



**HOUSEHOLD SATELLITE ACCOUNT
(EXPERIMENTAL)
METHODOLOGY
Chapter 7 Providing Adult Care**

Sue Holloway
Sandra Short
Sarah Tamplin
Office for National Statistics

April 2002

7. PROVIDING ADULT CARE

Output

Concepts

Informal adult care is defined in the HHSA as any help received either from members of one's own household, or from members of other households in the UK. We shall refer to this group as informal carers. It does not aim to measure the help provided by members of voluntary organisations. This will be recorded separately in our voluntary activity project, where voluntary activity is defined as unpaid work undertaken for or on behalf of an organisation or group, which benefits other people or the environment.

The output of adult care is the number of adults receiving care. There must be some adjustment for the amount/quality/regularity of care given. It is important that we disaggregate this output sufficiently to be able to value it at the market rate of an equivalent service. The type of care varies from specialised care, such as lifting or changing dressings, to "keeping an eye" on someone or doing their shopping. The amount of care received also varies from a visit once a week to continuous care. The cost of providing 24 hour nursing care for an elderly person is very different from the cost of providing a meal once a day or doing the shopping for an elderly neighbour once a week. If the valuation method uses residential rates as the equivalent market price, then the related housing provided by the household should be included in the inputs and the output of housing should be adjusted accordingly. If a domiciliary care rate is used, then no housing costs should be included in the inputs. Care which involves providing transportation needs to be linked to the transportation account, so that double counting is avoided.

The output of informal care is therefore the number of adults looked after, differentiated by the type and frequency of care they receive

Inputs

Intermediate consumption

Theoretically this includes any consumables relating to caring for the elderly. In practice, it is unlikely that we will be able to identify them separately. It should also include the relevant housing and transport costs if appropriate.

Household capital consumption and related services

As for childcare.

Labour

As well as Time Use Data, other household surveys collect information on time spent caring for adults, which may provide a useful comparison.

Methodology

Data source

The Family Resource Survey (commissioned by the Department for Work and Pensions – DWP) collects information on the number of adults receiving care and whether this care is on a weekly, daily or continuous basis. The FRS is currently the best data source, but is known to underestimate the numbers of adults receiving care.

In the FRS, the definition of adults is the population over 16 years of age, and care includes all help or assistance given to others because of physical or mental need. It ranges from odd jobs e.g. helping an elderly neighbour/relative with shopping or gardening, to full-time nursing care of the sick, disabled or elderly.

The FRS is a continuous survey that samples households in Great Britain using a stratified multi-stage probability sample. The questions and answers that we are interested appear in the care module and are listed below:

1. In some households, there are people who receive help or being looked after, for example because they are sick, disabled or elderly. Is there anyone in this household who receives any of these kinds of help or looking after? This could be from outside or anyone who lives here.
Yes / No
2. How frequently does (X) receive such help?
 - 1 - Continuously
 - 2 - Several times a day
 - 3 - Once or twice a day
 - 4 - Several times a week
 - 5 - Once a week
 - 6 - Less frequently
3. Who looks after, or provides help for (X)? Anyone else?
 - 1 - 14 - Named person
 - 15 - Relative
 - 16 - Friend
 - 17 - Helpers
4. About how many hours a week, on average does (name of helper) spend actually providing help for or looking after (X)?
Number of hours given.
5. What kind of things does (X) usually receive help with?
 - 1 - Personal care (dressing, bathing, washing, shaving, feeding, using the toilet)
 - 2 - Physical care (walking, getting into and out of bed, and getting up and down stairs)
 - 3 - Other sorts of personal care (preparing meals, giving medicines, changing dressings)
 - 4 - Help with paper works or financial matters (writing letters, dealing with bills, handling money, and banking)
 - 5 - Other practical help (shopping, laundry, housework, gardening, doing odd jobs, taking out for walks, visiting, talking to, keeping an eye on)

Question 1 provides information on the number of adults receiving help, and question 2 gives the respondent's perception of the help received. This perception may include active care (direct interaction or supervision) or passive care (i.e. available on call if needed).

The total number of adults receiving help includes those who are helped by people working for organisations, e.g. visiting social workers, nurses, specialist teachers and volunteers. For simplicity, we will refer to this group as formal carers. For HHSA purposes, we need to exclude any episodes of care, which they provide. For this reason, our estimates will differ from those published in the Family Resources Survey Reports 1995/6 - 1999/0 (published by Corporate Document Services).

Adults who are helped by only formal carers

We have excluded the cases where an adult is helped only by a formal carer.

Adults who are helped by informal carers only

Using question 3 we can identify the number of cases where an adult is helped by informal carers only. These cases include adults who are helped by spouses, their children, neighbours, friends and other relatives.

Adults who are helped by both a household member and a formal helper or volunteer

There are cases where an adult is receiving both formal and informal care. In some cases, an adult is being cared for by an outside helper and the informal carer is supplementing this help e.g. an adult may be attending a day care home for the majority of the day, with a neighbour popping in for an hour or so when they get home. In other cases, an adult is being cared for by a household member and the outside helper is called in to give specialised help such as changing a dressing etc. For the HHSA it is important that we include all adults who are helped by an informal carer, even if they are also receive help from a formal care provider. In order to include these cases, we need to adjust the type and length of the help received, to estimate the help from informal carers only.

Frequency of help received

For valuation purposes we need to differentiate between continuous and less frequent episodes of care, as these are associated with different market rates. Using question 2, we have some information on how often the adult receives help. The frequencies are broken down into the following categories:

1. Continuously
2. Several times a day
3. Once or twice a week
4. Several times a week
5. Once a week

However, this is dependent on the respondent's perception of what constitutes each frequency type. Equivalent market prices of informal care are based on an hourly rate rather than on an episode of care or an independent measure of the output e.g. bathing an elderly person. Therefore we have had to make an assumption about the approximate the number of hours in each episode of care.

Estimating the number of hours in each frequency type

To estimate the number of hours that correspond to each frequency, we examined the cases where an adult is helped by informal carers only. When we examined the hours of help given (question 4) and the frequency of help received (question 2); there was a considerable range in the total number of hours helped and the frequency type. This suggests a difference in respondents' perception of frequency. This can be accounted for by the fact that frequencies are undefined, and that no distinction is made in the question between active and passive care. The modal number of hours was used to approximate the number of hours, which correspond to each frequency, and these are summarised in Table 7.1 below.

Table 7.1 Assumption about number of hours per week corresponding to reported frequency

Frequency	Average (mode) number of hours reported	Number of hours: HHSa assumption
Continuous	Not applicable	112 hours (household members) 168 hours (neighbours and friends)
Several times a day	16	14 - 111
Once or twice a day	12	11 - 13
Several times a week	7	4 -10
Once a week	2	1 -3

Source: HHSa

A number of sensitivity tests have been calculated to see the effect of using the median and mean hours in each frequency and the mid-point of the band.

Measuring passive care

In the HHSa we define productive activity as anything that could be delegated to another person - the "third party criterion" developed by Margaret Reid (1934). The important point is that if no unpaid carer were available, a third person would have to be paid to take his or her place. We should therefore measure passive as well as active care wherever possible. In the FRS, an adult has the option of reporting that they receive continuous care. We assume this is 168 hours per week: 24 hours a day times 7 days. There are cases where an adult reports that they need continuous help (active plus passive care), but the total number of hours of help given by informal carers is only a few hours a week (active care only). Similarly, there are cases where a helper reports giving care 168 hours a week (active and passive care), yet the frequency of help received is reported as several times a week (active care only).

In order to include passive care, whether it is reported or not, we have re-coded the frequency of help received to include not only those cases where the recipient records a need for continuous care, but also those cases where at least one household member gives more than 112 hours a week. Our underlying assumption is that, if a household member is caring for an adult 16 hours a day (the average waking day), 7 days a week (112 hours) then they are also likely to be caring for the adult at night - even if this is passive care. This is not the case when the informal carer is not a member of the same household as the adult receiving care, in which case they must be giving 168 hours of care for it to be considered continuous.

Although we have made this adjustment, we may be underestimating continuous care, because we have no information on overlapping versus sequential hours of household members. That is, the total number of hours given by several household members may sum to more than 168 hours per week, but this may not represent continuous care, because household members may work together e.g. to help an elderly person out of bed may require two people.

Reclassifying the frequency of help received by those adults who are helped by both formal and informal carers

As mentioned before, we need to exclude all formal care, whether provided by paid providers or by volunteers working on behalf of an organisation. From question 4, we have information on the total number of hours of help given by informal carers only and can

exclude the number of hours given by formal carers. We can use this estimate of hours of help *given* as a proxy for the frequency of help received. By using our earlier assumption about the number of hours which correspond to each frequency, we can then reclassify the frequency of help received.

There are limitations in this approach, as the number of hours of help *given* will not always correspond to the frequency of help received. This could be due to different perceptions of what constitutes care (passive or active), different perceptions of what constitutes each frequency type, two or more carers helping simultaneously, and reporting errors in the survey itself. However, to reclassify this help some assumption has to be made about the relationship of the frequency of help received to the hours of help given.

In order to inform this assumption, we examined the cases where adults receive help only from informal carers, and compared the total number of hours given by those carers with the reported frequency of help received. We calculated an average of the modal values of hours given corresponding to each frequency category reported in 4 survey years. We used this in order to re-categorise the frequency of help received once formal care hours were excluded. As before, an adult is considered to be receiving continuous help only if 112 hours or more are given by *one* household member.

Examples of this reclassification follow. An adult may report they receive continuous help and a total of 168 hours of help are given. This could be provided equally by a volunteer and a relative. By removing the hours of help given by the volunteer, the total number of hours given by the relative is reduced to 84. This corresponds with the several times a day category, and so the frequency of help received is re-categorised. Similarly an adult could report they receive continuous help and a total of 132 hours are given. This could be provided by a spouse who gives 112 hours and a relative who gives 20 hours a week. Because one household member is giving 112 hours we assume that this person is receiving continuous care.

Other cases also need to be re-categorised. For example, an adult could receive 10 hours of help and report that the frequency of help is several times a week. If 8 of these 10 hours of help are provided by (a district nurse, then we would re-categorise the frequency to once a week, as only 2 hours of help are being provided by an informal carer.

There are many cases where the number of hours given do not correspond to the frequency of help the person reports they receive. Only in the cases of re-categorising help received from both formal and informal carers do we use the number of hours giving help, rather than the reported frequency of help received.

To make these adjustments for 1999/00, there is an additional complication, because the hours of care given are recorded in bands. In order to reclassify the frequency of help for adults receiving informal and formal care (see above), we examined the 4 survey years where we have actual hours data. For these survey years we grouped the data into the 1999/00 banded hours (see below) and calculated the average mean number of hours in each banded hour category. We used the 4 year mean average and applied this to 1999/00.

Banded hours	Mean of 4 survey years
0-4 hours	3 hours
5-9 hours	6 hours
10-19 hours	12 hours
20-34 hours	23 hours

35-49 hours
50-99 hours

39 hours
67 hours

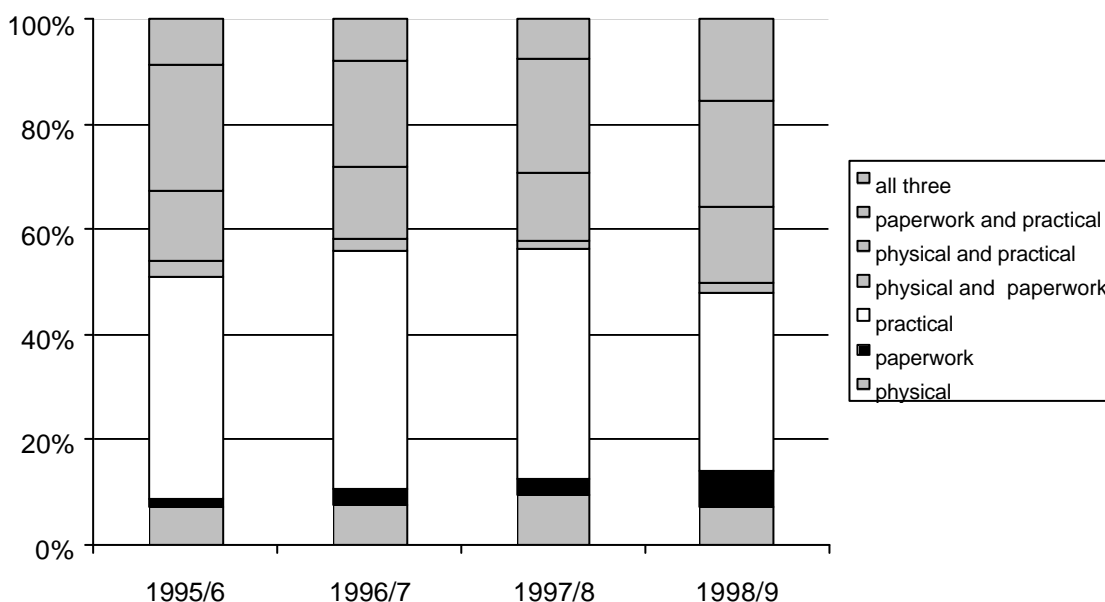
Type of help received

For non-continuous care (several times a day, once or twice a day, several times a week, and once a week), it is important to distinguish between the types of help received, so we can value the care at different appropriate market prices. Respondents are asked "what kind of things does [X] usually receive help with?". The type of help received includes "getting into and out of bed" (physical help), "keeping an eye on them" (other physical help), and "giving medicines" (other personal help). Respondents are given a show card to help prompt their answers, and can respond with one or more of the following:

- Help with personal care e.g. dressing, bathing, washing, shaving, feeding, using the toilet
- Physical help e.g. walking, getting up and down the stairs getting into and out of bed
- Other sorts of personal help e.g. preparing meals, giving medicines change dressings
- Help with paperwork or financial matters e.g. writing letters dealing with bills handling money, banking filling in forms
- Other practical help e.g. shopping laundry housework gardening doing odd-jobs, taking out for a walk, keeping an eye on him/her

Due to small sample sizes in each category, we have reclassified this help into three categories: personal help (help with personal care, other sorts of personal help), practical help (physical help, help with paper work or financial matters and other practical help) and both personal and practical help. As the graph below shows, the category "practical help" covers a wide range of activities from helping with paperwork to helping with housework. However as the number of adults who are helped with only their paperwork is small, ranging from 1-6%, compared with 34-46% of adults who are helped with practical tasks, we feel it is sufficient to group these tasks together as "practical help". We can then value all of the practical help received at a care attendant's wages. This does mean that the value of informal care may be underestimated, as help with paper work, may require additional skills which may be valued at a higher rate.

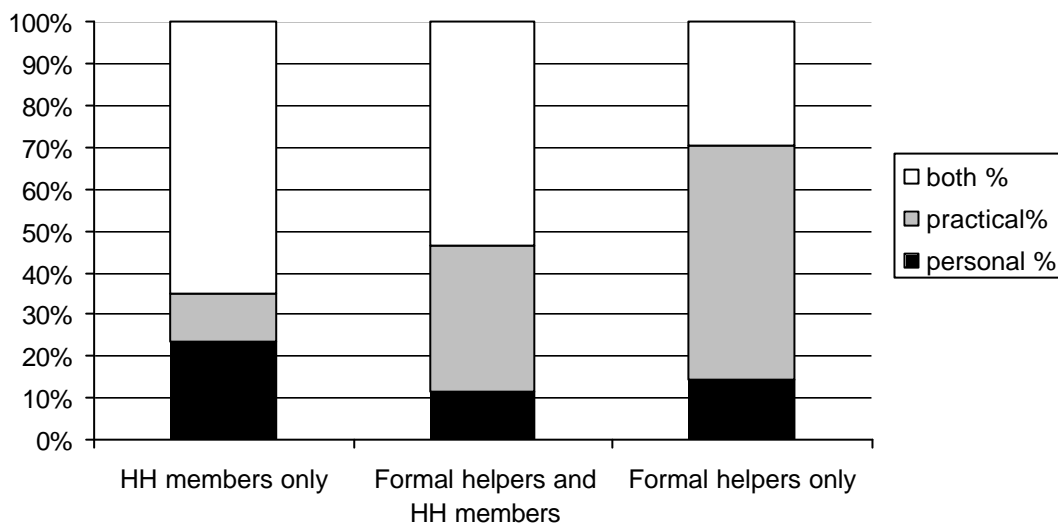
Chart 7.1 Proportion of type of help received



Reclassifying the type of help received by those adults who are helped by both formal and informal carers

Analysis shows formal and informal carers give different types of help. When adults are helped by informal carers only, approximately 60 per cent receive both personal and practical help. In contrast, in cases where adults are helped by formal carers only (help which is not included in the HHS adult care project), approximately 60 per cent receive help with personal tasks only, and only 30 per cent with both personal and practical tasks. The proportion receiving help with practical tasks is similar in both cases. This seems to suggest that formal carers help more often with only one specific type of task, while informal carers provide are more likely to help with a range of activities.

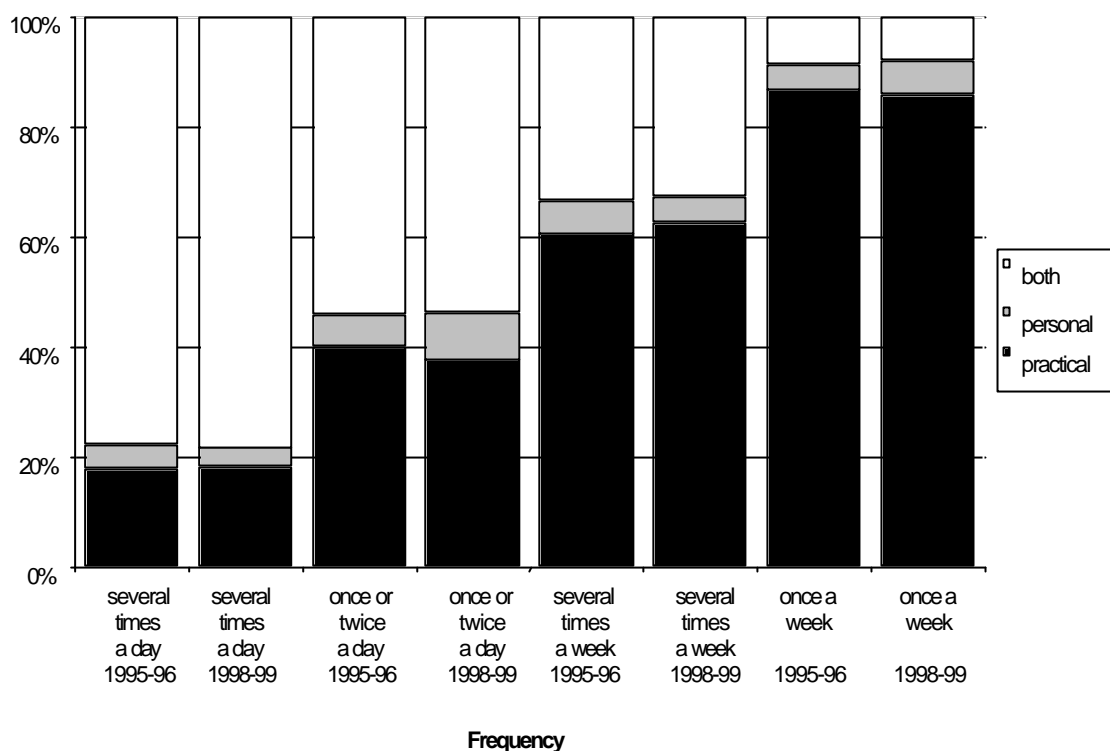
Chart 7.2 Type of help given to people receiving help from formal carers only, formal carers and household members, and household members only



The majority of adults who receive help from both formal and informal carers also are helped with both practical and personal tasks. However, it is hard to come to any conclusion about whether these adults use formal carers to support the help given by household members (e.g. an extra pair of hands to lift, bath etc.) or to provide additional, more specialised help.

The graph below shows that the proportion of adults receiving different types of help has not changed significantly over time. Therefore, in cases where help by formal carers has been excluded, we have adjusted the type of help received, by using the 4 year average distribution of the type of help given by informal carers only, by gender and frequency, and applied this to the adjusted hours of help received. Breaking down the distribution of the help received by age resulted in sample sizes which are too small.

Chart 7.3 Proportion of adults receiving different types of care



Estimating the type of help received by adults in 1999/2000

In 1999/00 the FRS did not ask about the type of help received. As Graph 2 shows, the distribution of personal help, practical help and help with both personal and practical tasks stays constant between the survey years. Therefore we have applied the four-year average of this distribution to all help received in 1999/2000.

Grossing to the UK population

The FRS coverage is currently Great Britain, although this is being extended to cover Northern Ireland as of April 2002. Data will therefore not be available on a UK basis before the end of 2003. In the meantime, we need to gross the data to a UK total to be consistent with the rest of the HHSA. There is not an equivalent Northern Ireland survey which could be used, so we have taken the FRS GB estimates and grossed them to the UK population using grossing factors using data derived from the Labour Force Survey, which exclude people living in institutions, and stratified by age and gender. We are aware of the limitations of this approach, knowing that Northern Ireland has different care structures, and we will revisit our estimates in the light of information from Northern Ireland, when it becomes available.

Value

In order to value informal care, we need to use the cost of the nearest equivalent service provided by the market. As already noted, it is important to try and encapsulate the different types of help received, taking into account how often the care is received and the type of care given.

We have valued continuous care using the residential care weekly fee, from the Care of Elderly People Market Survey 2001 conducted by Laing and Buisson. This is a postal survey of all for-profit homes with 4 or more places in the UK. The homes were asked to give their minimum and maximum single and sharing fees for nursing and residential care. The average was calculated as the mean of the minimum and maximum fees, weighted by bed numbers. The response rate for 2000 was 24 per cent of all for-profit homes.

The residential rate was chosen because the services provided by a residential home involves daily help with personal and practical care, as well as being on call. We have used this rather than a nursing home fee, as more specialised help is available in a nursing home. Sensitivity tests have been run using the nursing home fee. This residential home fee include meals and accommodation costs and will often include an " on call" charge. When we calculate the value added by informal carers, an adjustment has been made to take into consideration the housing services and meals provided.

Non-continuous personal care includes help with dressing, bathing, changing dressings and feeding. We have chosen the average wage of an assistant nurse or nursing auxiliary as the most appropriate market rate for valuing this care. This is because a nurse/nursing auxiliary will usually provide this type of specialised care outside the home. For non-continuous practical care we have used the hourly rate of care assistants and attendants in health and related occupations.

The wage rates used are median hourly wages from the New Earnings Survey. This survey samples 1 per cent of UK employees (1998 onwards) who are members of the Pay As You Earn (PAYE) Income Tax Scheme. Prior to 1998 only employees in Great Britain were sampled. The wages are simply aggregated, and no grossing or weighting is attempted. No imputations for non-response or sample frame deficiencies are made. The average hourly earnings calculated take into account only those earnings not affected by sick absence and are basic wages excluding overtime.

Sensitivity analysis

We have tested the sensitivity of our results to our estimate of the number of hours in each frequency type. Instead of using the modal value, we can use the mean and median. We have also tested our sensitivity to the wage rate used and have valued continuous care used the nursing home fee, and the mean wage rate.