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Abstract

Solutions to support older people to live independently and reduce the cost of an ageing population are high on the political agenda of most developed countries. Help-at-home schemes offer a mix of community support with the aim to address a range of wellbeing needs. However, not much is currently known about the costs, outcomes and economic consequences of such schemes. Understanding their impact on individuals' wellbeing and the economic consequences for local and central government can contribute to decisions about sustainable long-term care financing. This article presents results from a mixed-methods study of a voluntary sector-provided help-at-home scheme in England for people of 55 years and older. The study followed a participatory approach, which involved staff and volunteers. Data were collected during 2012 and 2013. Social care-related quality of life was measured with the Adult Social Care Outcomes Toolkit (ASCOT) for 24 service users (59% response rate) when they started using the scheme and 4 to 6 months later. A customised questionnaire that captured resource use and wellbeing information was sent to 1,064 service users (63% response rate). The same tool was used in assessment with service users who started using the scheme between November 2012 and April 2013 (100% response rate). Costs of the scheme were established from local budget and activity data. The scheme was likely to achieve a mean net benefit of £1,568 per person from a local government and NHS perspective and £3,766 from the perspective of the individual. An expenditure of £2,851 per person accrued to central government for the additional redistribution of benefit payments to older people. This article highlights the potential contribution of voluntary sector-run help-at-home schemes to an affordable welfare system for ageing societies.

What is known about this topic:
- Help-at-home schemes might help older people achieve positive health and wellbeing benefits and potentially reduce costs.
- Such initiatives are often run by the voluntary sector and include a mix of emotional, practical and financial support.
- Older people value these types of support; they are at risk of substantial unmet needs and adverse impact without this support.

What this paper adds
- Help-at-home schemes are an example of mix funded, prevention oriented voluntary sector provision that can contribute to sustainable long-term care finance.

- They can achieve individual wellbeing as well as economic gains.
- Even with such support in place, some older people continue to have some unmet needs; research into this area needs to continue.

INTRODUCTION

Initiatives that help older people to live more independently in their own homes can promote positive health and wellbeing and possibly prevent or delay the need for more intensive or institutional care (Beswick *et al.* 2010, Hurstfield *et al.* 2007). An example of this kind of initiative is the *help-at-home scheme*, which provides person-centred emotional, practical and financial support. Such schemes are usually run by voluntary or community organisations and operate at the interface between the community and formal health and social care.

Whilst these types of complex social interventions have not been evaluated in terms of their costs and outcomes, different streams of evidence suggest that help-at-home schemes could be cost-effective. Befriending and similar types of volunteer-provided *emotional* support interventions for older people have been shown to reduce social isolation and achieve health and wellbeing benefits (MacIntyre *et al.* 1999, Rabiner *et al.* 2003, Mead *et al.* 2010). In simulation modelling, befriending has been linked to potential cost savings (Knapp *et al.* 2013). Although not often evaluated, older people show that they may value *practical* support as much as personal care (Clough *et al.* 2007). Similarly, whilst the costs and outcomes of *welfare benefits* advice are not known, the substantial adverse impact of poverty and material deprivation on older peoples' health and wellbeing is well established (Dominy & Kempson 2006). Furthermore, numerous issues have been raised regarding the redistribution of welfare payments to older people without additional advice and support: many are not aware of their entitlements, feel shame accepting the financial support or struggle with paper work (Wiggan & Talbot 2006). Evidence also shows that citizens who engage in formal *volunteering* and are members of voluntary sector organisations can experience positive outcomes such as increased psychological wellbeing and employability (Greenfield & Marks 2004, Low *et al.* 2007, Dolan *et al.* 2008, Spera *et al.* 2013).

Our research aimed to contribute further evidence in this area. We evaluated the costs and economic consequences of a help-at-home scheme based in Shropshire, England. We sought to examine the costs and outcomes from a societal perspective, which included the perspective of service users, carers, volunteers and government. This included translating outcomes into monetary terms and establishing potential cost savings, in particular to adult social care.

METHODS

Shropshire Age UK service

The help-at-home scheme we studied was targeted on older people aged 55 years and above living in their own homes. It comprised a volunteer-provided face-to-face and telephone befriending scheme; a practical home help service for gardening, shopping and cleaning; and welfare benefit advice service. The scheme was funded through the local authority and through charges to clients for using the practical home help service. Whilst personal care was not provided as part of the scheme, people were assessed for and referred elsewhere for this type of support. The scheme worked in close partnership with the local authority in order to ensure that people eligible for publicly funded care could access the services and support to which they were entitled and those who were not eligible could get the help from the scheme. Satisfaction surveys showed that service users felt very positive about the scheme. They valued the friendliness of the staff and volunteers. They reported that the scheme had a positive impact on their quality of life and some also felt that it helped them to remain living in their own home.

Participatory approach and research ethics

We employed a collaborative, iterative approach to gather as much information on costs and outcomes as possible from the scheme given its limited capacity to engage in data collection. Our aim was to examine costs and outcomes over the period of a year and determine potential cost savings from a societal perspective, which included costs and returns to central and local government and to individuals.

First, following initial discussions with the service manager we set up a workshop with staff and volunteers in early 2012. After an initial introduction into the method of economic evaluation, participants were asked to name and prioritise potentially quantifiable outputs and outcomes that they thought the scheme achieved. We also asked workshop participants to provide us with routinely collected data and insights from previous evaluations. We then assessed possible channels and capacities for new data collection with them. The final choice of outcomes measurement tools was later made in collaboration with the service manager and data administrator, who were also involved in the development of a new questionnaire, designed to capture wellbeing and resource information.

The research was part of a study on the economic consequences of community capacity building initiatives funded by the NIHR School for Social Care Research. It went through the required governance and ethics procedures, which included approval of the proposed approach and data collection tools by the Social Care Research Ethics Committee (REC reference number 11/IEC08/0037). Information sheets about the research and consent forms for signature were developed for staff and volunteers participating in the research. The return of self-completion questionnaires was taken to indicate informed consent by service users (who were contacted by the service not the researchers). Data were transferred to the research team in anonymised form.

Data collection tools

Adult Social Care Outcomes Tool

The scheme's outcomes and aims mapped well on to the dimensions of the widely used Adult Social Care Outcomes Tool (ASCOT; PSSRU 2007), which measures social care-related quality of life. Its domains include control over daily life, dignity and respect, nutrition, personal hygiene and home cleanliness, social participation and occupation. We used the ASCOT SCT4 version, which can be completed by users of social care provided in the community. The tool asks on a scale from 1 to 4 how far the person views their social care-related needs as met (1 refers to an optimal state and 4 to high needs). In line with the scoring instructions for ASCOT (Netten et al 2011), we calculated overarching social care-related quality of life scores that ranged from 0 to 1, with 0 reflecting the equivalent of being dead and 1 reflecting an ideal social care-related quality of life. Scores reflect the fact that outcomes in the various domains are not valued equally and that weights are applied. Between June and September 2012 all new service users who consented to participate in the research were asked to complete the questionnaire at assessment. A follow-up questionnaire was sent in January 2013 to those still in contact with the scheme.

Wellbeing and resource use questionnaire.

In addition to social care-related quality of life, workshop participants thought that the scheme increased physical and mental wellbeing, reduced social isolation, loneliness, financial worries and carer burden. Furthermore, they thought that the focus of the scheme on supporting independence led to reductions in hospital and care home admissions.

We developed a questionnaire that captured those aspects in a way that representatives of the scheme considered appropriate in terms of language and length. Questions were worded so that responses could be quantified and used for economic analysis; for example, questions were asked about number of social contacts per week instead of perceived loneliness.

We were not able to apply a 'before/after' design, because this would have required respondents to remember details of events and conditions *before* they entered the project, which, for some, was several years earlier. Instead, we used the scheme's annual survey to collect data from the 1,064 individuals who were registered with the scheme in 2012. An additional smaller survey was carried with service users who started the scheme between November 2012 and April 2013 using the same questionnaire. This was carried out as part of the assessment process so that all new service users during this time were interviewed. In both groups, we asked respondents about resource use and wellbeing experiences over the previous 6 months.

Costing the scheme

We derived cost estimates for the scheme from activity and budget data provided to us for the financial year 2010/11. This included budget data for different components of the scheme (befriending, practical home help and welfare benefits advice), with a distinction between finance provided by the authority and finance generated from service user charges (for the practical home help service). Activity data included hours provided by staff and number of people using the scheme. We costed volunteers' time based on activity data from 2010/11.

Statistical analysis

We calculated mean ASCOT scores for each domain when individuals started using the service and at follow-up. We carried out paired t-test analysis in Stata (StataCorp 2009) to test the statistical significance of any differences in those scores. We also analysed the proportions of people whose levels of needs increased, decreased or remained the same.

For data from the wellbeing and resource use questionnaire, we carried out comparative analysis between service users who responded to the annual survey and new service users who took part in the smaller survey. To ensure that the annual survey only captured people who had been using the service for some time, we excluded people using the scheme for less than a year. We carried out logistic regression analysis to adjust for differences in socio-demographic characteristics (age, gender and living status) between new service users and those who had been using the scheme for some time. We estimated the predicted probability that someone in each of the two groups would use a service, as well as adjusted mean changes in outcomes between the two groups in physical and mental health, service use, unpaid care, social contacts and financial worries.

Modelling

Through modelling we assigned monetary values to mean changes in outcomes (including service use). For some outcomes which could not be directly translated into monetary terms, this required additional steps in which data from the literature were utilised to establish economic consequences.

First, we combined the adjusted probability that an individual used a service with its mean frequency (i.e. number of visits or attendances), mean duration or length of stay, and unit costs for health and social care taken. Unit costs were taken from a national source (PSSRU 2013) and costs of befriending and practical support were taken from local data. Unit costs are presented in Table 1. The costs of domestic and gardening help for existing service users were not calculated as they were already captured in the cost of the scheme. Following a replacement cost approach we multiplied the mean change in hours of unpaid care by the unit cost of a home care worker.

Please insert table 1 here

Next, we estimated potential cost savings of prevented care home stays for the period that service users had stayed with the project and per average year. Some service users were carers for their spouse and so we also valued care home stays that had been potentially prevented for their spouses. A number of steps were required for these estimations. We used information from the wellbeing and resource questionnaire which asked individuals if they felt a care home admission had been prevented (for them or their spouse) because of the support provided by the help-at-home scheme. For individuals who reported that this was the case we calculated the mean time they had stayed with the scheme, and divided this by two, assuming that the event of prevented admission happened half way through the period (up to the time of the survey). For those time periods we applied unit costs of a care home stay. Based on data from the literature we assumed that 100% of individuals started off paying as self-funders but that 24% would run out of money after one year and become reliant on public funding (LGiU 2011, 2013). We then calculated the mean present value per participant by applying a discount rate of 3.5% and calculated an annual value (annuity).

We took mean changes in probabilities that individuals had been physically (mentally) well most of the time and multiplied by the difference in health utility between a well and unwell state. Health utilities are preference values that individuals attach to health states, estimated through surveys: we assigned a utility value of 0.73 for being physically or mentally 'well, most of the time' (based on Kind 1998); 0.47 for 'physically unwell, most of the time' (based on Glendinning *et al.* 2010 for older people with high reablement needs) and 0.61 for 'mentally unwell, most of the time' (based on Ara & Brazier 2011 for older people with anxiety or depression). To get an indicative value of change in wellbeing we applied a monetary value to utility scores based on the lower value of £20,000 of the range of thresholds recommended by NICE for one year in perfect health (NICE 2008).

We linked mean changes in number of social contacts with changes in risk of death due to social isolation and loneliness (based on Steptoe *et al.* 2013) and valued the loss in life for the current year. We assumed that individuals died half-way through the year and that their health utility before death was equivalent to 'physically unwell, most of the time'. Again, we valued one year in perfect health at £20,000.

Currently there is no willingness-to-pay threshold for social care-related quality-of-life so we did not assign a monetary value to the changes.

We examined the (limited) data available from the project about their volunteers, including the number who entered employment after involvement with the scheme (which we assumed was linked to improved confidence, skills and knowledge acquired during their involvement). We valued their employment by taking the national mean salary earned by people moving from Jobseeker's Allowance (JSA) into employment (Adams *et al.* 2013); JSA is an out-of-work benefit which can be claimed by people unemployed and seeking work, aged between 18 and State Pension Age. Mean JSA per claimant in England in February 2011 was £66 per week (calculated from DWP 2009/10; 11). We interpreted mean reduction in benefit claims per volunteer as potential gains to government (and potential losses to

individuals). We assumed that volunteers entered employment half-way through the year.

Sensitivity analysis

We assessed the impact of the following variations on findings: we removed outliers in the service use data; from the identified associations between involvement with the project and outcomes we removed effects that were not statistically significant; (where available) we took lower and higher instead of mean values for unit cost data.

RESULTS

Survey responses and participant characteristics

Twenty-five of the 41 service users who completed ASCOT when they started using the scheme were available to complete it at follow-up. Others did not respond or were no longer in contact with the scheme. Characteristics of individuals who participated at both start and follow-up (n=25) were similar to the group of 41 who completed ASCOT at the start (Table 2). Altogether 670 (63%) of the registered service users returned the *Wellbeing and resource use questionnaire*. Of those, 603 reported they had used the scheme for more than a year. Characteristics of these individuals and the new service users (n=40) are shown in Table 3 together with age and gender distributions for all registered service users. As expected, new service users were much younger than current service users. Older service users (aged over 85) were less likely to respond to the survey, so that the group of existing users participating in the survey was not representative of all users. Of the 603 participants, 140 were carers for their spouse.

Please insert Table 2 here

Costs and economic consequences

Local government perspective

For local commissioners the cost per service user was £792 (in 2010/11 prices), and this related to 856 people registered with the scheme at that time. The cost of practical home help was £9.60 per hour and £643 per service user, based on an annual budget of £550,207 for this type of support and 57,266 hours of support per year. Cost of befriending was £9.30 per hour and £80 per service user, based on a budget of £68,167 and a mean of 60.7 hours of befriending support. The mean annual cost of welfare benefits advice was £69 per person, based on a budget of £58,779; the number of hours of service provided was not available.

We found differences in use of health and social care services in the community after adjusting for personal characteristics. New service users were significantly more likely to have had GP visits (97% vs. 81%, P=0.0129) and hospital admissions (61% vs. 22%, P<0.001) over the past 6 months; the difference in the frequency of visits by a district nurse was non-significant (30% vs. 24%, P=0.189). Annual mean number of visits or attendances was greater for those health services: 5.8 vs. 3 for GPs and 2.8 vs. 2.6 for hospital admissions. One new service user required very frequent support by a district nurse, which heavily influenced the mean difference (70 vs. 8.2 visits). Existing service users were more likely to use social workers than new service users but this was marginally significant (74% vs. 98%, P=0.098; mean visits 2 vs. 3.8). Once unit costs were attached to changes in service use, the net cost difference was £2,093 per person.

Seven per cent of survey participants stated that the help-at-home scheme prevented their own care home admission and a further 2.8% stated that it prevented their spouse's admission. Mean length of stay for individuals who reported these prevented admissions were 4.2 years and 3.6 years, respectively. Together, the costs of these potentially prevented care home stays were £267, of which £241 related to service users and £26 to service users' spouses.

After combining the costs and economic consequences, local commissioners could potentially save £1,568 per person. In sensitivity analysis, this value ranged from £273 to £1,688.

Central government perspective

The scheme had an impact on benefit payments received by volunteers and service users. Over the period of a year, 13 (11%) of the 121 volunteers had gone on to paid work after they volunteered with the scheme. Potential savings linked to the scheme from reduced JSA claims averaged £184 per volunteer, which translated to £26 per service user. The total amount of additional benefits redistributed to service users was £1,419,530 in 2009/10, equivalent to £2,851 per person. Although this figure presents additional costs to central government it might be seen as a 'good' cost in the sense that it represents an entitlement previously unclaimed.

Despite the increase in welfare payments, older people who used the scheme for more than a year reported more financial worries than new service users after adjusting for personal characteristics. Their main concern was to pay bills for heating (12% vs. 2%; P=0.006). This could indicate that the additional income from central government budgets that older people received was still insufficient to meet their basic needs.

Individual perspective

The costs of the scheme from user charges for practical support were £468 per person, based on user charges of £6 and £11, 57,226 hours of practical support provided and 856 registered users.

Privately paid services included domestic help, gardening and personal care: there was a non-significant difference in the probability of a person using personal care in the two groups (12% vs. 16%; P=0.173). A few individuals required intensive personal

care so that the frequency of use was much higher in the group of new service users (510 vs. 46 visits per year). The use of domestic help was significantly higher in the group of older people who had used the scheme for more than a year (77% vs. 22%; P<0.001), and mean frequency for those who used domestic help was also higher (7.6 vs. 5.6 times per year). There was no significant difference in the use of gardening services between new and existing groups of service users (62% vs. 63%, mean use 6.2 vs. 5). Because we did not have data on the number of hours we assumed an hour for each visit including travelling time.

Potential cost savings to the individual were altogether £1,378, of which £879 related to the service user and £499 to their spouse. This was based on the 7% of survey participants who stated that the help-at-home scheme prevented their own care home admission, the 2.8% who stated that it prevented their spouse's admission, and a mean length of stay of 4.2 years (3.6 years for spouse's admission).

After combining the differences in economic consequences and costs, individuals could potentially save £2,275 per person. In sensitivity analysis, this value ranged from £983 to £2,275.

There was no difference in the adjusted probability of receiving unpaid care between the new and existing service users (55.4% vs. 55.8%, P=0.49). However, the mean number of hours of unpaid care was lower in the group of new service users compared to the group of existing service users, with 13% vs. 18% getting more than 11 hours per week. The yearly mean cost of additional hours of unpaid care received by the group of existing users was £1,374 per person.

Older people involved with the scheme for longer than a year were significantly more likely to report that they were physically well compared to new service users, after adjusting for age, gender and whether they lived with someone (70.5% vs. 54.4%, P=0.05); we calculated a mean gain in quality-adjusted life years of 0.042, equivalent to a value of £840 per person. There was no significant difference in the proportion of individuals reporting they were mentally well (83.5 vs. 76%, P=0.187), with a mean gain in quality-adjusted life years of 0.09 and £190 per service user.

In our study, there was no significant difference in probability of social isolation in the group of older people (5% vs. 3%; P=0.385). We calculated an additional annual risk of death among socially isolated older people of 4.3 percentage points and a value for the mean of life years gained per service user of £5.

There were additional economic gains for volunteers and service users who had used the scheme for longer than a year from wages and central government payments. The potential benefits linked to additional earnings for volunteers (measured in difference between earnings and Job Seekers Allowance) were £557 per volunteer and £78 per older person using the scheme and those of additional income from welfare benefits were £1,752 per service user.

After combining the costs and potential economic consequences, the net benefit was £3,766 per service user. Values ranged from £2,474 to £5,140 in sensitivity analysis.

Outcomes not included in economic analysis

Not included in these calculations were improvements in social care-related quality of life. The weighted ASCOT results, shown in Table 4, suggested that levels of needs had been reduced and overall social care-related quality of life improved at 6 months by (on average) 0.07 units for those individuals who could be followed up (n=24). This difference did not reach significance. However, the figures still indicated a relatively positive reduction in needs when compared, for example, against the findings of a study that showed that social care-related quality of life for people using home care was on average 0.07 units higher than of those who did not use home care (Caiels *et al*. 2010).

Please insert Table 4 here.

All ASCOT domains showed higher (non-significant) mean scores at follow-up although for nutrition one person moved from the ideal to a lower state (Table 5). Individuals with reduced levels of need at follow-up usually outnumbered those with increased needs (Table 6): About a third of individuals reported lower levels of need for most domains. Exceptions were the domains nutrition and how people felt about getting help; in terms of nutrition, only two people reported lower needs whereas six people said they had higher needs; however the changes were all from the reported 'ideal state' to 'no needs'; in regards to how people felt about getting help, this was more negatively scored at follow-up; at the same time more people reported positively on the way they were helped. A possible explanation might be that the experience of seeking help increased awareness of their decreasing abilities. The most frequently reported improvements were in the following domains: personal safety, social participation, personal cleanliness, usual activities and control over daily life. The data also indicate that there were unmet needs for some individuals in regards to social participation and being able to do the things they like and enjoy.

Please insert Tables 5 and 6 here.

DISCUSSION

We examined the yearly costs and consequences of a help-at-home scheme based on data collected through various means including new collections, existing project information and associated literatures. Our findings suggest that the scheme was likely to achieve economic benefits from a local government (including local NHS) perspective, in particular because of a reduced risk of hospital and care home admission. From an individual's perspective, older people involved in the scheme appeared to achieve a number of health and wellbeing gains. Our study identified likely gaps in support: not all older people were able to engage in social and other activities as much as they would like and, although older people accessed their entitled welfare benefits through the scheme, this was not sufficient to stop their financial worries. Our findings about areas of unmet need are consistent with previous evaluations of health and social care interventions for older people in the

community (e.g. Windle *et al.* 2009, Glendinning *et al.* 2010 Hill *et al.* 2012). More research is needed to find out which type of interventions can help older people to address those needs, have greater opportunities to engage in activities they enjoy and access to basic material means.

Strengths and limitations

Our study has a number of strengths and limitations which need to be interpreted in the context of an applied evaluation of a personalised, complex social intervention, which set particular terms and conditions for the data collection. We were not able to recruit a comparison group as such, and instead compared outcomes of existing service users with a relatively small group of new service users. We had few personal characteristics for which we could control statistically in our analysis. For most outcomes (other than those evaluated as part of the ASCOT) we were not able to follow individual service users over time. As a result findings have to be interpreted with caution and further evaluation would be required to confirm whether the potential cost savings we found for this kind of scheme can be generalised more broadly. In addition, it is important to recognise that not all benefits of the scheme could be expressed in monetary values. For example, there is currently no standard way of assigning a monetary value to social care-related quality of life improvements (measured via the ASCOT).

Research and policy implications

"The findings of this research need to be interpreted in the context of an evolving landscape of guidance and legislation in health and social care in England. In particular, the 2014 Care Act placed new duties on local authorities to prevent, delay or reduce older peoples' social care needs. The legislation also requires integrated and person-centred ways of working. At the same time rising eligibility thresholds for home care currently are leading to social care provision in which only people with the highest levels of need get publicly funded support. Help-at-home schemes are mix-funded and follow principles of shared financial responsibilities between individuals and the public sector. Furthermore, in contrast to more traditional services, they offer prevention-focused models of care and support. They fit well with current long-term care policies and the need for affordable welfare systems for ageing societies.

We could not identify any peer-reviewed evaluations of help-at-home or similar types of scheme; reasons for such gaps in evidence are challenges associated with evaluating complex, personalised and long-term interventions; and randomised controlled trials often seen to be infeasible, unethical or inappropriate (Craig et al. 2008, Milton et al. 2012). Thus, for many types of independent living interventions, in particular those that aim to meet social rather than health care needs, effectiveness and cost-effectiveness are unknown. However, it has been found that those interventions for older people can be effective if they facilitate access to a wide range of support, are long-term and individualised (Frost et al. 2012)."

Most research in this area has been concerned with how projects work, focussing on the evaluation of process and outputs rather than (quantifiable) outcomes (NICE 2007). Thus there is a lack of knowledge as to whether these projects are good value

for money, which is particularly important in the current policy context. Arguably, third sector organisations are in a better place to respond to local needs because of their more informal and less bureaucratic structures and their proximity to communities. They often offer elements of support that would otherwise not be picked up by statutory or private, for-profit bodies because their provision would not generate sufficient profits or economies of scale (Kendall & Knapp 2000). But to do so they need resources. Although more research is needed, our findings indicate that voluntary and community sector run help-at-home schemes have the potential to meet some of the welfare needs of older people cost-effectively.

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TABLES

Table 1 Unit costs

Source: PSSRU Compendium Unit Costs for Health and Social Care 2013		
	Mean (lower bound - upper bound)	**Description**
GP visit at surgery (p191)	£37/visit	Per patient contact lasting 11.7 minutes including direct care staff costs, excluding qualification costs

Hospital admission (p107)	£598 (£399-£704)/admission.	Mean costs of non-elective inpatient stay
District nurse visit (p183)	£70/visit	Includes one hour of home visiting including costs for travelling
Social worker for adults (p198)	£159/hr.	Face-to-face time, excluding qualification costs
Private sector residential care home for older people (p38)	£532/wk.	Establishment costs without living expenses
Local authority residential care for older people (p39)	£1,002/wk.	Establishment costs without living expenses
Personal care (p202)	£24/hr.	Home care worker
Unpaid care at home		Valued through replacement cost by home care worker, PSSRU Compendium Unit Costs for health and Social Care 2013, p202

Source: Local data		
Befriending	£9/hr.	Administration and management costs for volunteers
Practical home support (domestic, gardening)	£14.4/hr.	Includes £9.6 paid by local government and £4.8 paid by individuals

Table 2 Characteristics of participants in ASCOT survey when they started using the scheme and at 5 to 6 months follow-up

	Start (N=39*)	Follow-up (N=25*)
	n (%)	n (%)
Age		
55-64	1 (3)	0 (0)
65-74	8 (20)	6 (24)
75-84	13 (33)	9 (36)
85+	17 (44)	10 (40)
Mean age	80.7	80.5
Gender		
Male	8 (20)	6 (24)

Female	31 (80)	19 (76)

Living status		
Alone	31 (80)	19 (76)
With spouse or family	8 (20)	6 (24)

*Note that two people did not fill in their socio-demographic details so that we only had information for 39 persons at start. For one person the identification number was missing so that we could only evaluate outcomes data for 24 individuals, for whom we had data at start and follow-up.

Table 3 Characteristics of participants of 'wellbeing and resource use' survey

	New service users N=40 n (%)	Current service users N=670 n (%)	Service users (all) N=1,059 n (%)
Age			
<55	0 (0%)	1 (0.1%)	0 (0%)
55-64	1 (3%)	8 (1%)	11 (1%)
65-74	12 (30%)	56 (8%)	82 (8%)
75-84	20 (50%)	239 (36%)	368 (35%)
>85	5 (13%)	325 (49%)	595 (56%)
No response	2 (5%)	41 (6%)	
Gender			
Male	6 (15%)	128 (19.1%)	199 (19%)
Female	33 (83%)	501 (74.8%)	860 (81%)
No response	1 (3%)	41 (6.1%)	
Living status			
Alone	30 (75%)	514 (77%)	Not known
With spouse	9 (23%)	112 (17%)	Not known
With family	1 (3%)	5 (1%)	Not known
With friends	0 (0%)	1 (0.1%)	Not known
No response	0 (0%)	38 (6%)	

Table 4 Social care related quality-of-life outcomes (weighted) in ASCOT survey of participants when they started using the scheme and at 5 to 6 months follow-up

	Start (n=24) Mean (SD)	Follow up (n=24) Mean (SD)	Mean diff.	95% CI	p-value
Overall score	**0.73 (0.19)**	**0.80 (0.18)**	**0.06**	**0.016 to 0.142**	**0.112**
Control over daily life	0.85 (0.18)	0.86 (0.19)	0.01	-0.094 to 0.107	0.891
Personal cleanliness/ comfort	0.82 (0.18)	0.87 (0.06)	0.05	-0.029 to 0.127	0.209
Food & drink	0.79 (0.21)	0.80 (0.16)	0.01	- 0.053 to 0.077	0.715
Personal safety	0.60 (0.23)	0.64 (0.23)	0.04	- 0.090 to 0.161	0.562
Social participation	0.67 (0.20)	0.71 (0.17)	0.04	-0.060 to 0.134	0.440
Usual activities/ occupation	0.73 (0.19)	0.80 (0.18)	0.07	-0.021 to 0.168	0.120
Accommodation cleanliness	0.74 (0.18)	0.79 (0.13)	0.05	-0.028 to 0.131	0.194
Dignity	0.72 (0.19)	0.76 (0.14)	0.05	-0.048 to 0.140	0.323

Table 5 Domains of social care related quality-of-life measured with ASCOT – *Only service users with follow-up*

	Start (N=24) n (%)	Follow up (N=24) n (%)
Control over daily life		
Ideal state	7 (29)	9 (38)
No needs	11 (46)	9 (38)
Low needs	6 (25)	6 (25)
High needs	0 (0)	0 (0)
Personal cleanliness/ comfort		
Ideal state	14 (58)	15 (63)
No needs	8 (33)	9 (38)
Low needs	2 (8)	0 (0)
High needs	0 (0)	0 (0)
Food & drink		
Ideal state	18 (75)	15 (63)
No needs	3 (13)	7 (29)
Low needs	2 (8)	2 (8)
High needs	1 (4)	0 (0)
Personal safety		
Ideal state	9 (38)	11 (46)
No needs	13 (54)	11 (46)
Low needs	2 (8)	2 (8)
High needs	0 (0)	0 (0)
Social participation		
Ideal state	8 (33)	7 (29)
No needs	7 (29)	11 (46)
Low needs	7 (29)	5 (21)
High needs	2 (8)	1 (4)
Usual activities/occupation		
Ideal state	6 (25)	5 (21)
No needs	4 (17)	10 (42)
Low needs	14 (58)	9 (38)
High needs	0 (0)	0 (0)
Accommodation cleanliness		
Ideal state	8 (33)	12 (50)
No needs	12 (50)	10 (42)
Low needs	3 (13)	2 (8)
High needs	1 (4)	0 (0)
Dignity		
Ideal state	14 (58)	16 (67)
No needs	7 (29)	7 (29)
Low needs	3 (13)	1 (4)
High needs	0 (0)	0 (0)

Table 6 Direction of change in social care related quality-of-life domains measured with ASCOT– *Only service users with follow-up* (N=24)

	n (%)
Control over daily life	
Level of need reduced	7 (29)
No change	12 (50)
Level of need increased	5 (21)
Personal cleanliness/comfort	
Level of need reduced	8 (33)
No change	11 (46)
Level of need increased	5 (21)
Food and drink	
Level of need reduced	2 (8)
No change	16 (67)
Level of need increased	6 (25)
Personal safety	
Level of need reduced	9 (38)
No change	10 (40)
Level of need increased	5 (21)
Social participation	
Level of need reduced	8 (33)
No change	9 (38)
Level of need increased	7 (29)
Usual activities/occupation	
Level of need reduced	7 (29)
No change	14 (58)
Level of need increased	3 (13)
Accommodation cleanliness	
Level of need reduced	8 (35)
No change	12 (52)
Level of need increased	3 (13)
Dignity	
Level of need reduced	7 (29)
No change	12 (50)
Level of need increased	5 (21)