits in the US cover expenses incurred by the tax-payer in caring for children, older people and disabled dependents living in the household. Aimed at assisting low-income families, its effectiveness is questionable, however, as those on low incomes are often unable to afford the initial expenses incurred. Furthermore, limiting credits to expenses fails to address the associated costs of in-kind services provided by carers. Tax credits in the UK are available in the form of Child Tax Credit and Working Tax Credit. However, a voucher scheme would have obvious advantages in ensuring the procurement of suitable services.

Childcare vouchers, introduced in the UK in 2005, provide a good example of the way in which care vouchers for working carers would operate. Childcare vouchers allow Income Tax and NIC exemptions to the value of the voucher (initially £50 per week in 2005, rising to £55 per week the following year). The vouchers are primarily offered as a salary sacrifice.

### ***Take-up***

GHS data indicate that in 2000, 15.2% of working-age adults in Great Britain provided care to a sick, disabled or elderly person. Over two thirds of these were carers of older people.

A study of the uptake and impact of the childcare-related Income Tax and NIC reforms suggests that the level of take-up of care vouchers would depend most significantly on the proportion of employers offering the scheme to their employees. By 2006, relatively shortly after the launch of the scheme, only 1.4 per cent of organisations were reported to offer Childcare vouchers. Childcare vouchers were most commonly offered in large and/or public-sector organisations, with 48.9 per cent of organisations employing 10,000 or more workers offering the scheme, compared to less than 1% of those with less than one employee.

Participating organisations generally found childcare support services to be cost-neutral, with administrative costs being minimal and usually covered by NIC exemptions afforded to the employer.

## **Methods and data sources**

### ***Numbers of carers/relatives entitled to care vouchers***

Due to the availability and comprehensiveness of data relating to carers of older people, analysis was focused on this group. A spreadsheet-based data model was constructed, incorporating a matrix of cells that quantified a series of groups of individuals entitled to take-up care vouchers, based on a bespoke analysis of GHS 2000/01 data. Only relatives or carers of older people with a minimum level of disability (difficulties performing at least one ADL activity) were assumed to be potentially likely to take-up a care voucher.

#### ***Model structure***

Based on the findings of a literature review, carers were grouped by combinations of factors likely to mediate the likely take-up of care vouchers. These factors included level of dependency of the user, relational propinquity between carer and user, and factors relating to the employment status of the carer (sector, income level and employing organisation's size). The number of eligible individuals in each group was multiplied by the corresponding propensity to take-up care vouchers to estimate the overall level of take-up of the scheme.

### ***The three scenarios***

Given the lack of real life evidence on care vouchers for working carers of disabled adults, the analysis defined three scenarios reflecting alternative assumptions about the likely take-up of the schemes. A central uptake scenario was based upon the take-up of similar schemes reported in the literature review. The effect of the different factors mediating likely take-up rates was then adjusted to define the high-uptake and low-uptake scenarios. The high uptake scenario was adjusted to reflect a situation in which a significantly large proportion of organisations offered care vouchers for older people, taking the view that increased awareness of the tax and NI exemptions will lessen the supply-side barriers to take-up. The low take-up scenario modelled a situation in which demand for care vouchers was lower than that observed in similar schemes.

### ***Financial implications***

Where associated costs and benefits could be identified, these were incorporated into the model at the group level. To the state, PAYE and National Insurance exemptions constituted a loss that differed by the income of individuals and the value of the voucher taken up. Where the scheme allowed individuals to enter the labour force, the savings from increased tax and NI contributions and reduced JSA payments were estimated. To the employer, administrative costs were estimated based on literature relating to similar schemes, as were the savings made through exemptions on NI contributions.

### ***Analysis limitations***

The main limitations of analysis were linked to a lack of real-world evidence on which to base the assumptions on the model. While childcare vouchers provide the most relevant source of evidence on which to base the assumptions about likely take-up, the evidence available relates to very early stages of the implementation of the scheme, when awareness amongst organisations was notably low. The high take-up scenario is intended to model the effect of raised awareness amongst organisations.

Due to data constraints, the analysis was focused on carers of older people rather than carers of all adults. Also, a number of the likely benefits of care vouchers, such as improved productivity and reduced absenteeism, could not be quantified into the model due to a lack of evidence.

## **Results**

### ***The central case***

Overall, take-up in the central scenario was low, estimated at 47,818 people (1.4% of the eligible population). This was due largely to the low level of supply assumed, mimicking the observed patterns for childcare vouchers. The implications for the public purse were modest, at just over £37 million per year. The monetary value of care vouchers taken-up in this scenario was approximately £83 million, equivalent to around 5% of current local authority home care gross expenditure in England.

### ***The high take-up scenario***

The high take-up scenario showed a dramatic increase in the number of users, who were estimated to total 156,163 (4.6% of the eligible population). The cost to the state under this scenario was approximately £120 million, and the value of vouchers purchased was over £271 million.

***The low take-up scenario***

In the low take-up scenario, a reduction in the demand for care vouchers led to take-up falling to just 28,236 users, below 1% of eligible carers and relatives. This equated to £49 million worth of vouchers being provided, at an estimated cost of under £22 million to the state.

**Implications**

Assuming levels of supply similar to those observed for childcare vouchers would result in a limited overall take-up of care vouchers. Given the potential benefits of care vouchers for employers, however, it is likely that marketing and promotion efforts would result in significant greater number of organisations offering care vouchers than implied in the low and central scenarios.

More importantly, however, the success of the scheme should be considered not in terms of take-up but whether the scheme generates net social gains or losses. With successful implementation and appropriate administration, however, the scheme could yield benefits that would extend beyond those quantified in the model, including improvements in productivity and staff retention for employers, and reduced stress and better employment prospects for carers.

**Recommendations**

Effective promotion amongst employers would be key to the successful implementation of a voucher scheme. Restricting access to care vouchers or capping the amount available to high-income individuals would also serve to limit the risk of deadweight losses and increase the progressivity of such a scheme.

## **2 Introduction**

### **2.1 Subject**

The proposal under evaluation in this paper is of a system of 'care vouchers' to help employees who balance paid employment with care responsibilities. The voucher scheme would create an additional funding stream to enable the purchase of additional care and support services for care recipients who are 'dependent' on working relatives.

### **2.2 Policy context**

It is well documented that the UK has an ageing society - research published by the Department of Work and Pensions (DWP) predicts that in 30 years, more than 25% of the population will be 65 and over, an increase of around 70% from the current level (DWP 2005). By 2051, the number of people aged over 85 will have quadrupled to reach four million, 6% of the total population. In the context of falling birth rates, the rising proportion of older people in society will increase the strain on public finances; the tax base is contracting due to fewer people being active in the workforce; whilst demand for health and social care services is increasing. The rise in the total number of people with disabilities is exacerbated by the fact that healthy life expectancy is increasing at a slower rate than total life expectancy (Wanless 2006).

As well as a need for greater investment in health and social care funding, it is also clear that efforts must be made to assist those who are able to work to participate in the employment market. A key area of activity must be people who balance employment whilst caring for a dependent friend or relative.

The 2001 Census revealed that 11% of the population of England and Wales, 5.2 million people, currently care for their family members, friends and neighbours or others. More than a million people provide care for over 50 hours per week. Significantly, three million people combine their caring responsibilities with full or part-time employment (ONS 2001). Research from the DWP has identified caring responsibilities as a key "push factor" causing people to disengage from the workforce and as a "pull factor" encouraging people to voluntarily leave the workforce (DWP 2006). Often people who decide to leave the workforce do so after finding the pressure of balancing caring responsibilities with full or part time work to be too much to bear.

### **2.3 The care voucher scheme**

A system similar to the existing scheme of employer supported childcare could provide the framework for employers to support their employees with the costs of relevant and appropriate care and support services, tailored to their individual needs.

Through the scheme, employers would be able to provide a benefit in kind to their employees in the provision of 'vouchers' capable of being redeemed only for qualifying care. This benefit would be exempt from both National Insurance contributions (primary and secondary) and PAYE. In addition, the administrative costs incurred by employers in supporting the scheme should be exempt from any PAYE or NI liabilities.

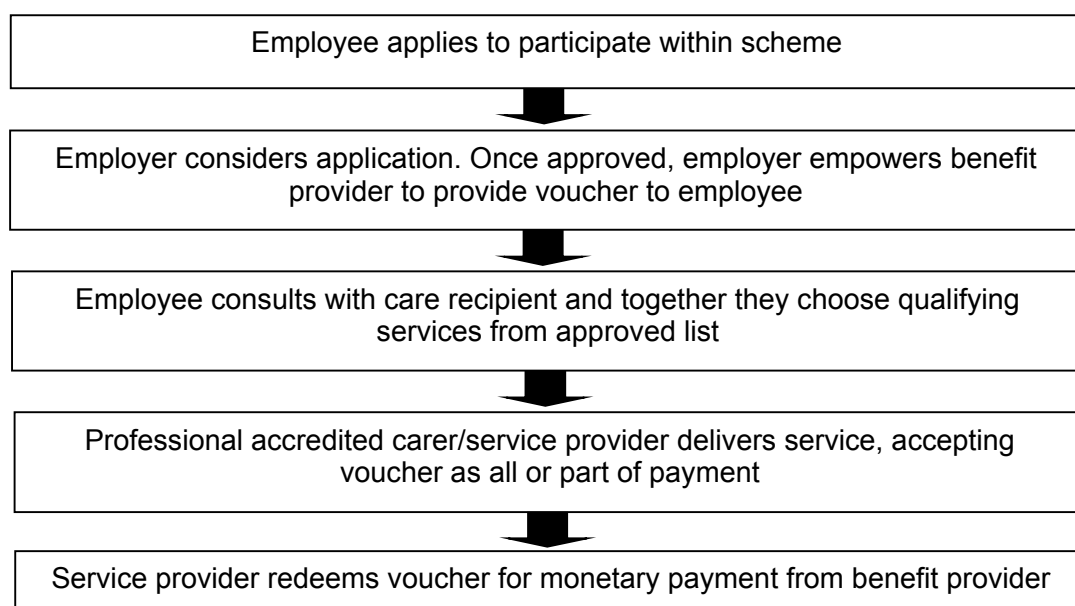
The employee would receive the support from their employer, potentially delivered through a voucher type system. In turn, they could then select the most appropriate level of support required from a range of accredited and pre-approved providers. The system will need to strike a balance between the requirement for flexibility (to meet

the diverse needs likely to be in demand) and the desire for control over the type of services that qualify for inclusion.

It is important to note that benefits received by employees through this scheme would be used for services that are not currently wholly provided by the government. Extra funding would be entirely additional to that which is properly funded by government and not a substitute for it.

Figure 1 summarises the proposed process for the award of the care voucher.

**Figure 1: Care voucher entitlement process**



## 2.4 Evaluation

PSSRU at LSE were commissioned to carry out an economic evaluation of the voucher scheme. This report summarises the main conclusions of such evaluation. Whereas an attempt is made to explore outcomes and costs for society as a whole, the results of the evaluation are presented separately for each of the relevant stakeholders in the analysis: users, carers, employers and the state.

Given the pre-implementation nature of the analysis, the evaluation was based on a model which built alternative assumptions about the likely take-up and consequences of care vouchers (further details about the methods used are provided in Section 2). Overall, the evaluation presents three alternative scenarios (labelled the central, high and low take-up scenarios) which correspond to three alternative hypotheses about the likely success of implementation of the scheme. Importantly, the scenarios were built in such a way as to be internally consistent, by combining their assumptions in a manner coherent with the nature of the scenario in question.

The remaining chapters of the report are structured as follows. Chapter 3 summarises the available evidence on similar schemes, their observed levels of take-up, their costs and their impact on the welfare of users and carers benefiting from support. Based on the review of the evidence, Chapter 3 also describes the main parameters required for building the evaluation model. Chapter 4 highlights the main features of the methods and data sources used in the analysis, and Chapter 5

presents the results for each of the three scenarios contemplated. Finally, Chapter 6 discusses the main policy implications of the results, focussing on the key factors likely to mediate the success of a hypothetical implementation of the scheme.

### **3 Existing evidence**

#### **3.1 Implications for the welfare of carers and care recipients**

This section addresses the welfare implications of a care voucher scheme for both the caregiver and the care recipient. Literature suggests that support of the type offered by care vouchers would allow caregivers to increase their own skills in the workplace while continuing to assist the care recipient. It may also serve to alleviate feelings of guilt on the part of the recipient, although there will always be cases where care provided by a relative or close friend will be preferable in the eyes of the care user.

##### ***Implications for the welfare of the carer***

The informal care literature has demonstrated the adverse effects that caring can have on both the physical and the mental health of informal carers. For instance, in a study of carers' experience of the NHS, Henwood (1998) suggests that more than half of the carers observed received treatment for stress-related illness during their time as a carer. Reported ill health on the part of the carer is also believed to rise in line with the amount of care provided. According to 2001 Census data (ONS 2006), 7 per cent of people that provided care for 1-19 hours per week reported 'not good health'. Amongst those providing 20-49 hours per week the level rose to 11 per cent, and 15 per cent of those caring for 50 or more hours per week. 2000 GHS data showed the proportion of carers reporting that caring had *no* effect on their health to fall as the hours of care they provided increased (ONS 2006): 72 per cent of carers providing less than 20 hours per week felt that their health had not been affected, compared to 39 per cent of those providing 20-49 hours, and 28 per cent of those providing 50 or more hours per week.

Given the significant negative impact that caring can have on their health, providing additional support to allow informal carers to manage their work and care commitments is likely to have positive effects upon the mental health as well as the physical health of the caregiver. A report on the benefits of a caregiver support service (Johnson and Maquire 1989) found that giving carers a break reduced anxiety, although other reported problems such as a feeling of helplessness were not necessarily alleviated. Davies, Fernández and Nomer (2000) also provide quantitative evidence of the reduction in carer stress associated with the provision of community care services to older dependent people. In fact, evidence suggests that the benefits of a voucher would reach further than the immediate carer and recipient, and would be likely to extend to other relatives of the carers (Yeandle *et al* (2002)).

The effect of the care voucher on the relationship between the carer and the dependent person is also an important consideration to factor into the evaluation of the scheme. Indeed, the provision of support to caregivers often leads to an improvement in the relationship, as shown for instance by Wright (1998) in the context of carers of frail older people admitted into care homes.

##### ***Implications for the welfare of the care recipient***

In addition to the benefits a care voucher scheme would afford to care givers, it is important to recognise the implications for the recipients of care services. Recent literature, for instance, has stressed the danger of placing too much emphasis on the

needs of carers (Morris 1997, Lloyd 2000). Indeed, the introduction of a voucher system would bring with it a risk, in certain cases where the interests of caregivers and users are in conflict, of the care user's wishes being neglected. Also, as noted in Twigg (1998), older people often want to be cared for by their families and not formal care providers. Clark *et al* (1998) suggest that the relationship between older people and their carers is often as important as the assistance provided. Substitution of formal for informal care services, therefore, should not be judged purely on the level of care provided.

Despite these concerns, most of the literature focused on the wellbeing of older people in receipt of care points towards the positive effects of schemes that empower the care user. Older people can feel their independence to be undermined by reliance on family and friends (Clark *et al* 1998), and would value a scheme that provided alternative sources of help. Twigg (1992) perceives the issues surrounding respite care to be a clear indication of the conflicts of interest in the caring relationship. Whereas the idea of going into an institution is generally looked upon unfavourably by the dependent person, home care is largely seen as a benefit to both care giver and user. Thus, insofar as a voucher scheme allows greater access to home care rather than increasing the likelihood of going into an institution, it would appear to be in the interest of the both parties.

Based on evidence from other countries, Comas-Herrera *et al* (2004) state that restricted access to long-term care resources due to means testing hinders the dignity, independence and choice implications for care users. Indeed, focus group participants cited in the Audit Commission's 2004 Report (Audit Commission 2004) expressed an acute awareness of the poverty trap where income lifted them above the threshold for means-tested benefits, leaving them in a position that was worse off financially. A non-means tested care voucher scheme would reduce the imbalance between the levels of support provided to those eligible for public funding and the assistance provided to other dependent people.

### **3.2 Employment consequences**

While the rate of full-time employment is lower amongst carers than non-carers (Evandrou 1995), a significant proportion of working-age carers combine their caregiving with employment. According to Arksey *et al* (2005), this balance is particularly difficult to achieve for those providing more than 20 hours of care per week and for those living with the care user. The difficulties faced are often added to by a paucity of care-friendly practices in the workplace. Bernard *et al* (2002) noted that managers would see the combination of work and care as a "balancing act", whereas the carer tended to think of their situation as more of a "juggling act".

The effects of providing care outside the workplace can range from reduced levels of labour participation to complete withdrawal from the labour market (Evandrou 1995). Part-time workers are particularly likely to reduce their hours of paid employment once they start caring (Henz 2004). A recent report on the social and business benefits of supporting working carers (Bennett *et al* 2006) stated that currently one in five people gives up work to care.

A study of the determinants of labour market participation of carers (Heitmueller and Inglis 2004) found evidence of significant opportunity costs in the form of foregone wages and wage discrimination. Large wage differentials between carers and non-carers were apparent, the overall pay gap doubling for those providing more than 20 hours of care per week. The authors also highlighted the 'all-or-nothing' decision faced by many carers, who have to choose whether to enter the labour market and

have to pay for externally-provided care, or provide informal care themselves, forgoing the benefits associated with a career. While flexible working arrangements offer a viable solution in some cases, this is often more difficult in highly specialised jobs where employees' skills cannot easily be substituted (Yeandle *et al* 2002).

The effects of juggling caregiving responsibilities with paid work are also significant for employers. Gilhooly and Redpath (1997) review American evidence about such effects, which include absenteeism, lateness and unscheduled absences. In contrast, the offer of flexible working practices to support carers in the workplace has been associated with improved staff intake and retention, reduced employee stress and sick leave, and significant increases in productivity and service delivery (Gilhooly and Redpath 1997; Bennett *et al* 2006). Bennett *et al* (2006) also highlight the relatively low cost of new measures such as emergency leave in comparison to costs incurred through the recruitment and training of new staff. By reducing the burden of caring upon employees, the likely impact of a care voucher scheme would be to lessen some of the negative effects commonly associated with balancing employment and care provision.

### **3.3 Related schemes**

A number of related schemes provide an indication of the likely impact and take-up of a care-voucher scheme. In the US, the Federal Dependent Care Tax Credit covers expenses incurred by the tax-payer in caring for children, older people and disabled dependents in the household (Pickard 1999). Eligibility criteria require that more than half of the dependent's annual support is received from the tax-payer, and that the dependent spends at least eight hours per day in the tax-payer's household. Aimed at assisting moderate to low-income families, the credit runs in parallel to dependent tax credits available in a number of individual states. The effectiveness of tax credits is called into question in a number of reports, however. Keigher and Stone (1994) comment that low-income families are often unable to afford the initial expenses on which the credits would subsequently be claimed. Doty (1986) argues that basing credits solely on expenses drastically reduces its impact, as in-kind services (which form a large part of the caregiver's contribution) do not directly incur significant expenses.

Tax credits are currently available in the UK in the form of Child Tax Credit and Working Tax Credit, introduced in 2003 in place of Working Families' Tax Credit, Disabled Persons' Tax Credit and Children's Tax Credit. Child Tax Credit is available to those with responsibilities for a child, while Working Tax Credit supports low-income workers by topping up their earnings. Extra credit is available to those responsible for children, paying for childcare, disabled or over 50. Neither benefit affects Child Benefit Payments, which are paid separately. A mechanism based on tax credits, however, is less explicit about the targeting of the benefit on support services than a care voucher scheme. Additionally, their main objective is not to improve access to the labour for informal carers.

In the UK, the childcare vouchers introduced in 2005 alongside direct payments and direct provision of childcare services, as part of Income Tax and National Insurance Contributions (NIC) reforms, provide a good example of the way in which care vouchers for working carers would operate. The childcare vouchers allow Income Tax and NIC exemptions on the value of the voucher (initially £50 per week in 2005, rising to £55 per week the following year). Exemptions on this weekly amount apply to both employees (Income Tax and NICs) and their employers (NICs). The vouchers are primarily offered as a salary sacrifice, whereby the employee is provided with childcare vouchers in lieu of a portion of their salary.

### 3.4 Likely take-up of care vouchers

The 2001 Census and 2000/01 General Household Survey (GHS) provide the most comprehensive picture of levels of caregiving. An in-depth analysis of the 2000/01 GHS data provided by Pickard (2007) showed that 15.8% of adults in Great Britain provided care for a sick, disabled or elderly person. Amongst adults of working age (between 16 and the state pension age), the proportion providing care was 15.2%. Applying this proportion to the working-age population of England, it can be estimated that in 2005, approximately 4.8 million people of working age in England provided informal support to dependent people. 10.7% of people of working age were carers of an older person (equivalent to 3.4 million people in England in 2005).

A number of factors have been shown to affect the probability that carers would use schemes such as the care voucher system under review. A study by the National Centre for Social Research (Kazimirski *et al* 2006), commissioned by HM Revenue and Customs, analysed the uptake and impact of the childcare-related Income Tax and NIC reforms. The assessment was based upon an initial telephone screening of approximately 3,600 organisations, followed by a telephone survey of approximately one quarter of the organisations screened.

The study reported that 1.4 per cent of organisations in the sample offered Childcare vouchers, equivalent to approximately 9,600 organisations in the UK (7,093 to 12,134 organisations at the 95 per cent confidence interval). Both the size and sector of the organisation were found to have a significant effect on the propensity to offer childcare vouchers (or indeed other forms of child support). Larger organisations were significantly more likely to offer vouchers, with 48.9 per cent of those employing 10,000 or more workers offering the scheme, compared to less than 1 per cent of those with less than 10 employees. The prevalence of childcare-scheme provision was also highest amongst public-sector organisations. The vouchers were primarily offered as a salary sacrifice; a minority of employers offered them as an additional salary, however most did not in order to keep the scheme cost-neutral.

The limited number of organisations reported to be offering childcare vouchers is explained in part by a lack of awareness of the existence of the scheme at the time of the study. Overall, only 30 per cent of organisations were aware of the new Income Tax and NIC exemptions, the single most common first source of information being an HMRC leaflet. Other reasons cited for organisations not offering support were insufficient levels of demand from employees, too few employees and the opinion that it did not fall under the responsibilities of the organisation.

In their report, Kazimirski *et al* (2006) make a cautious estimate of around 175,000 recipients of financial help through employer-supported childcare in the UK. This figure includes recipients of direct payments and direct provision, in addition to those receiving childcare vouchers. In almost 50 per cent of cases, voucher users took up the limit of the exemptions (£216 to £217 per month, at the time). A larger proportion of higher-rate tax payers received childcare support compared to the proportion of higher-rate tax payers in the general population, although the significance of this difference is not known.

Employers generally found childcare vouchers to be cost-neutral (81 per cent). Administration-related costs were most commonly reported as equating to less than one WTE day per month. 87 per cent of providers used an external provider to manage the scheme, to which most paid a proportion of the value of the voucher (six per cent, on average). In the majority of cases, however, these costs were offset by

the National Insurance exemptions applicable to the employer. Indeed, 13 per cent of organisations surveyed reported making a profit, while only 7 per cent reported an overall loss as a result of the scheme.

Organisations offering childcare support did not perceive their beneficial effects to be limited to National Insurance savings. The majority (60 per cent of organisations offering childcare support) believed that there had been a positive effect on relations with employees. More than half also reported improvements in employees' work-life balance, motivation and commitment. Almost one third reported a positive effect on productivity, and one fifth found there to be a notable impact on absenteeism (Kazimirski *et al* 2006).

## **4 Methods and data sources**

### **4.1 Numbers of carers/relatives entitled to care vouchers**

The main aim of the analysis was to estimate the likely take-up of the proposed care voucher scheme, and to identify its costs and benefits for care users, informal caregivers, family relatives and Government in England. Whereas the concept of a care voucher for working carers need not be restricted to a particular user group, the analysis was centred on carers of older people. Data relating to this group (which constitutes over two thirds of all carers of working age) were the most readily available and compatible with the prevalence indicators used as the basis for modelling take-up. An estimate of the likely up-take amongst carers of all adult dependents (based upon the model for older people) is given in the discussion of the findings later in this paper.

The analysis was spreadsheet-based, and developed a matrix of cells quantifying a series of groups of individuals entitled to take-up a care voucher. As a result, the model used as its unit of analysis carers and/or relatives likely to take a salary sacrifice to purchase care for a dependent older person, rather than older people themselves. In addition, eligibility to the care voucher scheme was restricted only to relatives or carers of older people with a minimum level of dependency, set at one or more problems with ADL activities. Eligibility could ultimately be set at a higher or lower level than this threshold. For instance, flexible working legislation does not demand the requirement of any particular level of care or level of dependency, only that the carer is a relative, partner, spouse or cohabitant of the adult receiving care. For the purposes of the model, however, and in order to be able to quantify the potential volume of people interested in care vouchers, the analysis assumed that eligibility was restricted to carers of individuals with difficulties performing ADL tasks (such as bathing, dressing and feeding). It is also important to stress, however, that the nature of the support purchased through the care vouchers need not be restricted to ADL related caring activities.

An estimate of the number of eligible carers in England was based upon a bespoke analysis of the General Household Survey Carers 2000/01 survey by Pickard (2007), which identified the proportion of working-age residents in private households in Great Britain that cared for someone elderly. These numbers were rescaled to fit the English context. This analysis indicated that the probability of an adult of working age (16 to state pension age) providing informal care to an older person in 2000/01 was 10.7%. Applying this proportion to the working-age population of England, it was estimated that approximately 3.4 million people of working age provided informal care to an older person at the time of the survey. A significant proportion of informal caregivers, however, provide informal support to older people of very low

dependency levels. The number of older people that had no ADL needs but received informal care were calculated based on the estimates provided by Pickard *et al* (2007) Excluding these caregivers from the pool of potential care voucher recipients left a total of approximately 2.9 million eligible carers<sup>1</sup>.

The model also took into account the fact that individuals who do not receive direct informal support might nevertheless have working age relatives interested in funding a care voucher through a salary sacrifice. Further GHS analysis (Pickard *et al* 2007) gave an indication of the number of older people who, despite not receiving informal support, have close relatives who may potentially be eligible for a care vouchers. This analysis showed the ratio of dependent older people receiving care to those not receiving care, according to level of need. Applying this ratio to the number of existing carers that would be eligible to be use care vouchers, it was estimated that approximately 500,000 people that did not already provide informal care would be eligible to use the scheme.

Overall, approximately 3.4 million carer/relatives were therefore identified as potentially eligible for the care voucher scheme (see Appendix 1).

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<sup>1</sup> It was assumed that carers with no ADL needs would only have one informal carer.

**Figure 2: Factors mediating levels of take-up of care vouchers, and their benefits and costs**

**Carer status:** Existing carers were considered to be the principal beneficiaries of a care-voucher scheme. While those who did not already provide care would be eligible for participation, a smaller proportion would be likely to use it.

**Employment status:** Take-up was predicted to be highest amongst those already in employment. Nonetheless, a voucher scheme would also incentivise and facilitate the transition into employment for a proportion of those currently unemployed or economically inactive.

**Size of organisation\*:** Supply-side factors would have a large effect on the potential for take-up. Based on the take-up of similar schemes, larger organisations (defined as those employing 100 or more workers) are significantly more likely to make care vouchers available to their employees than smaller organisations.

**Employment sector\*:** Based on analysis of childcare-voucher provision (Kazimirski *et al* 2006), it was assumed that care vouchers would be offered by a larger proportion of public-sector organisations than those in the private sector.

**Income level\*:** As the voucher scheme would comprise a tax exemption, the size of saving would be highest amongst those paying higher marginal rates of tax. Consequently, those receiving a higher level of income (over £28,400 per annum at 2000/01 levels) were assigned a higher take-up propensity than those with lower-level incomes.

**Relational propinquity to care recipient:** The maxim adopted regarding relationship to the care recipient was that the closer the relationship, the higher the propensity to support their relative. While only spouses of working age would be eligible for participation, take-up amongst eligible individuals with a dependent spouse was likely to be high. Take-up amongst children and children-in-laws of the care recipient is likely to be marginally lower, while those of a more distant propinquity would be still less likely to provide support.

**Level of dependency of care recipient:** Only older people with one or more ADL needs (difficulty in performing one or more daily activities such as bathing, dressing and feeding) were considered to be eligible for support via a care voucher scheme. This group was separated into those with difficulties in performing one task, and those that had difficulties performing two or more tasks. Propensity for take-up was assumed to be highest amongst those whose prospective care recipient had the greatest level of dependency. This factor was also used to estimate the level of care required, and consequently the likely size of the voucher used.

\*In cases where the individual was initially unemployed or economically inactive, the average effect of these factors was applied.

## **4.2 Model structure**

These carer and non-carer numbers were broken down according to a number of factors likely to mediate the probability of take-up of care vouchers, following the conclusions from the literature review in Chapter 3. The list of factors and their associated assumptions are detailed in Inset 1, and included informal care provision, employment status (economically inactive, unemployed and employed), size and sector of organisation if employed, level of income, relational propinquity to the care

recipient (spouse, child or other), and the level of dependency of the care recipient. The distribution of carers according to each of these factors was based on the analysis of GHS data provided by Pickard (2007). The corresponding distribution for non-carers eligible to take-up care vouchers was estimated from the 2001 Labour Force Survey analysis already mentioned above.

Assigning a probability effect to each of the factors in Inset 1 made it possible for the model to derive estimated propensities to use care vouchers for each analysis group that reflected the circumstances of the voucher user and the care recipient. Each characteristic was therefore assigned a value ranging from 0 to 1, representing the *ceterus paribus* effect of that characteristic on the individual's propensity for take-up. The number of potentially eligible individuals in each group was then multiplied by their corresponding propensity to take-up vouchers in order to estimate the overall level of take-up. Using the information in the model relating to the level of economic activity amongst individuals, it was also possible for the analysis to provide an estimation of a number of the associated costs and benefit to the Government, employers and employees.

Appendices 1 to 7 show each of the components of the model for the central scenario, as well as the hypotheses used to derive the levels of uptake in the low and high scenarios.

### **4.3 The three scenarios**

Three scenarios were considered, depicting a low, central and high level of take-up amongst the eligible population.

The assumptions behind the central uptake scenario were chosen so as to approximate the take-up among similar schemes reported in the literature review undertaken. The likelihood of take-up effects assigned to individual factors were subsequently adjusted to model the low and high take-up scenarios. In particular, the assumptions underlying the high take-up scenario were chosen to illustrate a situation whereby significantly larger proportions of organisations would offer care voucher schemes for older people, perhaps as a result of their effect on worker productivity and absenteeism rates. In other words, supply-side factors were adjusted disproportionately in the high take-up scenario. This strategy reflected the fact that the low proportion of organisations offering care vouchers in the central model, which itself reflected findings relating to the availability and use of childcare vouchers (Kazimirski *et al* 2006), constituted the greatest single barrier to take-up. Indeed, given that the analysis of childcare voucher take-up was carried out when the scheme was still in its infancy, the high take-up scenario adopts the optimistic view that a greater awareness of tax and NI exemptions will yield an increase in supply amongst organisations.

In contrast, the low take-up scenario modelled a situation whereby demand for care vouchers for older people among employees would be even lower than the observed demand for child care vouchers, even though the number of employers offering them would not decrease.

Whereas the literature review had indicated that a large proportion of existing carers had left employment in order to provide care (Bennett *et al* 2006), the analysis of the carer data used (Pickard 2007) found the proportions unemployed and economically inactive to be no higher than amongst the general population (LFS 2001). The model assumed a limited transition effect into employment in all scenarios, given the added incentive for employment offered by the voucher scheme. The assumption about the

propensity to use care vouchers for those currently unemployed or economically inactive was adapted, if only to a limited extent, in line with the overall uptake level hypothesised in each scenario.

#### **4.4 Financial implications**

The analysis estimated, as far as possible, the financial impact of the voucher scheme on the state and employers. This analysis was based upon data relating to the administrative costs of running similar schemes, the costs and benefits of the Income Tax and NIC exemptions, and the likely level of carer transition into employment. While it is likely that a voucher scheme would bring about further monetary implications, only those for which quantifiable effects were available were incorporated into the model.

To the state, the voucher scheme could bring about a reduction in revenue through PAYE and National Insurance exemptions (equivalent at the individual level to the value of the voucher times the sum of the taxation rates and employee and employer national insurance rates). These losses would differ therefore in the model by income of individuals, and by the dependency of the dependent older person. In the model, the value of the care voucher was set to £55 per week for carers/relatives of high dependency older people (with problems with at least 2 ADL activities excluding bathing) and to £27.5 for carers/relatives of older people with lower dependency levels.

Theoretically, the voucher scheme would bring about financial gains for the government in cases where the support funded by the care voucher allowed individuals to enter the labour force. Indeed, such a move could result in reductions in Job Seeker's Allowance payments, and increases in tax revenue and NI contributions.

Equally, increases in the volume of care services associated with the vouchers could result in financial gains through reductions in the demand for other related care services, and particularly in the demand for health care services (Fernández and Forder 2007, forthcoming). These potential efficiency gains, however, were not included in the model due to the difficulties involved in their quantification.

In terms of employers, care vouchers would involve some administration-related financial costs. The analysis based its estimates of administration costs on the available estimates for similar schemes for supporting children's carers (Kazimirski *et al* 2006), which suggest an average of one day per month per employer as the level of direct input required by participating employers. In addition to this, most organisations reported using an external provider to manage the scheme. In the case of childcare vouchers, this service was most commonly charged to employers as a proportion of the value of the voucher. The analysis assumed the average charge reported by employers offering child care vouchers, equivalent to 6% of the value of the voucher.

In spite of the administrative costs involved, and assuming that employers would be exempt from paying National Insurance contributions over the value of the salary sacrifice, care vouchers would in all likelihood be cost-neutral to most employers, and a source of profit to some, as noted in Section 1.

#### **4.5 Limitations of the analysis**

The main limitations of the analysis were linked to the lack of data, mostly due to the fact that the evaluation predated the hypothetical implementation of an adult care voucher scheme. In light of the lack of real world evidence with which to populate the assumptions of the model, the analysis constructed the central scenario based on the patterns observed for similar schemes, and particularly on the evidence for the childcare voucher system reported in Kazimirski (2006). As noted in Section 1, however, only 30% of the organisations were aware of childcare vouchers at the time of the survey, a factor which is likely to have been due to the early stage at which analysis was conducted. The high take-up scenario aims to model the effect of raised awareness and greater supply of a voucher system amongst organisations.

A further source of caveats about the analysis related to the intractability of some of the likely effects of a care voucher scheme for older people. Hence, the impact of care vouchers on the productivity of workers, for instance through a potential reduction in absenteeism rates, was very difficult to observe and measure due to the large number of confounding factors present. The Natcen study of employer-supported childcare (Kazimirski *et al* 2006) reported that organisations offering childcare support did associate benefits with the scheme – with 31% indicating that productivity had improved and 20% reporting reduced absenteeism. With no indication as to the intensity of these effects or the significance of correlation, however, it was not possible to model such benefits. It is therefore likely that the model underestimated to some extent the benefits to employers associated with care vouchers. Other likely and yet unquantified benefits would include for instance reductions in caregiver stress (Davies and Fernández, 2000). Equally, it is likely that the analysis missed some potential negative impacts, such as those felt by users who see some of the care they receive from their informal caregivers substituted for care provided by formal services.

### **5 Results**

As indicated above, the analysis applied three sets of modelling hypotheses, summarised under the labels of 'central', 'high take-up' and 'low take-up' scenarios. These scenarios were compatible respectively with the take-up patterns currently observed for the child care voucher scheme; with a scenario where a large proportion of employers are keen to offer care vouchers due to significant associated gains in productivity; and with a situation where eligible individuals are less interested in taking care vouchers for older people than currently observed for child care vouchers. The remainder of this section summarises the results for each of the scenarios postulated, focussing on levels of take-up and volume of services commissioned, implications for the state, and implications for employers.

#### **5.1 The central case**

The main results for the central case scenario are summarized in Table 1. Overall, the level of uptake in the central scenario was low, with less than 50,000 people assumed to be using care vouchers (approximately 1.4% of the eligible population). As hinted at above, the main factor contributing to the low levels of take-up was the limited proportion of employers in the scenario offering care vouchers to their employees, in line with current evidence about the supply of child care vouchers.

Not surprisingly given the relatively low level of uptake, the implications for the public purse of the central scenario are very modest, at just over £37 million per year. Also

not surprisingly, the beneficial effects on government expenditure of potential reductions in social security payments and increases in tax revenue generated by increases in the labour force were found at £1.7 million to be much smaller than the losses in tax and NI revenue associated with the salary sacrifice scheme (which accounted for in excess of £38 million).

Overall, the monetary value of care vouchers taken-up in the central scenario was approximately £83 million, equivalent to around 5% of current local authority home care gross expenditure in England. The net effect of the care vouchers on the total volume of hours of care provided would depend, however, on the extent to which care vouchers were used to finance already existing packages of care, and therefore acted as a public subsidy to the cost of existing privately funded care. It is difficult to judge the extent to which such deadweight losses would occur, other than to say that they would probably be more likely to occur among higher income groups, who might find it easier to provide financial assistance to their dependent relatives even in the absence of a care voucher scheme. The group of high income carers/relatives in the model, however, constituted a small proportion (less than 10%) of the total number of eligible individuals to the care voucher scheme (see Appendix 1).

**Table 1: Summary of results - central scenario**

<b>Number of users:</b>	<b>47,818</b>	
<b>Take-up rate:</b>	<b>1.4%</b>	<b>of eligible carers/relatives</b>
of which:	45,439	employed
	181	unemployed
	2,198	economically inactive
<b>Value of care vouchers</b>	<b>£ 83,071,026</b>	
<b>Total cost to state:</b>	<b>£ 37,054,360</b>	
of which:	£ 38,743,749	lost PAYE / NI revenue
	-£ 1,689,389	JSA gains
<b>Total cost to employers:</b>	<b>-£ 3,736,108</b>	
of which:	£ 1,912,721	administration costs
	£ 4,984,262	provider costs
	-£ 10,633,090	gains through NI exemption

As indicated in the previous section, due to the savings in their NI contributions, the care voucher scheme could actually represent a small net gain in revenue for employers. This gain was estimated in the central case to amount to just below £4 million (approximately 4% of the monetary value of care vouchers). It is likely however that such a picture would vary significantly between individual employers, depending on the efficiency of their administrative systems and the transaction costs implied by administering the scheme.

## **5.2 The high take-up scenario**

The high-take-up scenario assumes a very significant increase in the offer of care vouchers by employers. It is not surprising therefore that as a result the number of care-vouchers rise dramatically relative to the central scenario, to over 150,000 users (approximately 4.6% of all eligible individuals), with a value for the volume of care vouchers of over £270 million (approximately 16% of current gross local authority home care expenditure). In a situation such as the high take-up scenario, the increase in the volume of hours of care generated by the care voucher scheme would

constitute therefore a significant contribution to the overall levels of community care support provided.

Following the increase in the volume of care vouchers, the financial cost to the state also increased in the high take-up scenario, to approximately £120 million per year (44% of the value of the care vouchers). The positive impact on employers revenue of the scheme, in turn, is scaled up in line with the increase in the volume of care vouchers contracted. The gain to employers in this scenario was estimated at £12 million, or 4% of the value of the vouchers.

**Table 2: Summary of results – high take-up scenario**

<b>Number of users:</b>	<b>156,163</b>	
<b>Take-up rate:</b>	<b>4.6%</b>	<b>of eligible carers/relatives</b>
of which:	147,282	employed
	621	unemployed
	8,261	economically inactive
<b>Value of care vouchers</b>	<b>£ 271,225,263</b>	
<b>Total cost to state:</b>	<b>£ 120,393,223</b>	
of which:	£ 126,184,774	lost PAYE / NI revenue
	-£ 5,791,550	JSA gains
<b>Total cost to employers:</b>	<b>-£ 12,196,786</b>	
of which:	£ 6,246,531	administration costs
	£ 16,273,516	provider costs
	-£ 34,716,833	gains through NI exemption

### 5.3 The low take-up scenario

The low take-up scenario assumes a reduction in the demand for care vouchers from individuals. As indicated in Appendix 6, the effect of most of the demand-related factors mediating the likelihood of uptake were reduced by 10% relative to the central scenario. As a result, levels of uptake appear to be very small, with just over 28,000 people involved in the scheme (less than 1% of eligible individuals).

Although difficult to quantify, it is likely that the administration costs per case in a situation such as that described in the low take-up scenario would increase, because of the loss in economies of scale in the administration processes, particularly in small firms.

In the low take-up case, the overall value of the care vouchers fell to less than £50 million, only 3% of gross local authority home care expenditure. The cost to the state was just under £22 million at 45% of the overall value of the care vouchers, while the overall amount of saving to firms was estimated at £2.2 million.

**Table 3: Summary of results – low take-up scenario**

<b>Number of users:</b>	<b>28,236</b>	
<b>Take-up rate:</b>	<b>0.8%</b>	<b>of eligible carers/relatives</b>
of which:	26,831	employed
	107	unemployed
	1,298	economically inactive
<b>Value of care vouchers</b>	<b>£ 49,052,610</b>	
<b>Total cost to state:</b>	<b>£ 21,880,229</b>	
of which:	£ 22,877,797	lost PAYE / NI revenue
	-£ 997,567	JSA gains
<b>Total cost to employers:</b>	<b>-£ 2,206,131</b>	
of which:	£ 1,129,445	administration costs
	£ 2,943,157	provider costs
	-£ 6,278,733	gains through NI exemption

## 6 Implications

The analysis above has postulated three scenarios, based on alternative assumptions about, on the one hand, the likely offer of care vouchers by employers, and on the other the likely demand for care vouchers from employees.

As the results of the central scenario show, levels of take-up of the scheme based upon current evidence from child care vouchers would be relatively low. Even assuming a significant willingness from carers and relatives to take up care vouchers, problems with the level of offer of the scheme by firms such as those observed in the context of child care vouchers would act as a binding constraint against the expansion of care vouchers. The success of care vouchers is like to depend, therefore, on a significant effort to promote the scheme amongst employers.

Importantly, the existing evidence pointing out the benefits of the child care voucher schemes for employers suggests, long term, a likely increase in the proportion of firms offering care voucher schemes. Indeed, the model suggests that savings in National Insurance contributions would be likely to offset the costs of administering the scheme for a large proportion of employers. As noted above, however, less than one third of organisations offering childcare vouchers were aware by 2005 of the availability of tax and NI exemptions available to them and their employees (Kazimirski *et al* 2006). Assuming that this barrier to take-up is overcome, the volume of care vouchers taken-up could be considerable, as indicated by the high take-up scenario, and would represent a very significant contribution to the overall level of support provided to dependent people. This would be particularly important at a time where local authority social care resources are subject to very significant budgetary pressures.

Levels of take-up, however, need not be the deciding factor for judging the success of a care vouchers scheme. A more important question appears to be whether the scheme generates net social gains or losses. This would depend partly on the extent to which deadweight losses occur, whereby vouchers are used to subsidise already existing privately financed formal care rather than to fund additional levels of support.

At a negative extreme, care vouchers could have the effect to act as subsidies to the cost of care without generating increases in the volume of support provided to dependent older people.

At face value, however, contributing approximately 45% of the cost of care vouchers appears to be good value for money for the state, particularly compared with the level of charges for home care raised by local authorities. Also, the benefits derived from care vouchers are likely to extend beyond those quantified in the data model. These are likely to include significant improvements in levels of carer stress, reductions in levels of absenteeism, and improvements in labour productivity and staff retention. The lack of quantitative evidence about the intensity of such effects, however, prevented the analysis from incorporating them into the modelling of the different scenarios.

Finally, it is also important to note that care vouchers need not be restricted to carers of older people (as assumed in the modelling). While 10.7% of working-age adults in Great Britain care for an older person, a further 4.5% care for adults under the age of sixty-five (Pickard 2007). Extending carer vouchers to all carers of dependent adults would therefore lead to a significant further increase in the overall volume of support purchased through care vouchers.

## **7 Recommendations**

### ***The role of care vouchers***

Care vouchers, overall, could offer a significant contribution to supporting the needs of adults in need of support and their caregivers. Implementing the scheme is likely to generate increases in the volume of support provided, and improvements in labour market outcomes including labour force participation, increased staff retention and productivity and reduced absenteeism.

### ***Promoting supply***

The analysis above shows, however, that a successful implementation of care vouchers will depend crucially on the effective promotion of the scheme amongst employers. In fact, the benefits that care vouchers can offer to employers themselves, mentioned in previous sections, should make it possible for a large number of organisations to take part in the scheme.

### ***Effective targeting of vouchers***

The impact of the resources invested in the care vouchers on the welfare of users and carers might be improved by targeting care vouchers on individuals with a minimum level of dependency. In the data model used for this report, eligibility was restricted to those with difficulty performing at least one ADL activity, although the type of care provided need not be restricted to support with such activities.

### ***Minimising deadweight losses***

A successful implementation of care vouchers might also depend on the progressivity of the scheme. In particular, it would be important to include mechanisms for limiting the risk of deadweight losses by restricting the access or capping the value of the care voucher for high-income individuals.

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## Appendix 1 Number of carers and relatives eligible for the voucher scheme

Carers / relatives aged 16 to state pension age (SPA)												
Relational propinquity	Economically inactive	Unemployed	Employed									
			Small firm				Large firm					
			Public services		Private		Public services		Private			
			Low income	High income	Low income	High income	Low income	High income	Low income	High income		
Carers												
High dependency												
Spouse	5,382	0	458	0	879	359	839	0	493	0	8,409	
Children	69,625	6,054	49,131	4,859	71,477	6,215	27,377	4,091	49,833	14,056	302,719	
Others	32,879	7,148	19,044	2,354	40,838	2,607	14,608	2,992	19,790	3,872	146,131	
Low dependency												
Spouse	28,475	0	2,422	0	4,649	1,899	4,440	0	2,608	0	44,492	
Children	368,394	32,034	259,955	25,710	378,193	32,886	144,853	21,845	263,672	74,369	1,601,711	
Others	173,964	37,818	100,764	12,454	216,076	13,792	77,292	15,831	104,712	20,487	773,191	
Non carers												
High dependency												
Spouse	233	35	79	7	236	27	85	20	176	50	947	
Children	8,391	1,262	2,843	237	8,478	963	3,074	721	6,324	1,815	34,109	
Others	4,050	609	1,372	114	4,093	465	1,484	348	3,053	876	16,465	
Low dependency												
Spouse	2,029	305	687	57	2,050	233	743	174	1,529	439	8,247	
Children	73,035	10,985	24,747	2,064	73,796	8,382	26,758	6,276	55,048	15,799	296,891	
Others	35,256	5,303	11,946	997	35,624	4,046	12,917	3,030	26,573	7,627	143,318	
		801,712	101,553	473,449	48,853	836,387	71,874	314,471	55,128	533,812	139,390	3,376,631

## Appendix 2 Numbers taking-up vouchers – central scenario

Propensity to take-up voucher																																																							
Relational propensity	Economically inactive	Unemployed	Employed																																																				
			Small firm				Large firm																																																
			Public services		Private		Public services		Private																																														
			Low income	High income	Low income	High income	Low income	High income	Low income	High income																																													
Carers																																																							
High dependency																																																							
Spouse	0.5%	0.3%	1.8%	2.6%	0.7%	1.1%	9.5%	14.2%	3.8%	5.7%																																													
Children	0.4%	0.3%	1.6%	2.4%	0.6%	0.9%	8.5%	12.8%	3.4%	5.1%																																													
Others	0.3%	0.2%	1.2%	1.8%	0.5%	0.7%	6.6%	9.9%	2.6%	4.0%																																													
Low dependency																																																							
Spouse	0.3%	0.2%	1.2%	1.8%	0.5%	0.7%	6.3%	9.5%	2.5%	3.8%																																													
Children	0.3%	0.2%	1.1%	1.6%	0.4%	0.6%	5.7%	8.5%	2.3%	3.4%																																													
Others	0.2%	0.2%	0.8%	1.2%	0.3%	0.5%	4.4%	6.6%	1.8%	2.6%																																													
Non carers																																																							
High dependency																																																							
Spouse	0.2%	0.2%	0.9%	1.3%	0.4%	0.5%	4.7%	7.1%	1.9%	2.8%																																													
Children	0.2%	0.2%	0.8%	1.2%	0.3%	0.5%	4.3%	6.4%	1.7%	2.6%																																													
Others	0.2%	0.1%	0.6%	0.9%	0.2%	0.4%	3.3%	5.0%	1.3%	2.0%																																													
Low dependency																																																							
Spouse	0.2%	0.1%	0.6%	0.9%	0.2%	0.4%	3.2%	4.7%	1.3%	1.9%																																													
Children	0.1%	0.1%	0.5%	0.8%	0.2%	0.3%	2.8%	4.3%	1.1%	1.7%																																													
Others	0.1%	0.1%	0.4%	0.6%	0.2%	0.2%	2.2%	3.3%	0.9%	1.3%																																													
<table><tr><td>Already provides care</td><td>Yes</td><td>100%</td><td>No</td><td>50%</td><td rowspan="5">Other</td><td rowspan="5">Employed</td><td rowspan="5">70%</td><td rowspan="5">100%</td><td colspan="2" rowspan="5"></td></tr><tr><td>Dependency</td><td>High</td><td>90%</td><td>Low</td><td>60%</td></tr><tr><td>Relational propensity</td><td>Spouse</td><td>100%</td><td>Child</td><td>90%</td></tr><tr><td>Employment status</td><td>Ec. inactive</td><td>10%</td><td>Unemploy.</td><td>7%</td></tr><tr><td>Size of firm</td><td>Small</td><td>13%</td><td>Large</td><td>70%</td></tr><tr><td>Employment sector</td><td>Public</td><td>25%</td><td>Private</td><td>10%</td><td colspan="2"></td></tr><tr><td>Income level</td><td>High</td><td>90%</td><td>Low</td><td>60%</td><td colspan="2"></td></tr></table>											Already provides care	Yes	100%	No	50%	Other	Employed	70%	100%			Dependency	High	90%	Low	60%	Relational propensity	Spouse	100%	Child	90%	Employment status	Ec. inactive	10%	Unemploy.	7%	Size of firm	Small	13%	Large	70%	Employment sector	Public	25%	Private	10%			Income level	High	90%	Low	60%		
Already provides care	Yes	100%	No	50%	Other	Employed	70%	100%																																															
Dependency	High	90%	Low	60%																																																			
Relational propensity	Spouse	100%	Child	90%																																																			
Employment status	Ec. inactive	10%	Unemploy.	7%																																																			
Size of firm	Small	13%	Large	70%																																																			
Employment sector	Public	25%	Private	10%																																																			
Income level	High	90%	Low	60%																																																			
<table><tr><td rowspan="4">total recipients</td><td colspan="2">2,198 economically inactive =</td><td colspan="2">0.3%</td><td colspan="2">takeup</td><td colspan="4"></td></tr><tr><td colspan="2">181 unemployed =</td><td colspan="2">0.2%</td><td colspan="2">takeup</td><td colspan="4"></td></tr><tr><td colspan="2">45,439 employed =</td><td colspan="2">1.8%</td><td colspan="2">takeup</td><td colspan="4"></td></tr><tr><td colspan="2">47,818 total</td><td colspan="2">=</td><td colspan="2">1.4%</td><td colspan="2">takeup</td><td colspan="2"></td></tr></table>											total recipients	2,198 economically inactive =		0.3%		takeup						181 unemployed =		0.2%		takeup						45,439 employed =		1.8%		takeup						47,818 total		=		1.4%		takeup							
total recipients	2,198 economically inactive =		0.3%		takeup																																																		
	181 unemployed =		0.2%		takeup																																																		
	45,439 employed =		1.8%		takeup																																																		
	47,818 total		=		1.4%		takeup																																																
Numbers of individuals taking-up the scheme																																																							
Relational propensity	Economically inactive	Unemployed	Employed																																																				
			Small firm				Large firm																																																
			Public services		Private		Public services		Private																																														
			Low income	High income	Low income	High income	Low income	High income	Low income	High income																																													
Carers																																																							
High dependency																																																							
Spouse	26	-	8	-	6	4	79	-	19	-																																													
Children	307	19	776	115	452	59	2,328	522	1,695	717																																													
Others	113	17	234	43	201	19	966	297	524	154																																													
Low dependency																																																							
Spouse	93	-	28	-	22	13	280	-	66	-																																													
Children	1,084	66	2,737	406	1,593	208	8,213	1,841	5,980	2,530																																													
Others	398	61	825	153	708	68	3,409	1,047	1,847	542																																													
Non carers																																																							
High dependency																																																							
Spouse	1	0	1	0	1	0	4	1	3	1																																													
Children	19	2	22	3	27	5	131	46	108	46																																													
Others	7	1	8	1	10	2	49	17	40	17																																													
Low dependency																																																							
Spouse	3	0	4	1	5	1	23	8	19	8																																													
Children	107	11	130	16	155	26	759	267	624	269																																													
Others	40	4	49	6	58	10	285	100	234	101																																													
	2,198	181	4,824	744	3,237	414	16,526	4,147	11,160	4,386																																													
										47,818																																													
Value of care voucher																																																							
Relational propensity	Economically inactive	Unemployed	Employed																																																				
			Small firm				Large firm																																																
			Public services		Private		Public services		Private																																														
			Low income	High income	Low income	High income	Low income	High income	Low income	High income																																													
Carers																																																							
High dependency																																																							
Spouse	£ 75,452	-	£ 22,974	-	£ 17,641	£ 10,808	£ 226,793	-	£ 53,278	-																																													
Children	£ 878,548	£ 53,477	£ 2,219,420	£ 329,255	£ 1,291,559	£ 168,464	£ 6,659,222	£ 1,492,584	£ 4,848,637	£ 2,051,347																																													
Others	£ 322,677	£ 49,103	£ 669,120	£ 124,050	£ 573,935	£ 54,951	£ 2,763,684	£ 849,084	£ 1,497,643	£ 439,526																																													
Low dependency																																																							
Spouse	£ 133,075	-	£ 40,519	-	£ 31,113	£ 19,062	£ 399,994	-	£ 93,967	-																																													
Children	£ 1,549,491	£ 94,317	£ 3,914,381	£ 580,705	£ 2,277,916	£ 297,119	£ 11,744,837	£ 2,632,463	£ 8,551,517	£ 3,617,950																																													
Others	£ 569,103	£ 86,603	£ 1,180,124	£ 218,787	£ 1,012,246	£ 96,917	£ 4,874,296	£ 1,497,525	£ 2,641,385	£ 775,189																																													
Non carers																																																							
High dependency																																																							
Spouse	£ 1,634	£ 172	£ 1,982	£ 248	£ 2,364	£ 403	£ 11,539	£ 4,060	£ 9,496	£ 4,088																																													
Children	£ 52,939	£ 5,574	£ 64,217	£ 8,036	£ 76,599	£ 13,051	£ 373,979	£ 131,550	£ 307,669	£ 132,452																																													
Others	£ 19,876	£ 2,093	£ 24,111	£ 3,017	£ 28,759	£ 4,900	£ 140,375	£ 49,391	£ 115,516	£ 49,730																																													
Low dependency																																																							
Spouse	£ 4,741	£ 499	£ 5,751	£ 720	£ 6,859	£ 1,169	£ 33,481	£ 11,780	£ 27,552	£ 11,861																																													
Children	£ 153,596	£ 16,171	£ 186,319	£ 23,315	£ 222,243	£ 37,866	£ 1,084,770	£ 381,678	£ 892,670	£ 384,296																																													
Others	£ 57,668	£ 6,072	£ 69,955	£ 8,754	£ 83,442	£ 14,217	£ 407,283	£ 143,303	£ 335,158	£ 144,286																																													
	3,818,801	314,080	8,398,872	1,296,886	5,624,676	718,926	28,720,153	7,193,419	19,374,489	7,610,724																																													
										83,071,026																																													

## Appendix 3 Tax and NI revenue losses to the state – central scenario

Annual tax cost to state per individual										
Relational propinquity	Economically inactive	Unemployed	Employed							
			Small firm				Large firm			
			Public services		Private		Public services		Private	
			Low income	High income	Low income	High income	Low income	High income	Low income	High income
Carers										
High dependency										
Spouse	£1,281	£1,410	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539
Children	£1,281	£1,410	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539
Others	£1,281	£1,410	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539
Low dependency										
Spouse	£641	£705	£641	£769	£641	£769	£641	£769	£641	£769
Children	£641	£705	£641	£769	£641	£769	£641	£769	£641	£769
Others	£641	£705	£641	£769	£641	£769	£641	£769	£641	£769
Non carers										
High dependency										
Spouse	£1,281	£1,410	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539
Children	£1,281	£1,410	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539
Others	£1,281	£1,410	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539	£1,281	£1,539
Low dependency										
Spouse	£641	£705	£641	£769	£641	£769	£641	£769	£641	£769
Children	£641	£705	£641	£769	£641	£769	£641	£769	£641	£769
Others	£641	£705	£641	£769	£641	£769	£641	£769	£641	£769
Costs to state										
Size of voucher (weekly voucher)			Full		£55	Half		£27.50		
Tax rate			High income		0.4	Low income		0.22		
NI (employer)			Any income		0.128					
NI (employee)			High income		0.01	Low income		0.1		
Annual tax cost to state total individuals										
Relational propinquity	Economically inactive	Unemployed	Employed							
			Small firm				Large firm			
			Public services		Private		Public services		Private	
			Low income	High income	Low income	High income	Low income	High income	Low income	High income
Carers										
High dependency										
Spouse	£ 33,803	£ -	£ 10,292	£ -	£ 7,903	£ 5,815	£ 101,603	£ -	£ 23,869	£ -
Children	£ 393,590	£ 26,364	£ 994,300	£ 177,139	£ 578,618	£ 90,634	£ 2,983,332	£ 803,010	£ 2,172,190	£ 1,103,624
Others	£ 144,559	£ 24,208	£ 299,766	£ 66,739	£ 257,123	£ 29,564	£ 1,238,131	£ 456,807	£ 670,944	£ 236,465
Low dependency										
Spouse	£ 59,618	£ -	£ 18,152	£ -	£ 13,938	£ 10,255	£ 179,198	£ -	£ 42,097	£ -
Children	£ 694,172	£ 46,498	£ 1,753,642	£ 312,419	£ 1,020,506	£ 159,850	£ 5,261,687	£ 1,416,265	£ 3,831,080	£ 1,946,457
Others	£ 254,958	£ 42,695	£ 528,695	£ 117,707	£ 453,486	£ 52,141	£ 2,183,685	£ 805,668	£ 1,183,341	£ 417,052
Non carers										
High dependency										
Spouse	£ 732	£ 85	£ 888	£ 133	£ 1,059	£ 217	£ 5,170	£ 2,184	£ 4,254	£ 2,199
Children	£ 23,717	£ 2,748	£ 28,769	£ 4,323	£ 34,316	£ 7,021	£ 167,498	£ 70,774	£ 137,836	£ 71,259
Others	£ 8,904	£ 1,032	£ 10,802	£ 1,623	£ 12,884	£ 2,636	£ 62,888	£ 26,572	£ 51,751	£ 26,755
Low dependency										
Spouse	£ 2,124	£ 246	£ 2,576	£ 387	£ 3,073	£ 629	£ 14,999	£ 6,338	£ 12,343	£ 6,381
Children	£ 68,811	£ 7,972	£ 83,471	£ 12,544	£ 99,565	£ 20,372	£ 485,977	£ 205,343	£ 399,916	£ 206,751
Others	£ 25,835	£ 2,993	£ 31,340	£ 4,710	£ 37,382	£ 7,649	£ 182,463	£ 77,097	£ 150,151	£ 77,626
£17,10,823			£154,841	£3,762,694	£697,725	£2,519,855	£386,782	£12,866,628	£3,870,059	£8,679,771
									£4,094,570	£38,743,749

## Appendix 4 Gains in state revenue due to reductions in unemployment – central scenario

Annual revenue gains to state per individual																			
Annual JSA cost to state per individual																			
Relational propinquity	Economically inactive	Unemployed	Employed																
			Small firm				Large firm												
			Public services		Private		Public services		Private										
			Low income	High income	Low income	High income	Low income	High income	Low income	High income									
Carers																			
Medium dependency																			
Spouse		£8,817																	
Children		£8,817																	
Others		£8,817																	
Low dependency																			
Spouse		£9,472																	
Children		£9,472																	
Others		£9,472																	
Non carers																			
Medium dependency																			
Spouse		£8,817																	
Children		£8,817																	
Others		£8,817																	
Low dependency																			
Spouse		£9,472																	
Children		£9,472																	
Others		£9,472																	
Costs to state																			
<table><tr><td>Weekly amount of JSA</td><td>£53</td><td>Taxable salary High depen</td><td>£ 19,032</td></tr><tr><td>Salary</td><td>£ 21,892</td><td>Taxable salary Low depen</td><td>£ 20,462</td></tr></table>												Weekly amount of JSA	£53	Taxable salary High depen	£ 19,032	Salary	£ 21,892	Taxable salary Low depen	£ 20,462
Weekly amount of JSA	£53	Taxable salary High depen	£ 19,032																
Salary	£ 21,892	Taxable salary Low depen	£ 20,462																
											£ 1,689,389								
Annual JSA cost to state total individuals																			
Relational propinquity	Economically inactive	Unemployed	Employed																
			Small firm				Large firm												
			Public services		Private		Public services		Private										
			Low income	High income	Low income	High income	Low income	High income	Low income	High income									
Carers																			
Medium dependency																			
Spouse	£	-	£	-	£	-	£	-	£	-	£	-	£0						
Children	£	-	£	164,860	£	-	£	-	£	-	£	-	£164,860						
Others	£	-	£	151,377	£	-	£	-	£	-	£	-	£151,377						
Low dependency																			
Spouse	£	-	£	-	£	-	£	-	£	-	£	-	£0						
Children	£	-	£	624,724	£	-	£	-	£	-	£	-	£624,724						
Others	£	-	£	573,628	£	-	£	-	£	-	£	-	£573,628						
Non carers																			
Medium dependency																			
Spouse	£	-	£	530	£	-	£	-	£	-	£	-	£530						
Children	£	-	£	17,183	£	-	£	-	£	-	£	-	£17,183						
Others	£	-	£	6,451	£	-	£	-	£	-	£	-	£6,451						
Low dependency																			
Spouse	£	-	£	3,306	£	-	£	-	£	-	£	-	£3,306						
Children	£	-	£	107,113	£	-	£	-	£	-	£	-	£107,113						
Others	£	-	£	40,216	£	-	£	-	£	-	£	-	£40,216						
			£0	£1,689,389	£0	£0	£0	£0	£0	£0	£0	£0	£1,689,389						

## Appendix 5 Administration costs to employers– central scenario

Administration costs													
Relational propinquity	Economical ly inactive	Unemploye d	Employed										
			Small firm						Large firm				
			Public services		Private		Public services		Private				
			Low income	High income	Low income	High income	Low income	High income	Low income	High income			
Carers													
High dependency													
Spouse	£1,055	£0	£321	£0	£247	£151	£3,172	£0	£745	£0	£5,692		
Children	£12,291	£748	£31,041	£4,605	£18,064	£2,356	£93,136	£20,875	£67,813	£28,690	£279,619		
Others	£4,516	£687	£9,358	£1,735	£8,027	£769	£38,653	£11,875	£20,946	£6,147	£102,713		
Low dependency													
Spouse	£3,722	£0	£1,133	£0	£870	£533	£11,189	£0	£2,628	£0	£20,076		
Children	£43,342	£2,638	£109,493	£16,243	£63,718	£8,311	£328,527	£73,635	£239,203	£101,201	£986,313		
Others	£15,919	£2,422	£33,010	£6,120	£28,315	£2,711	£136,344	£41,889	£73,885	£21,684	£362,299		
Non carers													
High dependency													
Spouse	£23	£2	£28	£3	£33	£6	£161	£57	£133	£57	£503		
Children	£740	£78	£898	£112	£1,071	£183	£5,229	£1,840	£4,303	£1,852	£16,307		
Others	£278	£29	£337	£42	£402	£69	£1,963	£691	£1,616	£696	£6,123		
Low dependency													
Spouse	£133	£14	£161	£20	£192	£33	£937	£330	£771	£332	£2,921		
Children	£4,296	£452	£5,212	£652	£6,217	£1,059	£30,343	£10,676	£24,970	£10,750	£94,627		
Others	£1,613	£170	£1,957	£245	£2,334	£398	£11,393	£4,008	£9,375	£4,036	£35,528		
			£87,929	£7,241	£192,950	£29,779	£129,489	£16,577	£661,046	£165,876	£446,388	£175,445	£1,912,721
Transaction costs assumptions													
Administration costs		hourly cost					20.00						
		hours per month					1/6						
		hours per week					0.04						
Provision costs		Weekly of voucher	Full				£55		Half			£27.50	
		proportion of voucher					0.06						
Payments to voucher providers													
Relational propinquity	Economical ly inactive	Unemploye d	Employed										
			Small firm						Large firm				
			Public services		Private		Public services		Private				
			Low income	High income	Low income	High income	Low income	High income	Low income	High income			
Carers													
High dependency													
Spouse	£4,527	£0	£1,378	£0	£1,058	£648	£13,608	£0	£3,197	£0	£24,417		
Children	£52,713	£3,209	£133,165	£19,755	£77,494	£10,108	£399,553	£89,555	£290,918	£123,081	£1,199,551		
Others	£19,361	£2,946	£40,147	£7,443	£34,436	£3,297	£165,821	£50,945	£89,859	£26,372	£440,626		
Low dependency													
Spouse	£7,984	£0	£2,431	£0	£1,867	£1,144	£24,000	£0	£5,638	£0	£43,064		
Children	£92,969	£5,659	£234,863	£34,842	£136,675	£17,827	£704,690	£157,948	£513,091	£217,077	£2,115,642		
Others	£34,146	£5,196	£70,807	£13,127	£60,735	£5,815	£292,458	£89,851	£158,483	£46,511	£777,131		
Non carers													
High dependency													
Spouse	£98	£10	£119	£15	£142	£24	£692	£244	£570	£245	£2,159		
Children	£3,176	£334	£3,853	£482	£4,596	£783	£22,433	£7,893	£18,460	£7,947	£69,958		
Others	£1,193	£126	£1,447	£181	£1,726	£294	£8,422	£2,963	£6,931	£2,984	£26,266		
Low dependency													
Spouse	£284	£30	£345	£43	£412	£70	£2,009	£707	£1,653	£712	£6,265		
Children	£9,216	£970	£11,179	£1,399	£13,335	£2,272	£65,086	£22,901	£53,560	£23,058	£202,976		
Others	£3,460	£364	£4,197	£525	£5,007	£853	£24,437	£8,598	£20,109	£8,657	£76,208		
			£229,128	£18,845	£503,932	£77,813	£337,481	£43,136	£1,723,209	£431,605	£1,162,469	£456,643	£4,984,262
NI savings													
Relational propinquity	Economical ly inactive	Unemploye d	Employed										
			Small firm						Large firm				
			Public services		Private		Public services		Private				
			Low income	High income	Low income	High income	Low income	High income	Low income	High income			
Carers													
High dependency													
Spouse	£9,658	£0	£2,941	£0	£2,258	£1,383	£29,030	£0	£6,820	£0	£52,089		
Children	£112,454	£6,845	£284,086	£42,145	£165,320	£21,563	£852,380	£191,051	£620,626	£262,572	£2,559,042		
Others	£41,303	£6,285	£85,647	£15,878	£73,464	£7,034	£353,752	£108,683	£191,698	£56,259	£940,003		
Low dependency													
Spouse	£17,034	£0	£5,186	£0	£3,982	£2,440	£51,199	£0	£12,028	£0	£91,869		
Children	£198,335	£12,073	£501,041	£74,330	£291,573	£38,031	£1,503,339	£336,955	£1,094,594	£463,098	£4,513,369		
Others	£72,845	£11,085	£151,056	£28,005	£129,568	£12,405	£623,910	£191,683	£338,097	£99,224	£1,657,878		
Non carers													
High dependency													
Spouse	£209	£22	£254	£32	£303	£52	£1,477	£520	£1,215	£523	£4,606		
Children	£6,776	£713	£8,220	£1,029	£9,805	£1,671	£47,856	£16,838	£39,382	£16,954	£149,244		
Others	£2,544	£268	£3,086	£386	£3,681	£627	£17,968	£6,322	£14,786	£6,365	£56,034		
Low dependency													
Spouse	£607	£64	£736	£92	£878	£150	£4,286	£1,508	£3,527	£1,518	£13,365		
Children	£19,660	£2,070	£23,849	£2,984	£28,447	£4,847	£138,851	£48,855	£114,262	£49,190	£433,014		
Others	£7,382	£777	£8,954	£1,120	£10,681	£1,820	£52,132	£18,343	£42,900	£18,469	£162,578		
			£488,807	£40,202	£1,075,056	£166,001	£719,959	£92,023	£3,676,180	£920,758	£2,479,935	£974,173	£10,633,091

## Appendix 6 Numbers with vouchers - low uptake scenario

Propensity to adopt (low uptake)																																																																																																		
Relational propensity	Economically inactive	Unemployed	Employed																																																																																															
			Small firm				Large firm																																																																																											
			Public services		Private		Public services		Private																																																																																									
			Low income	High income	Low income	High income	Low income	High income	Low income	High income																																																																																								
Carers																																																																																																		
High dependency																																																																																																		
Spouse	0.3%	0.2%	1.0%	1.6%	0.4%	0.6%	5.6%	8.4%	2.2%	3.3%																																																																																								
Children	0.3%	0.2%	0.9%	1.4%	0.4%	0.6%	5.0%	7.5%	2.0%	3.0%																																																																																								
Others	0.2%	0.1%	0.7%	1.1%	0.3%	0.4%	3.9%	5.9%	1.6%	2.3%																																																																																								
Low dependency																																																																																																		
Spouse	0.2%	0.1%	0.7%	1.0%	0.3%	0.4%	3.7%	5.6%	1.5%	2.2%																																																																																								
Children	0.2%	0.1%	0.6%	0.9%	0.2%	0.4%	3.3%	5.0%	1.3%	2.0%																																																																																								
Others	0.1%	0.1%	0.5%	0.7%	0.2%	0.3%	2.6%	3.9%	1.0%	1.6%																																																																																								
Non carers																																																																																																		
High dependency																																																																																																		
Spouse	0.1%	0.1%	0.5%	0.8%	0.2%	0.3%	2.8%	4.2%	1.1%	1.7%																																																																																								
Children	0.1%	0.1%	0.5%	0.7%	0.2%	0.3%	2.5%	3.8%	1.0%	1.5%																																																																																								
Others	0.1%	0.1%	0.4%	0.5%	0.1%	0.2%	2.0%	2.9%	0.8%	1.2%																																																																																								
Low dependency																																																																																																		
Spouse	0.1%	0.1%	0.3%	0.5%	0.1%	0.2%	1.9%	2.8%	0.7%	1.1%																																																																																								
Children	0.1%	0.1%	0.3%	0.5%	0.1%	0.2%	1.7%	2.5%	0.7%	1.0%																																																																																								
Others	0.1%	0.0%	0.2%	0.4%	0.1%	0.1%	1.3%	2.0%	0.5%	0.8%																																																																																								
<table><tr><td></td><td></td><td>relative to medium</td><td></td><td></td><td>relative to medium</td><td></td><td></td><td></td><td>relative to medium</td><td></td></tr><tr><td>Already provides care</td><td>Yes</td><td>90%</td><td>90%</td><td>No</td><td>90%</td><td>45%</td><td></td><td></td><td></td><td></td></tr><tr><td>Dependency</td><td>High</td><td>90%</td><td>91%</td><td>Low</td><td>90%</td><td>54%</td><td></td><td></td><td></td><td></td></tr><tr><td>Relational propensity</td><td>Spouse</td><td>90%</td><td>90%</td><td>Child</td><td>90%</td><td>81%</td><td>Other</td><td>90%</td><td>63%</td><td></td></tr><tr><td>Employment status</td><td>Ec. inactive</td><td>90%</td><td>9%</td><td>Unemploy</td><td>90%</td><td>6%</td><td>Employed</td><td>90%</td><td>90%</td><td></td></tr><tr><td>Size of firm</td><td>Small</td><td>100%</td><td>13%</td><td>Large</td><td>100%</td><td>70%</td><td></td><td></td><td></td><td></td></tr><tr><td>Employment sector</td><td>Public</td><td>100%</td><td>25%</td><td>Private</td><td>100%</td><td>10%</td><td></td><td></td><td></td><td></td></tr><tr><td>Income level</td><td>High</td><td>90%</td><td>81%</td><td>Low</td><td>90%</td><td>54%</td><td></td><td></td><td></td><td></td></tr></table>													relative to medium			relative to medium				relative to medium		Already provides care	Yes	90%	90%	No	90%	45%					Dependency	High	90%	91%	Low	90%	54%					Relational propensity	Spouse	90%	90%	Child	90%	81%	Other	90%	63%		Employment status	Ec. inactive	90%	9%	Unemploy	90%	6%	Employed	90%	90%		Size of firm	Small	100%	13%	Large	100%	70%					Employment sector	Public	100%	25%	Private	100%	10%					Income level	High	90%	81%	Low	90%	54%				
		relative to medium			relative to medium				relative to medium																																																																																									
Already provides care	Yes	90%	90%	No	90%	45%																																																																																												
Dependency	High	90%	91%	Low	90%	54%																																																																																												
Relational propensity	Spouse	90%	90%	Child	90%	81%	Other	90%	63%																																																																																									
Employment status	Ec. inactive	90%	9%	Unemploy	90%	6%	Employed	90%	90%																																																																																									
Size of firm	Small	100%	13%	Large	100%	70%																																																																																												
Employment sector	Public	100%	25%	Private	100%	10%																																																																																												
Income level	High	90%	81%	Low	90%	54%																																																																																												
<table><tr><td>total recipients</td><td>1,298 economically inactive =</td><td>0%</td><td>takeup</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>107 unemployed =</td><td>0%</td><td>takeup</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>26,831 employed =</td><td>1%</td><td>takeup</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>28,236 total =</td><td>0.8%</td><td>takeup</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>											total recipients	1,298 economically inactive =	0%	takeup									107 unemployed =	0%	takeup									26,831 employed =	1%	takeup									28,236 total =	0.8%	takeup																																																			
total recipients	1,298 economically inactive =	0%	takeup																																																																																															
	107 unemployed =	0%	takeup																																																																																															
	26,831 employed =	1%	takeup																																																																																															
	28,236 total =	0.8%	takeup																																																																																															
Numbers of individuals taking-up the scheme																																																																																																		
Relational propensity	Economically inactive	Unemployed	Employed																																																																																															
			Small firm				Large firm																																																																																											
			Public services		Private		Public services		Private																																																																																									
			Low income	High income	Low income	High income	Low income	High income	Low income	High income																																																																																								
Carers																																																																																																		
High dependency																																																																																																		
Spouse	16	-	5	-	4	2	47	-	11	-																																																																																								
Children	181	11	458	68	267	35	1,375	308	1,001	424																																																																																								
Others	67	10	138	26	118	11	571	175	309	91																																																																																								
Low dependency																																																																																																		
Spouse	55	-	17	-	13	8	165	-	39	-																																																																																								
Children	640	39	1,616	240	941	123	4,850	1,087	3,531	1,494																																																																																								
Others	235	36	487	90	418	40	2,013	618	1,091	320																																																																																								
Non carers																																																																																																		
High dependency																																																																																																		
Spouse	0	0	0	0	0	0	2	1	2	1																																																																																								
Children	11	1	13	2	16	3	77	27	64	27																																																																																								
Others	4	0	5	1	6	1	29	10	24	10																																																																																								
Low dependency																																																																																																		
Spouse	2	0	2	0	3	0	14	5	11	5																																																																																								
Children	63	7	77	10	92	16	448	158	369	159																																																																																								
Others	24	3	29	4	34	6	168	59	138	60																																																																																								
	1,298	107	2,848	440	1,912	245	9,759	2,449	6,590	2,590																																																																																								
										28,236																																																																																								
Value of care voucher																																																																																																		
Relational propensity	Economically inactive	Unemployed	Employed																																																																																															
			Small firm				Large firm																																																																																											
			Public services		Private		Public services		Private																																																																																									
			Low income	High income	Low income	High income	Low income	High income	Low income	High income																																																																																								
Carers																																																																																																		
High dependency																																																																																																		
Spouse	£ 44,554	£ -	£ 13,566	£ -	£ 10,417	£ 6,382	£ 133,919	£ -	£ 31,460	£ -																																																																																								
Children	£ 518,774	£ 31,578	£ 1,310,546	£ 194,422	£ 762,653	£ 99,476	£ 3,932,204	£ 881,356	£ 2,863,072	£ 1,211,300																																																																																								
Others	£ 190,537	£ 28,995	£ 395,109	£ 73,250	£ 336,903	£ 32,448	£ 1,631,928	£ 501,375	£ 884,343	£ 259,536																																																																																								
Low dependency																																																																																																		
Spouse	£ 78,579	£ -	£ 23,926	£ -	£ 18,372	£ 11,256	£ 236,193	£ -	£ 55,487	£ -																																																																																								
Children	£ 914,959	£ 55,693	£ 2,311,403	£ 342,900	£ 1,345,086	£ 175,446	£ 6,935,209	£ 1,554,443	£ 5,049,585	£ 2,136,363																																																																																								
Others	£ 336,050	£ 51,138	£ 696,851	£ 129,192	£ 597,721	£ 57,229	£ 2,878,223	£ 884,273	£ 1,559,712	£ 457,741																																																																																								
Non carers																																																																																																		
High dependency																																																																																																		
Spouse	£ 965	£ 102	£ 1,170	£ 146	£ 1,396	£ 238	£ 6,814	£ 2,397	£ 5,607	£ 2,414																																																																																								
Children	£ 31,260	£ 3,291	£ 37,920	£ 4,745	£ 45,231	£ 7,706	£ 220,772	£ 77,679	£ 181,676	£ 76,212																																																																																								
Others	£ 11,737	£ 1,236	£ 14,237	£ 1,782	£ 16,982	£ 2,893	£ 82,890	£ 29,165	£ 68,211	£ 29,365																																																																																								
Low dependency																																																																																																		
Spouse	£ 2,799	£ 295	£ 3,396	£ 425	£ 4,050	£ 690	£ 19,770	£ 6,956	£ 16,269	£ 7,004																																																																																								
Children	£ 90,697	£ 9,549	£ 110,020	£ 13,767	£ 131,232	£ 22,359	£ 640,546	£ 225,377	£ 527,113	£ 226,923																																																																																								
Others	£ 34,053	£ 3,595	£ 41,307	£ 5,169	£ 49,272	£ 8,395	£ 240,496	£ 84,619	£ 197,907	£ 85,199																																																																																								
	2,254,964	185,461	4,959,450	765,798	3,321,315	424,519	16,958,963	4,247,642	11,440,442	4,494,057																																																																																								
										49,052,610																																																																																								

## Appendix 7 Numbers with vouchers - high uptake scenario

Propensity to adopt (high takeup)													
Relational propensity	Economically inactive	Unemployed	Employed										
			Small firm				Large firm						
			Public services		Private		Public services		Private				
			Low income	High income	Low income	High income	Low income	High income	Low income	High income			
Carers													
High dependency													
Spouse	1.8%	1.1%	8.5%	12.7%	3.4%	5.1%	25.2%	37.7%	10.1%	15.1%			
Children	1.7%	1.1%	8.0%	12.0%	3.2%	4.8%	23.8%	35.7%	9.5%	14.3%			
Others	1.2%	0.8%	5.9%	8.9%	2.4%	3.6%	17.6%	26.4%	7.0%	10.6%			
Low dependency													
Spouse	1.2%	0.8%	5.7%	8.5%	2.3%	3.4%	16.8%	25.2%	6.7%	10.1%			
Children	1.1%	0.7%	5.4%	8.0%	2.1%	3.2%	15.8%	23.8%	6.3%	9.5%			
Others	0.8%	0.5%	4.0%	5.9%	1.6%	2.4%	11.7%	17.6%	4.7%	7.0%			
Non carers													
High dependency													
Spouse	1.0%	0.6%	4.7%	7.0%	1.9%	2.8%	13.8%	20.8%	5.5%	8.3%			
Children	0.9%	0.6%	4.4%	6.6%	1.8%	2.6%	13.1%	19.6%	5.2%	7.8%			
Others	0.7%	0.4%	3.3%	4.9%	1.3%	2.0%	9.7%	14.5%	3.9%	5.8%			
Low dependency													
Spouse	0.6%	0.4%	3.1%	4.7%	1.2%	1.9%	9.2%	13.8%	3.7%	5.5%			
Children	0.6%	0.4%	2.9%	4.4%	1.2%	1.8%	8.7%	13.1%	3.5%	5.2%			
Others	0.5%	0.3%	2.2%	3.3%	0.9%	1.3%	6.5%	9.7%	2.6%	3.9%			
			relative to medium		relative to medium		relative to medium						
Already provides care	Yes		100%	100%	No	110%	55%						
Dependency	High		110%	99%	Low	110%	66%						
Relational propensity	Spouse		100%	100%	Child	105%	95%	Other	100%	70%			
Employment status	Ec. inactive		120%	12%	Unemploy.	110%	8%	Employed	100%	100%			
Size of firm	Small		200%	26%	Large	110%	77%						
Employment sector	Public		200%	50%	Private	200%	20%						
Income level	High		110%	99%	Low	110%	66%						
total recipients			8,261 economically inactive =		1% takeup								
			621 unemployed =		1% takeup								
			147,282 employed =		6% takeup								
			156,163 total		= 4.6% takeup								
Numbers of individuals taking-up the scheme													
Relational propensity	Economically inactive	Unemployed	Employed										
			Small firm				Large firm						
			Public services		Private		Public services		Private				
			Low income	High income	Low income	High income	Low income	High income	Low income	High income			
Carers													
High dependency													
Spouse	95	-	39	-	30	18	211	-	50	-			
Children	1,162	65	3,944	585	2,295	299	6,508	1,459	4,739	2,005			
Others	407	57	1,132	210	971	93	2,572	790	1,394	409			
Low dependency													
Spouse	335	-	137	-	105	65	745	-	175	-			
Children	4,100	229	13,911	2,064	8,095	1,056	22,957	5,145	16,715	7,072			
Others	1,434	200	3,994	741	3,426	328	9,074	2,788	4,917	1,443			
Non carers													
High dependency													
Spouse	2	0	4	0	4	1	12	4	10	4			
Children	77	7	126	16	150	26	402	141	331	142			
Others	28	3	45	6	54	9	144	51	118	51			
Low dependency													
Spouse	13	1	21	3	26	4	69	24	56	24			
Children	447	43	728	91	869	148	2,332	821	1,919	826			
Others	160	15	260	33	311	53	834	293	686	295			
			8,261	621	24,342	3,747	16,336	2,100	45,859	11,517	31,110	12,272	156,163
Value of care voucher													
Relational propensity	Economically inactive	Unemployed	Employed										
			Small firm				Large firm						
			Public services		Private		Public services		Private				
			Low income	High income	Low income	High income	Low income	High income	Low income	High income			
Carers													
High dependency													
Spouse	£ 271,912	£ -	£ 111,194	£ -	£ 85,380	£ 52,310	£ 603,724	£ -	£ 141,827	£ -			
Children	£ 3,324,381	£ 185,491	£ 11,279,095	£ 1,673,272	£ 6,563,701	£ 856,135	£ 18,613,192	£ 4,171,922	£ 13,552,427	£ 5,733,719			
Others	£ 1,162,849	£ 162,209	£ 3,238,541	£ 600,404	£ 2,777,845	£ 265,864	£ 7,356,927	£ 2,260,261	£ 3,986,726	£ 1,170,017			
Low dependency													
Spouse	£ 479,570	£ -	£ 196,112	£ -	£ 150,585	£ 92,260	£ 1,064,785	£ -	£ 250,140	£ -			
Children	£ 5,863,193	£ 327,149	£ 19,892,882	£ 2,951,142	£ 11,576,367	£ 1,509,961	£ 32,827,993	£ 7,357,998	£ 23,902,346	£ 10,112,531			
Others	£ 2,050,911	£ 286,087	£ 5,711,798	£ 1,058,929	£ 4,899,272	£ 469,079	£ 12,975,375	£ 3,986,411	£ 7,031,368	£ 2,063,554			
Non carers													
High dependency													
Spouse	£ 6,477	£ 625	£ 10,552	£ 1,320	£ 12,587	£ 2,145	£ 33,790	£ 11,889	£ 27,806	£ 11,971			
Children	£ 220,349	£ 21,266	£ 358,987	£ 44,922	£ 428,202	£ 72,857	£ 1,149,531	£ 404,465	£ 945,963	£ 407,239			
Others	£ 78,792	£ 7,604	£ 128,365	£ 16,063	£ 153,115	£ 26,088	£ 411,045	£ 144,627	£ 338,254	£ 145,619			
Low dependency													
Spouse	£ 18,792	£ 1,814	£ 30,616	£ 3,831	£ 36,519	£ 6,222	£ 98,038	£ 34,495	£ 80,676	£ 34,731			
Children	£ 639,319	£ 61,701	£ 1,041,562	£ 130,336	£ 1,242,385	£ 211,676	£ 3,335,245	£ 1,173,512	£ 2,744,612	£ 1,181,561			
Others	£ 228,605	£ 22,063	£ 372,438	£ 46,605	£ 444,247	£ 75,690	£ 1,192,605	£ 419,620	£ 981,409	£ 422,498			
			14,345,151	1,076,009	42,372,141	6,526,825	28,370,206	3,640,486	79,662,251	19,965,200	53,983,554	21,283,440	271,225,263