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The Effectiveness of Paid Services in Supporting Unpaid Carers' Employment in England

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Abstract

This paper explores the effectiveness of paid services in supporting unpaid carers' employment in England. There is currently a new emphasis in England on 'replacement care', or paid services for the cared-for person, as a means of supporting working carers. The international evidence on the effectiveness of paid services as a means of supporting carers' employment is inconclusive and does not relate specifically to England. The study reported here explores this issue using the 2009/10 *Personal Social Services Survey of Adult Carers in England*. The study finds a positive association between carers' employment and receipt of paid services by the cared-for person, controlling for covariates. It therefore gives support to the hypothesis that services for the cared-for person are effective in supporting carers' employment. Use of home care and a personal assistant are associated on their own with the employment of both men and women carers, while use of day care and meals-on-wheels are associated specifically with women's employment. Use of short-term breaks are associated with carers' employment when combined with other services. The paper supports the emphasis in English social policy on paid services as a means of supporting working carers, but questions the use of the term 'replacement care' and the emphasis on 'the market'.

Introduction

In the context of population ageing, 'care stands alongside the other great challenges, such as climate change, that we must face at the global level and in our own lives' (Fine, 2012: 66). Many countries rely heavily on care provided by unpaid family members or friends yet, amid increasing debates around 'balancing the

work ethic with the care ethic' (Williams, 2004: 84), there is currently something of an 'impasse' concerning unpaid care and employment (Fine, 2012: 58). The need for care is rising and governments are keen to support the provision of unpaid care to meet this need. At the same time, partly to reduce the publicly funded costs of pensions, governments are extending working lives and encouraging older workers to continue in employment (Fine, 2012). However, older people of working age are those who are most likely to provide unpaid care, which is often incompatible with employment, particularly when provided for long hours. In this context, 'helping carers to combine caring responsibilities with paid work' is becoming a key policy objective in many countries (Colombo *et al.*, 2011: 85).

In England, over the last two decades, there has been an emphasis in government policy on enabling people to combine unpaid care and employment (Her Majesty's Government (HMG), 2008; HMG, 1999). The Coalition Government's Carers' Strategy has four priority areas, one of which is 'enabling those with caring responsibilities to fulfil their educational and employment potential' (HMG, 2010: 6). The emphasis in policy relating to unpaid care and employment in England, as in other countries, has primarily been on 'flexible working' as part of a work/life balance agenda (Fine, 2012; HMG, 2010, 2008). In Britain, the *Work and Families Act 2006* gave employees who care for adults the right to request flexible working arrangements and, from June 2014, the implementation of the *Children and Families Act 2014* extended this right to all employees.

However, as well as an emphasis on flexible working, there is now an emphasis on 'replacement care' to support work and care in England. The term 'replacement care' was initially used in government policy around carers and employment in the 2008 Carers' Strategy, which included a commitment to fund 'replacement care for those who are participating in approved training', in order to help carers to re-enter the labour market (HMG, 2008: 100). In the Coalition Government's Carers' Strategy, there is a new emphasis on developing 'social care markets' partly to meet carers' needs for 'replacement care to enable them to continue to work' (HMG, 2010: 16). The current emphasis on 'replacement care' goes further than previous policy because it implies *ongoing* support for working carers, rather than temporary support to help carers to re-enter the labour market. The *Care Act 2014* stated that carers' assessments must consider whether the carer wants to work and introduced a new duty on local authorities to provide support to meet carers' needs (*Care Act 2014*). Explanatory notes make it clear that a carer's need for support may be met by providing support directly to the cared-for person, for example by providing 'replacement care' (House of Commons, 2014). The notes also make it clear that 'replacement care' refers to *paid support and services for the cared-for person*, stating that carers will not be charged for care and support provided to the adult needing care.

The emphasis on ‘replacement care’ in government policy is an important development because it represents a marked change from previous government policies on carers in England. Previous UK governments had rejected any notion of replacing, or substituting, unpaid care with paid services (Pickard, 2012, 2001). In terms of the conceptualisation of carers in the service system, an emphasis on ‘replacement care’ is consistent with a ‘superseded carer’ model (Twigg, 1992). As such, it involves recognition of the ‘dual focus of caring’, acknowledging that caring takes place in a relationship and that policy should therefore focus on both the disabled or older person *and* the carer (Twigg, 1996: 85–6). Recognition of the need to provide better services for disabled and older people, as a means of supporting or replacing carers, is consistent with key approaches to policy around disability and caring, including disability rights and feminist approaches (Arksey and Glendinning, 2007; McLaughlin and Glendinning, 1994; Parker, 1993a). However, it is important to note, that the Coalition Government sees ‘replacement care’ as taking the form of services that would be provided through ‘social care markets’ and is therefore consistent with a neo-liberal approach to care provision (HMG, 2010: 16). A joint report by the government and employers emphasises ‘ways in which people can be supported to combine work and care, and the market for care and support services can be stimulated to grow to encompass their needs’ (HMG and Employers for Carers, 2013: 7), a position recently restated in the government’s *Carers’ Strategy National Action Plan* (HMG, 2014: 37).

Despite the new emphasis on ‘replacement care’ in England, little is known about its effectiveness as a means of supporting carers in employment in this country. Lilly and colleagues, in their systematic review of the international literature on unpaid care and employment, identify ‘the relationship between the use of paid (formal) home-care services and unpaid caregiver employment’ as needing further international analysis (Lilly *et al.*, 2007: 675). They could identify only four papers on this issue in the period covered by their review (1986–2006), all from the United States (Bullock *et al.*, 2003; Covinsky *et al.*, 2001; Doty *et al.*, 1998; White-Means, 1997). Two further studies, one carried out in the United States (Scharlach *et al.*, 2007) and one cross-nationally (Lundsgaard, 2006), have also been reported recently.

The existing international literature on the effectiveness of paid services as a means of supporting unpaid carers in employment is inconclusive. Two of the studies from the United States show a positive relationship between the use of paid home-care services by the care-recipient and carers’ employment rates (Scharlach *et al.*, 2007; Doty *et al.*, 1998). Moreover, a study carried out for the Organisation for Economic Co-operation and Development (OECD) found that countries with more extensive formal home-care provision, such as the Scandinavian countries, tend to have higher employment rates for mid-life women than countries with limited or average formal home-care provision,

such as the UK (Lundsgaard, 2006). However, two of the studies from the United States show no relationship between the use of paid services and carers' labour force participation rates (Bullock *et al.*, 2003; White-Means, 1997). Further, one of the studies from the United States suggests that there is a negative relationship between the use of formal services by the care-recipient and carers' employment rates (Covinsky *et al.*, 2001). The study shows that carers of people who use formal services are more likely to reduce their labour market hours than carers of people who do not receive services, suggesting that higher levels of both types of care may reflect the care-recipient's increasing care needs.

Not only is the existing international literature on the effectiveness of paid services as a means of supporting working carers inconclusive, but it is also the case that none of the studies relates specifically to England, where a policy advocating 'replacement care' to enable carers to work is being proposed. Research carried out in other countries is not necessarily applicable to England, because of differences in labour market conditions, community care arrangements and financing mechanisms for health and social care. However, there appear to have been no previous peer-reviewed studies on the effectiveness of services to support carers in employment in England. There are studies showing that access to services by working carers is low and that employed carers would like more service support (Milne *et al.*, 2013; Yeandle *et al.*, 2007; Phillips *et al.*, 2002), but this is not in itself evidence that the provision of such support would be effective in supporting carers' employment. There are also small-sample qualitative studies, providing examples of paid services that enable carers to work (Vickerstaff *et al.*, 2009; Arksey and Glendinning, 2008; Seddon *et al.*, 2004), but there have been no previous studies of the effectiveness of services in supporting working carers using large-scale survey data.

There is therefore a gap in the evidence relating to the effectiveness of paid services as a means of supporting working carers in England. The aim of the present paper is to contribute towards filling this gap by utilising large-scale survey data to examine how far paid care services for the cared-for person are effective in supporting carers' employment in England, and, if so, which services are most effective. The paper also aims to explore the implications of the results for the current policy emphasis in England on 'replacement care' for working carers.

Data and methods

In order to examine the effectiveness of paid services in supporting working carers, the analysis examines the association between the use of paid social care services by the cared-for person and the employment rates of unpaid carers,

controlling for covariates. An association between use of services by the cared-for person and carers' employment may not in itself indicate a causal connection. However, a positive association between paid services for the cared-for person and carers' employment rates can be regarded as a *necessary* condition if services for the cared-for person are effective in supporting carers' employment. If the analysis finds no association between use of services by the cared-for person and carers' employment, it is unlikely that services would be effective in supporting carers' employment.

The analysis uses the 2009/10 *Personal Social Services Survey of Adult Carers in England* (PSS SACE) (Health and Social Care Information Centre (HSCIC), 2010a). The survey includes questions on both the employment of the carer and the services received by the cared-for person (described more fully below). Moreover, the survey has a very large sample size, comprising approximately 35,000 carers. Excluding the ten-yearly census for England and Wales, the 2009/10 PSS SACE was, at the time it was collected, the largest survey of carers ever carried out in England.

The 2009/10 PSS SACE was administered through local authorities (Councils with Adult Social Services Responsibilities (CASSRs)) and was designed for adult carers in contact, either directly or via the person they cared for, with social services (HSCIC, 2010a). The 2009/10 PSS SACE was the first national survey of carers in contact with councils. From 2012, the PSS SACE is being conducted biennially and is compulsory for CASSRs but, in 2009/10, participation in the survey was voluntary and 90 out of 152 CASSRs participated. Although not all councils participated, the Health and Social Care Information Centre regards the survey as representative of CASSRs in England (HSCIC, 2010b: 8).

In the survey, carers are defined as people who 'look after a family member, partner or friend in need of support or services because of their age, physical or learning disability or illness, including mental illness' (HSCIC, 2010a: 92). Questions about unpaid care provision relate to the *main* cared-for person.¹ The eligible population in the PSS SACE is defined as carers aged eighteen and over, caring for an adult aged eighteen and over, where the carer has been assessed or reviewed by social services during the previous year and, in some CASSRs, carers identified from the records of service users (known as 'carers by association'). An eligible population of 175,600 carers was identified and 87,800 were randomly selected and sent a postal questionnaire. A total of 35,165 carers then responded, giving a response rate of approximately 40 per cent (HSCIC, 2010a). Carers in the survey are more likely to care for longer hours than carers nationally (HSCIC, 2010b). However, as explained below, it is with carers who provide long hours of care that this paper is concerned.

As already indicated, the survey asks the carer about both the services received by the person they look after and their own employment (HSCIC, 2010a: 94, 108).

The question on service receipt asks whether the care-recipient has used a range of services in the last twelve months, including care home, personal assistant, home care/home help, day centre/day activities, lunch club and meals-on-wheels (HSCIC, 2010a: 94). The analysis of services in this paper combines day centre, day activities and lunch club into one service ('day care'). Home care/home help ('home care') refers primarily to help with personal care. The service described as 'care home' refers to either short-term breaks or permanent residence in a care home, but, for reasons explained later, it seems likely that care home use in the survey primarily refers to short-term breaks. 'Personal assistants' are people employed by individuals with care needs, who are often in receipt of personal budgets. 'Meals-on-wheels' are meals delivered to individuals at home. Services are classified according to whether they are used on their own or in combination with other services (described more fully later). The employment variable utilised here measures the labour force participation rate, that is, whether or not the respondent is employed, including self-employed. Although the distinction between full-time and part-time employment is also important, the focus of much of the international literature on caring and employment is on labour force participation *per se*, and this is clearly of importance in its own right (Lilly *et al.*, 2007).

The analysis focuses on 'working age' carers aged between eighteen and state pension age, which, at the time the data were collected, was sixty for women and sixty-five for men. Because relationships around unpaid care and employment vary greatly by gender, it is customary to examine men and women separately wherever possible (cf. Evandrou and Glaser, 2002), and this practice is observed here. The analysis focuses on 'intense' carers, providing unpaid care for ten or more hours a week, because previous research suggests that it is at this threshold that unpaid care has a negative effect on employment in England and carers' employment is 'at risk' (King and Pickard, 2013).

The analysis begins by describing the characteristics of unpaid carers and the receipt of paid services by the people cared for in the PSS SACE. The analysis then looks at bivariate associations, in order to identify patterns that appear to be occurring in the data, before adjustment for relevant covariates. The bivariate analysis initially compares the employment rates of carers where the care-recipient does and does not use paid services. The bivariate analysis then looks at the employment rates of women and men carers by a range of variables that may affect provision of unpaid care and employment (described in detail later). Multivariate logistic regression analysis is then undertaken, with the dependent variables being whether or not the carer is in employment (described fully later). In all the analyses presented here, a level of 0.05 is used as the criterion to determine significance. All analyses are performed using the Stata 12.1 software package (StataCorp, 2011).

Characteristics of unpaid carers and service receipt by cared-for people in *PSS SACE*

Of the approximately 35,000 carers in the 2009/10 *PSS SACE*, approximately 10,500 are of 'working age' providing intense care for ten or more hours a week (Table 1). Not all were asked questions on service receipt and/or employment, because councils could choose whether to include these (and some other) questions. The sample size of intense carers under state pension age, answering questions on both services and employment, is 6,304 respondents (4,106 women and 2,198 men). The characteristics of these intense 'working age' carers are similar to the characteristics of all intense 'working age' carers in the sample and, for both, the overall employment rates are between 46 and 47 per cent for women and 38 per cent for men (Table 1). The higher employment rate for women carers in the sample probably reflects the higher percentage of women carers who work part-time, since part-time work is more compatible than full-time work with unpaid care provision (Evandrou, 1995).

Table 2 shows the distribution of unpaid carers in the survey according to the use of services by the person they care for. In the table, carers who look after someone who receives at least one paid service are distinguished from those who look after someone who receives no services. The types of services received are further disaggregated into a number of mutually exclusive categories: use of one service only, use of combinations of two services only and use of combinations of three services only. The most frequently occurring combinations of services are included,² with the remaining combinations categorised as 'other combinations of paid services'. Services are categorised in this way in order to examine the independent effects of each individual service, as well as the main combinations of services.

Table 2 shows that, although the *PSS SACE* is a survey of carers in contact with local authorities, not everyone looked after by carers receives paid services. Of the 4,106 women carers in the sample, 29 per cent (1,183) are looking after someone who does not receive any services, while this is true of 675 (31 per cent) of the 2,198 men. Among carers looking after someone who receives a paid service, the majority look after someone receiving only one service, the most frequently received being either home care or day care, with fewer people receiving help from a personal assistant, care home or meals-on-wheels. Of those caring for someone who receives more than one service, most receive two services. Some services are more likely to be received in combination with another service than on their own. In particular, care home and meals-on-wheels are both more likely to be received in combination with home care than on their own. Use of a care home is particularly likely to be combined with other services, including day care as well as home care, and this suggests that the service users are not permanently resident in care homes, where all these services would be provided. Therefore use of a care home in the survey is likely to refer primarily to short-term breaks.

TABLE 1. Characteristics of sample of unpaid carers in *Personal Social Services Survey of Adult Carers in England, 2009/10*

	All carers in sample	Carers under SPA	Carers under SPA and caring for ten or more hours a week	Carers under SPA, caring for ten or more hours a week and answering questions on both services and employment
Women				
N	23,097	8,907	6,940	4,106
Mean age in years (standard deviation)	62.5 (13.1)	49.8 (8.0)	49.8 (8.0)	50.1 (7.7)
Ethnicity, % from BME backgrounds	9.3%	14.5%	15.0%	14.1%
In employment (%)	26.0%	49.6%	46.4%	46.5%
Men				
N	11,680	4,692	3,644	2,198
Mean age in years (standard deviation)	67.4 (14.1)	53.6 (8.9)	53.7 (8.9)	53.7 (8.6)
Ethnicity, % from BME backgrounds	7.4%	10.8%	11.0%	10.6%
In employment (%)	20.4%	41.7%	38.1%	38.3%

Notes: SPA = state pension age (sixty for women and sixty-five for men, at time of survey); BME = black and minority ethnic. The final column excludes respondents with incomplete data on services and employment.

Source: Authors' calculations using *Personal Social Services Survey of Adult Carers in England, 2009/10*.

TABLE 2. Unpaid carers under state pension age, providing care for ten or more hours a week, by gender and use of paid services by the person cared for, England, 2009/10

Type of paid service used by cared-for person	Carers			
	Women		Men	
	Sample base (N)	% of carers who look after someone using each type of service	Sample base (N)	% of carers who look after someone using each type of service
One type of paid service only				
Home care	589	20.2	479	31.5
Day care	618	21.1	208	13.7
Personal assistant	250	8.6	118	7.8
Care home	152	5.2	80	5.3
Meals-on-wheels	[29]	[1.0]	[14]	[0.9]
Two types of paid services only				
Home care and day care	274	9.4	128	8.4
Home care and care home	156	5.3	106	7.0
Home care and personal assistant	100	3.4	87	5.7
Day care and care home	135	4.6	43	2.8
Day care and personal assistant	109	3.7	39	2.6
Meals-on-wheels and home care	85	2.9	38	2.5
Three types of paid services only				
Home care, day care and care home	114	3.9	44	2.9
Home care, day care and personal assistant	62	2.1	30	2.0
Other combinations of paid services	250	8.6	109	7.2
Using at least one paid service	2,923	100	1,523	100
Not using paid services	1,183		675	
Total	4,106		2,198	

Notes: 'Day care' includes day centre, day activities and/or lunch club. Use of at least one service includes any one of: home care, day care, care home, personal assistant or meals-on-wheels. Square parentheses indicate sample base lower than 30. For further notes on combinations of services, see note 2 at end of text.

Source: Authors' calculations using *Personal Social Services Survey of Adult Carers in England, 2009/10*.

Employment rates of unpaid carers by cared-for people's use of paid services

The analysis now explores whether the employment rates of unpaid carers vary according to the receipt of paid services by the cared-for person. Table 3 shows the employment rates of carers (according to gender) who provide unpaid care

TABLE 3. Employment rates of carers under state pension age providing unpaid care for ten or more hours a week, by gender and use of paid services by the person cared for, England, 2009/10

Type of paid service used by cared-for person	Carers			
	Women		Men	
	Employment rate (%)	Sample base (N)	Employment rate (%)	Sample base (N)
One type of paid service only				
Home care	53.0	589	44.7	479
Day care	42.1	618	31.7	208
Personal assistant	48.0	250	43.2	118
Care home	42.8	152	33.8	80
Meals-on-wheels	[65.5]	[29]	[35.7]	[14]
Two types of paid service only				
Home care and day care	54.0	274	44.5	128
Home care and care home	50.6	156	47.2	106
Home care and personal assistant	42.0	100	40.2	87
Day care and care home	43.7	135	37.2	43
Day care and personal assistant	49.5	109	33.3	39
Meals-on-wheels and home care	64.7	85	65.8	38
Three types of paid service only				
Home care, day care and care home	58.8	114	43.2	44
Home care, day care and personal assistant	54.8	62	40.0	30
Other combinations of paid services	62.0	250	51.4	109
Use of at least one paid service	50.3	2,923	42.4	1,523
Not using paid services	37.3	1,183	28.9	675
Total	46.5	4,106	38.3	2,198

Notes: See notes to Table 2. Chi-square difference between employment rates of carers where cared-for person uses and does not use at least one paid service is significant at 1% level, for both women and men.

Source: Authors' calculations using *Personal Social Services Survey of Adult Carers in England, 2009/10*.

for ten or more hours a week. Employment rates are shown both where the care-recipient receives paid services and where they do not. The table shows that, in initial bivariate analysis, women and men providing intense unpaid care seem more likely to be in employment if the care-recipient receives at least one paid service than if the care-recipient does not receive any services.³ The employment rate of women providing intense unpaid care for someone who does not receive a paid service is 37.3 per cent, but is 50.3 per cent where the cared-for person receives at least one service. The equivalent figures for men are 28.9 per cent and 42.4 per cent, respectively. Moreover, the employment rates of women and men caring for someone who receives any individual service or combination of services

are always higher than the employment rates of those whose care-recipient does not receive any services.

Employment rates of carers by characteristics of carers, cared-for people and caring

As already indicated, as well as the receipt of paid services by the cared-for person, the employment rates of unpaid carers may be associated with other variables. These include the carer's age, health, ethnicity and region of residence; the health of the care-recipient; whether or not he or she lives with the carer; and the hours of unpaid care provided by the carer. Previous British studies suggest that the employment rates of carers are likely to be higher among people aged in their thirties and forties (rather than those nearing retirement), who are in good health; who live in the South East or East of England; who care for someone with relatively low disability or who does not co-reside with them; or who provide fewer hours of care (Carmichael *et al.*, 2010; Buckner *et al.*, 2009; Heitmueller, 2007; Henz, 2004). Ethnicity is also important as there is variation in the extent to which people from different ethnic backgrounds provide intense care (Young *et al.*, 2005). In the analysis presented here, the age variable distinguishes those aged eighteen to thirty-four, thirty-five to forty-nine and fifty to state pension age. Carer health is measured in terms of presence or absence of illness or disability. The ethnicity variable distinguishes those with and without a black and minority ethnic background. Region of residence distinguishes nine English regions. The indicator for health of the care recipients distinguishes those with and without a condition that affects them mentally (dementia, mental health problem, learning disability/difficulty), given evidence that caring for someone who is affected mentally is more demanding for carers (Parker, 1993b). The 'locus of care' variable distinguishes cared-for people who do and do not live with the carer. The 'intensity of care' variable distinguishes care provided for ten to nineteen, twenty to thirty-four, thirty-five to forty-nine, fifty to ninety-nine and a hundred or more hours per week.

Table 4 shows the employment status of women and men of working age who provide unpaid care for ten or more hours a week, in the 2009/10 PSS SACE, by a range of characteristics. Most of the results are as expected from the literature. Employment rates of carers appear to be higher if they are in their thirties and forties rather than if they are nearing retirement, although women carers in the younger age-groups (eighteen to thirty-four years) also have comparatively low employment rates. Employment rates of carers also seem higher where carers do not have an illness or disability, where the care-recipient is not co-resident with the carer and where fewer hours of unpaid care are provided. The employment rates of women carers vary significantly by region, with the South East appearing to have the highest rates, although employment rates of men providing care are

TABLE 4. Employment rates of carers under state pension age providing care for ten or more hours a week, by characteristics of carers, cared-for people and caring, by gender, England, 2009/10

		Women		Men	
		Employment rate (%)	Sample base (N)	Employment rate (%)	Sample base (N)
<i>Characteristics of carer</i>					
Age	18–34 years	38.7	194	45.6	79
	35–49 years	50.0	1,361	46.1	503
	50 years – state pension age	45.3**	2,551	35.5**	1,616
Health	No illness/disability	55.6	2,319	48.8	1,118
	Has illness/disability	33.8**	1,680	26.8**	1,034
Ethnicity	Not BME	47.1	3,245	37.2	1,794
	BME	40.1**	534	44.8*	212
Region	North East	49.1	269	36.7	180
	North West	42.4	321	32.0	181
	Yorkshire/Humberside	48.1	430	37.9	235
	East Midlands	48.0	294	34.7	144
	West Midlands	41.7	398	36.8	209
	South West	46.2	578	36.9	333
	Eastern	47.3	338	46.6	174
	London	41.6	907	38.7	408
	South East	56.7**	571	41.6 <i>ns</i>	334
<i>Characteristics of cared-for person</i>					
Health of cared-for person	No mental health problem	46.7	2,888	38.9	1,583
	Has mental health problem	46.1 <i>ns</i>	1,214	36.8 <i>ns</i>	615
Locus of cared-for person	Not co-resident	59.1	1,419	53.8	485
	Co-resident	39.6**	2,649	33.8**	1,697
<i>Type of care provided</i>					
Hours of care provided	10–19 hours a week	77.4	607	70.0	307
	20–34 hours a week	62.2	516	56.0	207
	35–49 hours a week	39.5	550	36.7	275
	50–99 hours a week	40.9	631	33.5	418
	100 or more hours a week	32.2**	1,467	21.6**	796

Notes: BME = black and minority ethnic; mental health problem includes dementia, learning disability/difficulty or other mental health problem; * $p < 5\%$; ** $p < 1\%$; *ns* = not significant. Source: Authors' calculations using *Personal Social Services Survey of Adult Carers in England, 2009/10*.

not significantly different by region. In addition, the survey suggests that women carers from black and minority ethnic (BME) backgrounds seem less likely to be in employment than those who are not from BME backgrounds, although the reverse seems true for men. In the bivariate analysis shown in Table 4, there

is one relationship that seems unexpected from the literature. The employment rates of carers do not seem to vary significantly according to the health of the care-recipient, measured here by whether the person cared for has a mental health problem.

Relationship between employment rates of unpaid carers and care-recipients' use of paid services, controlling for covariates

The associations between the employment rates of unpaid carers and care-recipients' use of services are tested further using multivariate analysis, controlling for a range of covariates. The dependent variable is the employment status of women or men providing unpaid care for ten or more hours a week. Four models are reported, two each for women and men carers. The first two models include receipt of at least one service, while the second two models include receipt of individually identified services and combinations of services. Each model initially includes carer age, health, ethnicity and region of residence, whether or not the carer lives with the care-recipient, whether or not the care-recipient has a mental health problem and the intensity of caring. All of these latter variables are initially included, irrespective of whether they are significant in bivariate analysis, since their associations with employment status may vary when other factors are taken into account. The odds ratio for each variable is estimated, along with the significance level and 95 per cent confidence intervals (CIs). For each model, we compared the fit (based on likelihood ratio chi-squared statistics) of the full model, with all covariates included, and the final model, including only significant covariates. In each case, the final model has a better fit than the full model, and is reported here.

Table 5 shows the results of the logistic regression analysis to determine the factors associated with the employment status of *women* providing intense unpaid care, including the use of *at least one paid service* by the cared-for person in the model, controlling for covariates. There is a significant association between the employment rate of women carers and the use of at least one paid service by the cared-for person. Women who provide unpaid care for ten or more hours a week have significantly higher odds (1.57, CI 1.34–1.85) of being in employment if the person they care for receives at least one paid service compared with if they receive no services, controlling for covariates.⁴ Other factors significantly associated with being in employment for women carers are their age, health, region of residence, hours of care provided and co-residence with the care-recipient. Mid-life women and those in their fifties are more likely to be in employment than younger women, although this effect tends to be less marked for women nearing retirement. Women are also significantly more likely to be in employment if they do not themselves have an illness/disability, if they live in the South East of England and if they care for relatively few hours a week. In addition, a somewhat surprising

TABLE 5. Regression results for factors associated with employment status of *women* under state pension age providing unpaid care for ten or more hours a week, including use of at least one service by the cared-for person and other key variables, England, 2009/10

	Odds ratio	95% confidence interval
Use of at least one service . . .	1.57**	1.34, 1.85
. . . relative to not using services		
Age of carer 35 to 49 . . .	2.11**	1.46, 3.04
Age of carer 50 to 64 . . .	1.69**	1.18, 2.42
. . . relative to age of carer 18 to 34		
Health of carer: does not have illness/disability . . .	2.36**	2.04, 2.74
. . . relative to having illness/disability		
Carer lives with cared-for person . . .	1.29*	1.05, 1.58
. . . relative to carer does not live with cared-for person		
Region of residence of carer		
North East . . .	0.73 <i>ns</i>	0.52, 1.02
North West . . .	0.48**	0.35, 0.66
Yorkshire & the Humber . . .	0.61**	0.46, 0.82
East Midlands . . .	0.71*	0.51, 0.98
West Midlands . . .	0.55**	0.41, 0.74
South West . . .	0.75*	0.58, 0.97
Eastern . . .	0.63**	0.47, 0.86
London . . .	0.58**	0.45, 0.75
. . . relative to South East		
Caring for 10 to 19 hours a week . . .	8.74**	6.59, 11.60
Caring for 20 to 34 hours a week . . .	4.22**	3.27, 5.45
Caring for 35 to 49 hours a week . . .	1.55**	1.22, 1.95
Caring for 50 to 99 hours a week . . .	1.55**	1.27, 1.91
. . . relative to caring for 100+ hours a week		
Constant	0.13**	0.08, 0.22
N	3,642	

Notes: Dependent variable is employment status of carer. Table shows odds ratios and level of significance: * $p < 5\%$; ** $p < 1\%$; *ns* = not significant. Use of at least one service includes any one of: home care, day care, care home, personal assistant or meals-on-wheels.

Source: Authors' calculations using Personal Social Services Survey of Adult Carers in England, 2009/10.

result is that co-resident carers are *more* likely to be in employment than extra-resident carers. Factors that are not associated with women carers' employment status are the ethnicity of the carer and whether the cared-for person has a mental health problem. (These results are discussed in more detail below.)

Table 6 shows the results of the multivariate analysis to determine the factors associated with the employment status of *men* providing intense unpaid care, including the use of *at least one paid service* by the cared-for person. There is a significant association between the employment rate of men providing care and the use by the cared-for person of at least one service. Men who provide unpaid

TABLE 6. Regression results for factors associated with employment status of *men* under state pension age providing unpaid care for ten or more hours a week, including use of at least one service by the cared-for person and other key variables, England, 2009/10

	Odds ratio	95% confidence interval
Use of at least one service . . .	1.69**	1.34, 2.12
. . . relative to not using services		
Health of carer: does not have illness/disability . . .	2.41**	1.97, 2.96
. . . relative to having illness/disability		
Caring for 10 to 19 hours a week . . .	7.21**	5.30, 9.79
Caring for 20 to 34 hours a week . . .	4.42**	3.17, 6.18
Caring for 35 to 49 hours a week . . .	2.00**	1.47, 2.72
Caring for 50 to 99 hours a week . . .	1.84**	1.40, 2.42
. . . relative to caring for 100+ hours a week		
Constant	0.12**	0.09, 0.16
N	1,962	

Notes: See notes to Table 5.

Source: Authors' calculations using *Personal Social Services Survey of Adult Carers in England, 2009/10*.

care for ten or more hours a week have significantly higher odds (1.69, CI 1.34–2.12) of being in employment if the person they care for receives at least one paid service compared with if they receive no services, controlling for covariates. Other factors significantly associated with being in employment for men who provide unpaid care are their health and hours of care provided. Men who do not have an illness/disability and who care for relatively few hours are significantly more likely to be in employment. Factors that are not associated with the employment status of men providing care are their age and ethnicity, the region of residence of the carer, whether the cared-for person has a mental health problem and whether the care-recipient is co-resident with the carer. (Again these results are discussed in more detail below.)

Relationship between employment rates of unpaid carers and care-recipients' use of individual services and combinations of services, controlling for covariates

Multivariate analysis is used to look at the associations between the employment rates of unpaid carers and the care-recipients' use of *individual services and combinations of services*. As before, the dependent variable is the employment rate of women or men providing unpaid care for ten or more hours a week. Tables 7 and 8 show, respectively, the results for women and men carers. The models control for other factors, including the characteristics of the carer, the cared-for

TABLE 7. Regression results for factors associated with employment status of *women* under state pension age providing unpaid care for ten or more hours a week, including use of individual services by the cared-for person and other key variables, England, 2009/10

	Odds ratio	95% confidence interval
Use of home care only	1.64**	1.29, 2.07
Use of day care only	1.26*	1.00, 1.59
Use of personal assistant only	1.74**	1.27, 2.37
Use of care home only	1.10 <i>ns</i>	0.74, 1.65
Use of meals-on-wheels only	2.85*	1.13, 7.21
Use of home care and day care	1.65*	1.10, 2.48
Use of home care and care home	1.16 <i>ns</i>	0.78, 1.74
Use of home care and personal assistant	1.26 <i>ns</i>	0.78, 2.03
Use of day care and care home	1.65*	1.21, 2.25
Use of day care and personal assistant	2.13**	1.38, 3.31
Use of meals-on-wheels and homecare	1.87*	1.05, 3.30
Use of home care, day care and care home	2.24**	1.25, 4.02
Use of home care, day care and personal assistant	2.26**	1.44, 3.57
Use of other combinations of services . . .	2.10**	1.51, 2.93
. . . relative to not using services		
Age of carer 35 to 49 . . .	2.15**	1.49, 3.11
Age of carer 50 to 64 . . .	1.75**	1.22, 2.51
. . . relative to age of carer 18 to 34		
Health of carer: does not have illness/disability . . .	2.40**	2.07, 2.78
. . . relative to having illness/disability		
Carer lives with cared-for person . . .	1.33**	1.09, 1.64
. . . relative to carer does not live with cared-for person		
Region of residence of carer		
North East . . .	0.72 <i>ns</i>	0.51, 1.01
North West . . .	0.47**	0.34, 0.65
Yorkshire & the Humber . . .	0.61**	0.45, 0.81
East Midlands . . .	0.72*	0.52, 0.99
West Midlands . . .	0.55**	0.41, 0.75
South West . . .	0.75*	0.57, 0.97
Eastern . . .	0.65**	0.47, 0.88
London . . .	0.59**	0.46, 0.76
. . . relative to South East		
Caring for 10 to 19 hours a week	8.70**	6.54, 11.57
Caring for 20 to 34 hours a week . . .	4.21**	3.25, 5.44
Caring for 35 to 49 hours a week . . .	1.57**	1.24, 1.99
Caring for 50 to 99 hours a week . . .	1.55**	1.26, 1.90
. . . relative to caring for 100+ hours a week		
Constant	0.13**	0.08, 0.20
N	3,642	

Notes: Dependent variable is employment status of carer. Table shows odds ratios and level of significance: * $p < 5\%$; ** $p < 1\%$; *ns* = not significant.

Source: Authors' calculations using *Personal Social Services Survey of Adult Carers in England, 2009/10*.

TABLE 8. Regression results for factors associated with employment status of *men* under state pension age providing unpaid care for ten or more hours a week, including use of individual services by the cared-for person and other key variables, England, 2009/10

	Odds ratio	95% confidence interval
Use of home care only	1.69**	1.27, 2.25
Use of day care only	1.29 <i>ns</i>	0.87, 1.91
Use of personal assistant only	2.45**	1.55, 3.89
Use of care home only	0.98 <i>ns</i>	0.56, 1.72
Use of meals-on-wheels only	1.98 <i>ns</i>	0.59, 6.65
Use of home care and day care	1.96**	1.25, 3.06
Use of home care and care home	1.96**	1.22, 3.16
Use of home care and personal assistant	1.68 <i>ns</i>	0.98, 2.86
Use of day care and care home	1.67 <i>ns</i>	0.77, 3.62
Use of day care and personal assistant	1.88 <i>ns</i>	0.87, 4.07
Use of meals-on-wheels and homecare	2.74*	1.27, 5.91
Use of home care, day care and care home	1.30 <i>ns</i>	0.55, 3.09
Use of home care, day care and personal assistant	1.52 <i>ns</i>	0.73, 3.18
Use of other combinations of services relative to not using services	1.68*	1.04, 2.71
Health of carer: does not have illness/disability relative to having illness/disability	2.45**	1.99, 3.01
Caring for 10 to 19 hours a week . . .	7.17**	5.22, 9.84
Caring for 20 to 34 hours a week . . .	4.40**	3.14, 6.17
Caring for 35 to 49 hours a week . . .	2.02**	1.48, 2.76
Caring for 50 to 99 hours a week relative to caring for 100+ hours a week	1.82**	1.38, 2.40
Constant	0.12**	0.09, 15.8
N	1,962	

Notes: See notes to Table 7.

Source: Authors' calculations using *Personal Social Services Survey of Adult Carers in England, 2009/10*.

person and the nature of the care provided, with the patterns of significance of these other factors being similar to those in the previous models.

Tables 7 and 8 show that care-recipients' use of home care only and use of a personal assistant only are significantly associated with the employment rates of both women and men carers. Women and men who are providing unpaid care for ten or more hours a week have significantly higher odds (1.64 and 1.69 respectively) of being in employment if the person they care for receives home care compared with if they receive no services. Similarly, women and men who are providing intense unpaid care have significantly higher odds (1.74 and 2.45 respectively) of being in employment if the person they care for receives help from a personal assistant compared with if they receive no services. Care-recipients'

use of day care only and meals-on-wheels only are also significantly associated with women carers' employment.

Care-recipients' use of a care home only is not significantly associated with the employment rates of either women or men carers, but use of this service is significantly associated with carers' employment when combined with other services (Tables 7 and 8). Care-recipients' use of a care home, when combined with home care, is significantly associated with the employment of men carers, while care-recipients' use of a care home is significantly associated with women carers' employment when combined with day care or both home care and day care. In addition, although care-recipients' use of neither day care nor meals-on-wheels on their own are significantly associated with the employment rates of men carers, each service is significantly associated with the employment of men providing care when combined with home care.

Discussion and conclusions

This study suggests that there is a positive association between the employment rates of unpaid carers in England and receipt of paid services by the person they care for. The analysis has focused on carers whose employment is 'at risk' which, consistent with previous research (King and Pickard, 2013), is defined here as those providing care for ten or more hours a week. Using large-scale survey data, the 2009/10 PSS SACE, the study finds that, where the cared-for person receives at least one paid service, women and men providing unpaid care for ten or more hours a week are more likely to be in employment than if the cared-for person does not receive any services. A positive association between carers' employment and receipt of paid services is a necessary condition if services for the cared-for person are effective in supporting carers' employment. Therefore, our results give some support to the hypothesis that services for the cared-for person are effective in supporting carers' employment.

Carers' employment in England is associated with receipt by the cared-for person of some services more than others. The study finds that use by the care-recipient of home care only, or help from a personal assistant only, are both positively associated with the employment rates of women and men carers, while care-recipients' use of day care and meals-on-wheels are associated with women carers' employment. Gender differences in the association between paid services and carers' employment may be associated with the greater likelihood of women carers working part-time (Evandrou, 1995) since a service like day care, which tends not to be utilised by the care-recipient every day, may be more helpful to part-time than full-time workers. In addition, the study finds that use by the care-recipient of a care home only is not significantly associated with the employment rates of carers, although this service is associated with carers' employment when combined with other services. One reason for the difference in the association

between carers' employment and care-recipients' use of this particular service may again be the frequency with which the service is provided. The study has suggested that use of a care home is likely to refer primarily to short-term breaks, a service that tends to be provided for a limited number of weeks a year, whereas, to facilitate employment, services that are provided regularly during the working week are likely to be needed.

The results show that a number of factors, in addition to the cared-for person's receipt of paid services, are positively associated with carers' employment, including good health on the part of carers and providing fewer hours of care, as well as, for women carers, being in mid-life or older (compared to younger carers) and living in the South East. These results are broadly consistent with other studies in Britain (Carmichael *et al.*, 2010; Buckner *et al.*, 2009; Heitmueller, 2007; Henz, 2004). One result that is somewhat surprising is the finding that, controlling for other variables, women providing co-resident care are more likely to be in employment than those providing care to someone in another household, whereas the existing literature suggests that the employment rates of carers are higher when care is provided to someone who does not co-reside with them (Heitmueller, 2007). Closer examination of our results shows that co-resident women carers are more likely to be in employment than those providing extra-resident care when they care for thirty-five to forty-nine hours a week. This finding may be associated with the effect of the receipt of carer's allowance, since this benefit is only paid to carers providing care for at least thirty-five hours a week and receipt of carer's allowance can limit carers' employment opportunities, while interactions with other benefits could mean this differentially affects extra-resident carers (Fry *et al.*, 2011). This could not, however, be explored further because information on carer's allowance was not included in the dataset used here. Other factors, such as the health of the care-recipient have also been shown elsewhere to affect carers' employment (Heitmueller, 2007), but were not significant in the multivariate analysis reported here. This may be because the variable used here to indicate the care-recipient's health did not sufficiently distinguish between those with severe and relatively minor problems, and this represents a limitation of the analysis (discussed in more detail below). However, the key implication of our multivariate analysis is that the employment status of women and men providing long hours of unpaid care is likely to be associated, not just with factors like their health and hours of care provision, but also with the use of paid services by the person they care for.

The results presented here have important implications for social policy. The findings support the policies of recent governments in England of emphasising 'replacement care' as a means of supporting unpaid carers' employment (HMG, 2008, 2010). This is because the results show that paid services for the cared-for person are associated with higher employment rates among unpaid carers. A key

policy implication is therefore that, if a policy objective is to support people to combine unpaid care and employment, then there needs to be greater access to paid services for disabled and older people who are looked after by unpaid carers. More widely, our findings support disability rights and feminist approaches to policy, which have argued for better services for disabled and older people, as a means of supporting carers and of bringing together the interests of both carers and the people they care for (Arksey and Glendinning, 2007; McLaughlin and Glendinning, 1994; Parker, 1993a).

However, our results also raise two important issues around recent government policies emphasising 'replacement care' in England. First, the evidence raises questions about the use of the term 'replacement care'. There is no evidence from this study that unpaid carers are *replaced* by paid services for the person they care for. The unpaid carer is still providing care, even when paid services are provided to the person they look after. This suggests that paid services for the care-recipients are better described as complementing or supplementing the care provided by unpaid carers. Use of this latter terminology would be more consistent with the international literature on substitution between formal and informal care, which suggests that paid domiciliary services, provided to disabled and older people living in their own homes, do not tend to replace the care provided by unpaid carers (Motel-Klingebiel *et al.*, 2005).⁵ What this suggests is that a new term is needed for 'replacement care'. In the meantime, it is advisable to use the term in inverted commas, as in this paper.

The second issue around a policy of 'replacement care', as currently described in English government policy documents, relates to the emphasis on 'the market' to meet the needs of unpaid carers and the people they look after. The evidence from this study relates to unpaid care for adults, for whom most unpaid care in England is provided (HSCIC, 2010c). With regard to care for adults, the costs of 'replacement care' are likely to fall to the care-recipient, typically a disabled or older person, who may lack the resources to purchase care on 'the market' (Lewis and West, 2014). It is therefore likely that more *publicly funded* 'replacement care' is also needed. It is not clear that government policy would be so keen to advocate 'replacement care' if this was publicly funded. As the feminist literature on unpaid care policy has long recognised, the major disadvantage of increasing publicly funded services to disabled and older people with carers is the cost (McLaughlin and Glendinning, 1994). Yet public investment in services could lead to savings in public expenditure. It has been estimated that the public expenditure costs of carers leaving employment in England are more than a billion pounds a year, based on the costs of carer's allowance and lost tax revenues on forgone incomes (Pickard *et al.*, 2012). Therefore, greater public investment in 'replacement care' to support carers in employment could represent good value for money.

Further research examining the policy of 'replacement care' is now needed. First, there is a need for evidence around the costs of providing publicly funded

‘replacement care’ and whether these would be offset by public expenditure savings. In other words, there is a need for evidence not just about the effectiveness of ‘replacement care’ as a means of supporting working carers, but about its cost-effectiveness. Second, this paper has used cross-sectional data, the 2009/10 PSS SACE, to examine the association between paid services for the care-recipient and carers’ employment, but, in order to examine causation, longitudinal analysis would be preferable. In particular, it has not been possible to show conclusively here whether it is services for the cared-for person that enable carers to remain in employment, or whether employed carers are better able to purchase services for the care-recipient. The international evidence suggests that it is more often the care-recipient, rather than the carer, who makes payments for formal care (Doty *et al.*, 1998), suggesting that it is services that enable carers to work, but longitudinal data would help to establish the direction of causal influence in England. Third, there is a need for more informative data on the health of the care-recipient. The dataset used here did not contain detailed information on the health of the care-recipient and, specifically, did not allow for those with severe problems to be distinguished from those with relatively minor problems. In addition, the data used here did not allow for an examination of the potential impact of new technology on carers’ employment. Many of these issues are now being pursued by the authors in further research on ‘replacement care’ as a means of supporting working carers (Pickard *et al.*, 2013). Nevertheless, what this study has shown is that there is already some evidence to support a policy of ‘replacement care’ and that this type of policy may be central to resolving the current impasse around unpaid care and employment.

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Notes

- 1 The *main* cared-for person is the person that the carer spends most time helping. If carers spend an equal time caring for two or more people, they are asked to answer in relation to the person who lives with them. If carers live with two or more people that they spend an equal amount of time caring for, they are asked to choose one person as the main person they care for.
- 2 Combinations of two paid services are included if the underlying sample size of carers is at least thirty. The two most frequently used combinations of three paid services are included. The analysis includes each service used on its own, but where sample numbers are small, as in the case of meals-on-wheels, figures in tables are shown in square parentheses.

- 3 Bivariate tabulations do not constitute a platform for identifying associations; results adjusted for covariates are reported later in the paper.
- 4 This can be approximately interpreted to mean that, controlling for other factors, women carers have 57 per cent higher odds of being in employment if the person they care for receives at least one paid service compared with if they receive no services.
- 5 Where substitution between formal and informal care does take place, the evidence suggests that it occurs when the disabled or older person is in permanent residential care, rather than in their own home (Pickard, 2012).

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