Costs and outcomes of an extra-care housing scheme in Bradford

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The aim of this study was to assess as accurately as possible the comparative cost before and after residents moved to a new extra-care housing scheme in Bradford.

The importance of extra-care housing in the current policy context is illustrated by the level of financial investment. Each year since 2003 the Department of Health has provided capital funding to support its development. However, there is a lack of evidence about the potential, the costs and benefits, and consequently the cost-effectiveness, of extra-care housing.

This report:

- estimates comprehensive costs for each of the broad cost components (accommodation, social care, health services, living expenses and informal care), which together represent the weekly cost of a resident's living arrangement;
- interprets cost differences before and after the move in the context of outcomes and needs of residents;
- identifies a number of methodological implications for future studies.

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Executive summary

There is a systematic lack of evidence about the potential, the costs and benefits and, consequently, the cost-effectiveness of extra care housing. The principal aim of the research reported here was to assess as accurately as possible the comparative costs before and after residents moved to extra care housing.

The study was conducted in one extra care scheme, Rowanberries in Bradford, which received capital funding under the Department of Health's Extra Care Housing Funding Initiative (ECHFI). The research was conducted as an extension to an ongoing evaluation of the ECHFI by the Personal Social Services Research Unit (PSSRU) and took the form of a before-and-after study. Residents were interviewed by a local fieldworker soon after moving in about their previous circumstances, and again six months thereafter. Where informal carers were identified in the resident interview, permission was obtained to send them a self-completion postal questionnaire. Data was also collected indirectly from care staff and by drawing on assessment records completed prior to moving.

Information was collected from 40 out of an eligible 52 residents in the first-stage interviews, but a follow-up response at six months was only obtained for 22 residents. While there were no statistically significant differences in terms of either physical functioning or cognitive impairment, there was some indication that those who declined to participate in the follow-up stage were more impaired than those who remained in the study.

Overall, costs increased as a result of moving into Rowanberries, associated with improved social care outcomes and reported quality of life, compared with residents' experiences in their previous homes. Comprehensive estimates for each of the broad cost components (health care, social care, accommodation and living expenses) resulted in an average cost per person per week of £380 before moving, compared with £470 after moving to Rowanberries. The total average costs per person per week from a societal perspective, including informal care costs, were £430 and £490 respectively, before and after the move.

The increase in costs was primarily associated with higher accommodation, social care and support costs, while health care costs decreased. The increased social care costs were mainly attributable to the additional cost of support services provided to residents, such as social activities and staff providing 24-hour cover, and to a two-fold increase in the cost of home care.

It may be that moves were precipitated by health problems, resulting in a need for the increased levels of home care following the move. However, in the sample as a whole there was evidence of more than a 50 per cent reduction in health care costs per person after the move, with the single greatest difference relating to nurse consultations at home. There was evidence of a change in the pattern with which health care resources (such as a nurse and/or general practitioner) were accessed; more residents accessed the services but less frequently after their move to Rowanberries. By comparison, the proportion of residents accessing hospital services such as accident and emergency, outpatient appointments and inpatient stays, was slightly lower in all instances after the move.

Information about informal care was available from eleven carers. For these carers costs decreased; their estimated opportunity costs were £80 per week before the person they cared for moved to Rowanberries, compared with £25 per week after the move. The method of costing informal care incorporated direct financial expenditure on goods and services which would not have been purchased in the absence of caring, travelling costs and time, and the opportunity cost of waged and non-waged time spent caring.

It was estimated that the average cost falling to the public sector per Rowanberries resident was approximately £360 per week, which accounted for approximately 75 per cent of the average cost

of £470 per Rowanberries resident. This figure included estimates of subsidised capital cost, housing benefit payments towards rent and the service charge, care package funding by social services and the average amount of benefits and allowances received by residents. Although a substantial proportion of costs prior to the move to Rowanberries would also have fallen to the public sector, and a direct like-for-like comparison is problematic, not least because residents may simply be claiming benefits they were previously entitled to, it seems that there has been an increase in public sector funding.

The increased costs associated with the move to Rowanberries were also associated with better outcomes for residents: results showed improvements in both reported quality of life and in social care outcomes, compared with residents' experiences in their previous homes.

The improvement in social care outcome, as measured by the ASCOT (Adult Social Care Outcome Tool), reflects a decrease in resident's perceptions of their level of unmet need across all seven outcome domains (personal care, social participation, control over daily life, meals and nutrition, safety, accommodation and occupation). In the interview after moving in, residents were required to answer questions retrospectively, reflecting on their previous circumstances – their responses were then compared with those about their situation six months after the move. On the same basis, residents also reported better quality of life six months after moving into Rowanberries than in their previous homes. Although the results of the analyses suggested positive outcomes, we need to be aware that people may not recall accurately previous states.

Self-perceived health and psychological well-being, based on reports of what residents felt shortly after moving in and six months later, did not improve. Similarly, residents did not report improvements in levels of functioning, nor did they report that they had lower levels of need for help with activities of daily living in the six months since moving to Rowanberries. It might be expected that people would have lower levels of need once they have moved to a more enabling environment, but there was no evidence of this in the study.

The stable findings in terms of both self-perceived health and functional ability are of interest when placed alongside the increase in the proportion of residents consulting a nurse or general practitioner. This suggests that residents had better access to health care resources, e.g. through staff arranging the appointments or in fact encouraging them to access these services, rather than increased needs.

The fact that health and cognitive functioning were effectively unchanged after living at Rowanberries for six months was also of particular interest when placed alongside the decrease in the unmet need reported by residents across all seven social care outcome domains. This, together with the other findings (including reductions in informal care input), suggests that it is primarily the higher levels of formal support received in Rowanberries that resulted in improved outcomes for residents and carers. Unmet need associated with people's previous community care packages were being met by care services and support provided at Rowanberries.

Conclusions must be drawn with caution in light of the limitations of the study. It was undertaken in a single scheme and the residents who declined to participate in the follow-up stage tended to be more impaired than those who remained in the study. The results may not necessarily be transferable to other schemes in other locations, and the small sample size limited the scope for examining the relationships between costs and outcomes in any detail. Furthermore, a before-and-after approach, as adopted in this study, raises the question of what would have happened otherwise: would needs have remained unmet, costs risen by as much or more, or combinations of these?

While all fieldwork can meet challenges at some stage, there appear to be a number of fundamental problems that were encountered that would be important to consider in commissioning and the conduct of future research in this area, especially any evaluation of cost-effectiveness.

1 Introduction

Background

The last few years have seen the increased emergence of extra care housing, a development of sheltered housing that aims to meet the housing, care and support needs of older people, while helping them to maintain their independence in their own private accommodation. The importance of extra care in the current policy context is illustrated by the level of financial investment: each year since 2003 the Department of Health (DH) has provided capital funding to support the development of extra care housing to increase the range of options available (Department of Health, 2003). However, the evidence base in the field of housing with care for later life is rather limited (Croucher et al, 2006). There is a systematic lack of evidence about the potential, the costs and benefits, and consequently the cost-effectiveness of extra care housing. Higher rental costs are associated with the more stringent design standards, the greater internal floor area per unit and the more extensive communal facilities that characterise extra care housing (Wanless, 2006). However, these higher costs can be offset by reducing the cost of delivering care to people by bringing them together geographically, and better design facilitating easier management of residents' needs. Also, it is argued that by maintaining (and sometimes increasing) independence or other quality-of-life factors for older people, extra care housing can reduce the care costs and counter the higher capital, hence rental costs (Baker, 2002; Ogilvy, 2002; Laing & Buisson, 2008). Thus, from a longer-term perspective, total costs for the resident need not be higher in extra care housing than in their previous circumstances or other housing and care options.

As Oldman (2000) states, 'a principal motivation behind development has been the belief that extra care housing may be a cheaper, more affordable alternative to other forms of care, but it is here that the greatest variation occurs' (2000, p 23). However, the observation by the Institute of Public Care (2003) that the available literature, although rapidly expanding, did not afford many examples of rigorous evaluations or definitive methods of costing this service still holds. This is not surprising as establishing valid comparisons with the alternatives which extra care housing is supposed to replace are difficult. The complexities include the costing of care services, local variations in rent and charges and the personal financial resources available to individuals (Croucher et al, 2006).

An important area of concern is cost-shunting, for example local authorities developing extra care housing to transfer costs to social security funding (Laing & Buisson, 2007). As noted by Oldman (2000), the appeal to ease the pressure on hard-pressed social services budgets by transferring costs to other agencies is obvious. However, transferring costs to other budgets does not equate to cost savings overall (Croucher et al, 2006). One of the shortcomings of some cost estimates has been to calculate cost transfers rather than economic costs. For example, Housing Benefit may pay the bricks-and-mortar element of very sheltered housing, and social services pay for the care element, whereas in residential care social services will pay the total cost of the placement, recovering a means-tested contribution from the resident.

Extra care housing does not describe a standard service, and as such there is no single definition. Here we define extra care housing as schemes with (i) self-contained specialist housing units (whether rented, private purchase leasehold, or shared ownership), (ii) a care team on site providing 24-hour care, seven days a week, and (iii) access to communal facilities, such as a restaurant or activities room. This common definition does not specify the level of care provided or the degree of dependency of residents, and these vary between schemes. This has implications for costs and charges and makes direct comparisons between extra care housing schemes, and between extra care housing schemes and care homes or home care, difficult (Nicholls, 2007). One scheme, therefore, cannot be said to be typical or representative of extra care housing in general.

The PSSRU is currently conducting an evaluation of 19 new-build extra care schemes which received capital funding under the Department of Health's Extra Care Housing Funding Initiative (Department of Health, 2004; Health and Social Care Change Agent Team, 2005). One of these schemes is Rowanberries in Bradford, a 46-unit joint project between Bradford Adult Services and the Methodist Homes Housing Association (MHHA), based on re-provision of a former care home. The mixed tenure scheme offers a bespoke service for older people living with dementia, a resource and day centre, and extensive communal facilities. There is a wide range of care needs: a few residents came from residential and nursing home settings, although most moved in from the community. The first residents moved in during April 2007.

Within the large-scale evaluation limited information is being collected about services received by residents. The study of Rowanberries provided an opportunity to investigate costs to all stakeholders in more depth than has been feasible to date, and to feed into developing methods for collecting comprehensive cost data.

Aims and objectives

The principal aim of the research was to assess as accurately as possible the comparative cost before and after residents moved to extra care housing.

The objectives were to:

- obtain baseline data to describe the comprehensive costs and circumstances of residents prior to and after moving into the Rowanberries extra care scheme;
- identify the burden of cost falling on the different parties under the different arrangements, including costs to the individuals and their informal carers;
- evaluate whether the methodology for collecting the data would be practical and feasible in a larger study.

We start by outlining the method adopted, before providing a brief description of the Rowanberries extra care scheme. The characteristics and circumstances of the residents in our sample are described before detailing the costs incurred and where these fall. As we make clear, it is critical that, particularly in this type of study, costs are seen alongside outcomes. We identify outcomes for our sample and conclude by discussing some of the implications of the findings, in particular identifying the methodological issues that would be important for a larger study.

2 Method

We start by outlining costing principles before briefly describing the method we used and response rates.

Costing principles

Our objective is to identify the comprehensive opportunity costs to society. It is important to estimate comprehensive costs as, particularly in the field of extra care housing, there is a tendency for individual agencies to focus on their own perspective and thereby obtain a distorted picture of the broader resource implications. A restricted perspective may mask the fact that costs are simply being shifted to another sector rather than being saved. Opportunity cost is defined as the value of the best alternative: the cost incurred by choosing one option over an alternative one that may be equally desired. Assessing opportunity costs is fundamental to assessing the true cost of any course of action. The study perspective is critical since it determines which costs and effects to include in the evaluation. The societal perspective adopted in this study ensures that the full resource implications are reflected. In establishing accurate costs it is important that we should reflect cost variations – costs vary considerably so as far as possible we want to measure costs at the individual level.

In all evaluative research valid conclusions depend on comparing like with like. Costs are no exception. In each of the sections below we seek to clarify how we have attempted to ensure that we do this. Linked to this is the importance of placing costs in the context of outcomes. For a valid comparison of the cost to the resident before and after their move to extra care housing, it is important to account for unmet need, a certain level of which might be expected prior to the move because of the person and their family's decision to change their mode of care.

Data collection

We collected comprehensive data on costs, circumstances and outcomes for residents both prior to admission and six months thereafter, to facilitate a before-and-after comparison (i.e. the cost and outcome difference for residents upon moving). We augmented the data already being collected at six months as part of the DH-funded PSSRU evaluation. This data, combined with running cost estimates provided by the scheme at the six-month stage, was used as the basis for comparison.

The DH-funded PSSRU evaluation has involved the collection of information on the demographic characteristics, the needs-related circumstances and service use of the resident prior to admission to the extra care schemes and six months thereafter. The questionnaire completed soon after admission drew on the assessment process and was collected primarily from records; it was designed to correspond to those used in previous studies of admissions of older people to care homes (Darton et al, 2006).

In the main evaluation new residents are also asked to complete a questionnaire about their expectations and experiences of moving into the extra care scheme. Local fieldworkers assist residents with the self-completion questionnaire on a one-to-one basis and at a time of their own choosing once they have volunteered to participate in the study. In order to collect the additional data needed for this study, this questionnaire was replaced by an interview with the resident, or where necessary a proxy, which our local fieldworker conducted at or soon after admission.[1] This interview covered health and social care service receipt before moving in, reports of the unmet need prior to moving in using the Adult Social Care Outcome Toolkit (ASCOT) indicator, and other indicators of quality of life, satisfaction and quality of care (see Appendix 1).

The resident interview identified the resident's informal carer, who, when the resident gave permission, was sent a self-completion postal questionnaire. This included questions about both the situation before the older person had moved into Rowanberries and the carer's situation at the time that they received the questionnaire – close to the six-month point after the older person had moved.

For the follow-up stage at six months, the data already being collected from residents at six months as part of the DH-funded PSSRU evaluation was augmented to establish changes in unmet need and quality of life.

Response rates

Information was obtained for 40 out of 52 residents, a response rate of 77 per cent, but a follow-up response at six months was only obtained for 22 residents, 55 per cent of the sample of 40. The local fieldworker was asked to explain the reasons given by residents, if any, for deciding not to participate in the research. For the interview at admission, two residents refused because of ill health, one resident did not intend to stay at Rowanberries and one couple had some concerns about signing to confirm their informed consent. In terms of the follow-up interview at six months, four of the 40 residents did not consent to being contacted again. Of the residents who declined at the point of the six-month interview, two declined specifically in response to the anticipated length of the interview.

As noted previously, the intention of this study was to determine the cost consequences of moving to Rowanberries. The before-and-after comparison necessitated was therefore only possible for the subsample of 22 residents. The ideal situation would have been to capture data for all residents moving into Rowanberries at both stages of the research, as this would have increased the reliability of the findings. To ensure that results are correctly interpreted, and understood in their proper context, we have endeavoured to show in Chapter 4 the extent to which this sample of 22 residents is representative of the wider population at Rowanberries.

Of the 40 residents who were interviewed when they first moved into Rowanberries, 25 reported receiving help from family members, neighbours, friends and/or other informal carers in their previous home. Of these 25 residents, 13 were included in our follow-up analysis (i.e. in the sample of 22 residents). We asked the residents if they would be willing for us to contact their informal carers, so as to send them a self-completion questionnaire. We received back eleven completed questionnaires.

3 Rowanberries

Situated on the outskirts of Bradford, and within easy reach of the local community facilities in Clayton, Rowanberries is a joint project between Bradford Adult Services and the Methodist Homes Housing Association (MHHA), part of the MHA Care Group. Based on a re-provision of a former care home, Rowanberries is a purpose-built mixed tenure development of 46 self-contained apartments. Twenty of these apartments are one-bedroom units and 26 are two-bedroom units and, of these, eight were offered for sale and six for shared ownership. The apartments are arranged on four levels with a lift and wheelchair access throughout. Adjoining the housing with care facilities is a resource and day centre, which benefits people living in the local community. The scheme offers a range of communal facilities: a large communal lounge overlooking the gardens, a garden room leading onto a patio area with paths around the garden, an IT suite, a library, an activities room, a communal laundry, a hairdressing salon, a health/therapy room, a guestroom, assisted bathrooms and a café/restaurant. Residents have the choice of preparing their own food in their apartments or, alternatively, purchasing meals within the scheme's restaurant which is open daily for lunch and dinner.

Care services are provided on site by MHA; the organisational arrangements are such that the care provision is essentially divided into three elements of (i) care provision in the scheme, (ii) the day centre, which is staffed separately, and (iii) the domiciliary care team which delivers services exclusively to the community and whose service targets include enablement and rehabilitation. MHA has separate contracts for each of these with Bradford Metropolitan District Council. Rowanberries is registered as a Domiciliary Care Provider with the Commission for Social Care Inspection. The day centre is not intended for use by the residents, because the scheme employs an activities co-ordinator. The intention is also for Rowanberries to offer a bespoke service for older people living with dementia: Rowanberries has staff trained in dementia care who receive ongoing professional support. A wide range of care needs are accommodated in the scheme: some residents came from residential and nursing home settings, others moved in from the community. The aim at first letting/sale was for the 46 apartments to include 26 for older people with a range of housing, care and support needs; 10 for older people with specific physical disabilities and sensory needs; and up to 10 for residents with dementia. The balance of dependency intended was: 12 residents with high care needs, 12 with medium care needs, 12 with low care needs, and 10 with dementia. The first residents moved in during April 2007. After six months, the actual balance of dependency achieved was 12 residents with high needs, 12 with medium needs, 10 with low care needs and 13 with dementia. The definitions of these dependency levels, as provided by the Rowanberries Care and Support Manager, were as follows: low care corresponded to requiring five hours or more of care per week or two calls per day; medium care corresponded to requiring ten hours or more per week or up to three calls per day; and high care corresponded to requiring 20 hours or more per week or four or more calls per day.

4 Characteristics of residents moving into Rowanberries

Our initial sample comprised 40 residents who moved into Rowanberries when it first opened. As we describe above, only 22 of these 40 residents were interviewed after living at Rowanberries for six months and so provide the before-and-after data required for comparison purposes. It is clearly important to identify whether or not they are representative of the overall population of residents at Rowanberries.

Initial sample

Demographic characteristics

Table 1 presents information about the demographic characteristics of the 40 residents. The ages of the residents ranged from 59 to 92, with a mean of 78 years. Approximately 20 per cent of residents were aged under 70, and 13 per cent were aged 90 or over. Male residents accounted for 30 per cent of the residents, and there were very similar numbers of male and females in each marital status category, apart from widows, who accounted for 40 per cent of residents. No residents were recorded as being of non-white origin.

Housing circumstances

Table 2 shows the previous housing circumstances of the residents. Eighty per cent of residents had previously been living in a private household, 8 per cent had previously been living in sheltered or supported housing, and 10 per cent had previously been living in a care home. Among those who had been living in a private household, the majority had been living in a house (53 per cent) or a flat/maisonette (28 per cent), while 16 per cent had been living in a bungalow. About two-thirds of these residents had been owner-occupiers, and 40 per cent had been living in accommodation rented from the local authority or a housing association (31 per

Table 1: Demographic characteristics of residents

	Initial sample		Residents followed up	
	No.	%	No.	%
Age				
Minimum	59	–	59	–
Mean	78	–	76	–
Maximum	92	–	90	–
Age group				
Under 60	2	5.0	1	4.5
60 to 69	6	15.0	6	27.3
70 to 79	11	27.5	4	18.1
80 to 89	16	40.0	9	40.9
90 and over	5	12.5	2	9.0
Sex				
Male	12	30.0	6	27.3
Female	28	70.0	16	72.7
Marital status				
Single	5	13.2	3	14.3
Married/living as married	12	31.6	6	28.6
Divorced/separated	3	7.9	2	9.5
Widowed	18	47.4	10	47.6
Not known	2	–	1	–
Sex and marital status				
Single males	2	5.3	2	9.5
Single females	3	7.9	1	4.8
Married/living as married males	6	15.8	4	19.0
Married/living as married females	6	15.8	2	9.5
Divorced/separated males	0	0.0	0	0.0
Divorced/separated females	3	7.9	2	9.5
Widowed males	3	7.9	0	0.0
Widowed females	15	39.5	10	47.6
Not known	2	–	1	–
Ethnic origin				
White	40	100.0	22	100.0
Non-white	0	0.0	0	0.0
Total number of individuals	*40*	*100.0*	*22*	*100.0*

Table 2: Housing circumstances before moving into Rowanberries

	Initial sample		Residents followed up	
	No.	%	No.	%
Previous accommodation				
Private household	32	80.0	19	86.3
Sheltered/supported housing	3	7.5	2	9.1
Care home	4	10.0	1	4.5
Hospital	0	0.0	0	0.0
Intermediate care	0	0.0	0	0.0
Other	1	2.5	0	0.0
Private household: type				
House	17	53.1	7	36.8
Bungalow	5	15.6	4	21.0
Flat/maisonette	9	28.1	7	36.8
Bedsit/rooms	1	3.1	1	5.3
Private household: tenure				
Owner-occupied/ mortgaged	19	59.4	11	57.9
Rented from LA/HA	10	31.3	8	42.1
Privately rented	3	9.4	0	0.0
Private household: composition				
Lived alone	17	53.1	11	57.9
Lived with spouse	10	31.3	5	26.3
Lived with spouse and children	3	9.4	1	5.3
Lived with children	2	6.3	2	10.5
Sheltered housing: composition				
Lived alone	3	100.0	2	100.0
Other	0	0.0	0	0.0
Total number of individuals	*40*	*100.0*	*22*	*100.0*

cent) or had rented privately (9 per cent). As may be expected from information on marital status shown in Table 1, the majority of residents (53 per cent) had been living alone. However, one-third of those who had been living in a private household had been living with their spouse, and approximately 16 per cent had been living with their children or other family members.

Physical and cognitive functioning

The physical and cognitive functioning of residents is shown in Table 3, and includes the ability to undertake activities of daily living (ADLs), relating to personal care, and instrumental activities of daily living (IADLs), relating to domestic tasks, and

Table 3: Physical and cognitive functioning of residents

	Initial sample		Residents followed up	
	No.	%	No.	%
ADLs: unable to do without help				
Go out of doors	15	38.4	7	33.3
Bath/shower/wash all over	16	42.1	6	30.0
Get up/down stairs or steps	16	42.1	8	40.0
Dress/undress	7	18.4	4	20.0
Get in/out of bed (or chair)	3	7.7	1	4.8
Get around indoors (except steps)	8	21.0	4	19.0
Wash face and hands	4	10.3	1	4.8
Use WC	5	12.9	2	9.5
Feed self	0	0.0	0	0.0
IADLs: unable to do without help				
Do housework	25	65.7	12	57.1
Do household shopping	27	71.0	13	61.9
Do personal laundry	23	58.9	10	47.6
Do paperwork/pay bills/ write letters	21	55.2	11	52.4
Prepare hot meals	19	48.7	10	47.6
Make snacks and hot drinks	16	42.1	7	33.3
Use telephone	7	17.9	1	4.8
Barthel Index of ADL (grouped)				
Very low dependence (score 17–20)	21	58.3	13	68.4
Low dependence (score 13–16)	9	25.0	4	21.1
Moderate dependence (score 9–12)	3	8.3	1	5.3
Severe dependence (score 5–8)	2	5.6	1	5.3
Total dependence (score 0–4)	1	2.8	0	0.0
Not known	4	–	3	–
MDS Cognitive Performance Scale				
Intact (0)	19	50.0	13	61.9
Borderline intact (1)	4	10.5	3	14.3
Mild impairment (2)	4	10.5	3	14.3
Moderate impairment (3)	5	13.2	1	4.8
Moderately severe impairment (4)	3	7.9	1	4.8
Severe impairment (5)	3	7.9	0	0.0
Very severe impairment (6)	0	0.0	0	0.0
Not known	2	–	1	–
Total number of individuals	*40*	*100.0*	*22*	*100.0*

Note: These groups follow Granger et al. (1979), with an additional subdivision of the group of higher scores.

two summary measures of physical and cognitive functioning, the Barthel Index (Mahoney and Barthel, 1965) and the Minimum Data Set Cognitive Performance Scale (MDS CPS) (Morris et al, 1994) (see Appendix 1).

Approximately 40 per cent of residents needed help to go out of doors, use stairs or steps or bath or wash all over, and about 20 per cent required assistance with getting around indoors and with dressing. However, fewer than 13 per cent required assistance with other self-care tasks, and no individuals required assistance with feeding themselves. Fifty-five per cent required assistance with no more than two tasks, and 40 per cent were able to undertake all tasks without assistance. The majority of residents required assistance with domestic tasks, such as housework, shopping and personal laundry. Just under half required help to prepare hot meals and 42 per cent required assistance to make snacks and hot drinks. However, only 18 per cent required assistance with using the telephone. These last three activities are particularly relevant to extra care, given that residents' apartments have kitchen facilities and telecare systems may require residents to use sophisticated technology.

The Barthel Index summarises residents' abilities to undertake activities of daily living. Approximately 17 per cent of residents were classified as having moderate or more severe levels of dependence using the index (scores of 0–12). However, 40 per cent were identified as having some cognitive impairment and 16 per cent were severely impaired.

The follow-up sample

As only 22 of the 40 residents (55 per cent) participated in the follow-up, the effective sample size for the results to be presented from Chapter 5 onwards is 22. To examine how representative this sample is of our initial sample, we compare the characteristics of these 22 with the initial sample of 40.

The 22 residents were, on average, two years younger (76 years), with ages ranging from 59 to 90. Approximately one-third of the 22 residents were aged under 70, which is 10 per cent more than for the sample of 40 residents. The proportion of males to females remained the same, and there were very similar proportions of residents in each marital status category. Widows again accounted for about 45 per cent of residents, although no widowers were represented in the sample of 22 residents (compared with three in the sample of 40).

As in the sample of 40, nearly all residents (86 per cent) had been living in their own homes. However, only one of the four residents who had previously been living in a care home was interviewed at six months and was thereby included in our sample of 22 residents. Among those who had been living in a private household, fewer had been living in a house (16 per cent fewer), and slightly more in a flat/maisonette (5 per cent more). However, the type of tenure remained the same in that approximately two-thirds of residents had been owner-occupiers and the same proportion (58 per cent) had been living alone.

The mean score on the Barthel Index of ADL was 16.1 for the 40 residents and 17.1 for the follow-up sample when they moved in. The difference arises because a slightly smaller proportion of the 22 residents (6 per cent fewer) were classified as having moderate or more severe levels of dependence (Barthel Index scores of 0–12). For cognitive impairment, only one of the six residents who were severely impaired participated in the follow-up: i.e. 16 per cent of the 40 residents were severely impaired, compared with only 5 per cent of the 22 residents. Less than a quarter (5) of the 22 residents, compared with two-fifths (16) of the 40 residents, were identified as having some cognitive impairment.

The difference between the mean Barthel and MDS CPS scores for the 22 residents and those who were not followed up is not significant at a 5 per cent level; however, the MDS CPS score difference was significant at the 10 per cent level. It seems that in terms of both physical functioning and cognitive impairment a note of caution is needed, as there was some evidence that those who were more severely impaired did not participate in the follow-up at six months. This is important when we consider the results presented in the following chapters.

5 The cost consequences of moving into Rowanberries

The key research question was whether the cost of living in Rowanberries extra care scheme was more or less than the cost associated with residents' previous circumstances. To draw comparisons between these arrangements, we report the individual-level gross weekly cost as the weekly costs are understandable and comparisons are possible with other work. One of the purposes of the exercise was to explore the methodological issues; we therefore provide some detail about the basis for estimates where necessary. We drew primarily on self-reported data and, as with all sources, the possibility of reporting error always exists. Where possible we have verified estimates from alternative data sources.

The broad cost components, which together represent the total weekly cost of a resident's living arrangement, are the:

- health care service cost;
- social care service cost;
- capital cost of accommodation converted to an annual equivalent cost;
- running (maintenance and/or management) cost of housing;
- other living expenses.

As discussed in Chapters 2 and 4, the comparative analysis is based on the sample of 22 residents for whom before-and-after data was available. However, where possible the presentation of results also includes estimates for the initial sample of 40 residents as a whole. Table 4 summarises the overall cost with more detail provided in Appendix 2.

Health care costs

The cost of the average package of health care was based on the national unit cost for services, multiplied by the weekly frequency with which residents stated that services were received. National estimates of unit costs (per visit or per hour as appropriate) were used for each service, inflated to 2007/08 prices[1] (Curtis, 2007). Details of services used and the respective unit costs are identified in Table A2.1 in Appendix 2. The cost for non-recipients of each service was zero. Table A2.2 in Appendix 2 provides a detailed breakdown of the mean weekly health care costs per resident.

Overall health service costs fell after people had moved in, by an average of £68 per resident per week ($p < 0.10$). The greatest single difference related to nurse visits at home: a mean decrease of £37 per week. It is also interesting to note the pattern of service use. While the proportion of residents who were visited by a nurse at home increased (32 per cent before compared with 73 per cent after the move to Rowanberries), the mean number of consultations per resident decreased from approximately 22 to 11 visits in six months. In fact, the proportion of residents who reported receiving a general practitioner or nurse consultation at home or at the surgery was in all instances higher at the six-month interview stage (by more than 60 per cent). By comparison, the proportion of residents accessing hospital services such as accident and emergency, outpatient appointments or inpatient stays was slightly lower in all instances after the move to Rowanberries. Those residents who had previously been an inpatient at hospital were more likely to see a nurse since living at Rowanberries ($r = 0.89$, $p < 0.001$).

Table 4: Costs before and after moving to Rowanberries

	In previous home		In Rowanberries
	40 residents	22 residents	22 residents
Health care costs	**123.5**	**121.0**	**53.3**
Day hospital	3.6	6.5	0.0
GP at surgery	2.3	2.4	1.5
GP at home	3.4	2.6	2.3
Nurse at GP surgery	1.9	1.5	2.1
Nurse at home	77.9	71.8	35.0
Therapist	1.1	0.5	6.1
Chiropodist	0.7	0.8	1.4
A&E department	0.7	0.7	0.3
Outpatient appointment	5.2	4.9	3.9
Inpatient stay	26.9	29.5	0.8
Social care costs	**73.7**	**65.1**	**193.4**
Day centre	20.2	12.6	0.0
Lunch club	0.2	0.3	0.0
Meals on wheels	3.7	2.6	0.0
Restaurant at scheme	0.0	0.0	19.8
Social worker	9.2	9.3	33.3
Home care	40.4	40.3	88.6
Well-being charge (activities, support)	–	–	51.6
Accommodation costs	**119.9**	**110.0**	**141.1**
Owner-occupied			
Self-reported	111.1	93.9	
Locational analysis	120.0	116.1	
Maintenance	7.8	7.8	
Rented			
Rent only	73.9	72.8	84.1
Maintenance and management	13.5	11.9	57.0
Repairs allowance	13.4	13.5	–
Additional housing costs			
Water rates	4.9	4.9	
Hot water and heating (individual)	5.1	5.1	
Living expenses	78.0	77.9	77.8
Personal expenses	7.6	7.6	7.6
Total cost per resident per week	*403*	*382*	*473*

Social care and support costs

In order to compare like with like it was important to reflect unit costs based on local area prices. The social care resources identified, along with the unit costs supplied by Bradford Adult Services Department, are listed in Table A2.4 in Appendix 2. To provide a comparison, data specific to Bradford from routine data sources is also shown. Table A2.3 in Appendix 2 provides detailed data on the use of social care services and associated costs.

Overall, the weekly cost per resident for social care was higher in Rowanberries compared

with before people moved in. The comparison is complicated by the inclusion or exclusion of meals. Before people moved in, a minority (less than one in seven) of our sample made use of meals on wheels, receiving on average three meals per week. Others made use of lunch clubs and day care (where meals are usually provided). After moving in, no one in the sample reported attendance at a lunch club or receiving meals on wheels in the following six months. However, 20 of the 22 residents in the sample reported using the restaurant, on average taking five meals per week with a mean cost per week of £20 per resident. If we include this in the cost of social care, the package cost six months after moving in was on average £128 more per resident per week ($p < 0.05$). However, the cost of meals at the restaurant could also be categorised under living expenses, not under the cost of the average package of social care received. If restaurant meals were excluded, the difference in weekly social care costs per resident before and after their move to Rowanberries (on average £108 more per week) was only statistically significant at the 10 per cent level.

The difference in the cost of social care before and after moving in was primarily driven by an increase in the costs of support services and the costs of home care received (an average of £89 per week per resident, compared with £40 before moving to Rowanberries). These home care cost estimates were based on self-reported frequencies, with potential concerns about reporting error. The results were validated using anonymised information on the care packages received by all residents in their previous homes provided by Bradford Adult Services. According to these records, the average cost per week per resident was £42, of which more than 80 per cent was borne by social services, with the service user contributing the difference (those residents who were previously in a care home were excluded from this calculation). This figure is similar to the average weekly cost of £40 calculated from frequencies reported by residents in the interview. Moreover, 40 per cent of residents in the sample indicated receiving home care in their previous accommodation. This was again verified by the care plan records, according to which 42 per cent received home care.

The cost of home care reported after moving to Rowanberries (an average £89 per resident per week) is likewise consistent with the price of £91.92 per resident per week on which the block contract between MHA and Bradford Adult Services Department for care services provided is based. Furthermore, MHA was asked to provide information on actual expenditure at Rowanberries on care provision. Preliminary accounts were received from them for the first six months of trading. The weekly cost of £95 per resident was estimated from these accounts, which included all residents receiving care. This is slightly higher than both the £89 from self-reported home care receipt and the price per resident of the block contract. The mean number of hours of home care received was 0.68 per week per resident before moving to Rowanberries compared with 4.95 in the six months after moving into Rowanberries.

In the six-month interview more residents reported seeing a local authority social worker (45 per cent after moving to Rowanberries, compared with only 10 per cent beforehand), but at a lesser frequency. The average social worker cost after a move to Rowanberries was significantly higher at £33 per resident per week, compared with £9 before ($p < 0.05$).

While none of the residents reported attending day care after the move to Rowanberries, social activities were provided at Rowanberries. In addition, staff provided 24-hour cover including support and assistance in emergencies, medication ordering and administration, and contacting and arranging appointments with other professionals. It was not possible to estimate a bottom-up costing of these activities. Estimating costs using a bottom-up approach requires a clear understanding of the processes involved, the units of activity to be measured and the resources required for the activities and processes to take place. In the absence of this information, the 'well-being charge' to residents of £51.60 per week was used to indicate the cost of all of these activities.

The increased social care and support costs identified can only be correctly interpreted in the light of changes in needs and outcomes for residents: results presented in Chapter 8 show improvements in both social care outcome and in

reported quality of life compared with residents' experiences in their previous homes.

Accommodation costs

We need to estimate the opportunity costs to the economy of accommodation, which are not always costs to be met in cash by recipients of services or the public purse. Information was supplied by MHA on the capital cost of Rowanberries, which included the cost of construction, and professional fees. The capital cost, after deducting the development cost of the day centre, was annuitised over 60 years at a discount rate of 3.5 per cent.[2] This resulted in a weekly accommodation cost per person of £84.

In terms of residents' previous accommodation, the relevant weekly cost was similarly calculated as the annual equivalent of the capital cost. This resulted in an estimated weekly cost of £94 for owner-occupied dwellings (for just over half of the respondents). The calculation was based on market values as reported by residents in the interview shortly after moving in. When using the postcodes of residents' previous homes to obtain the associated local market values (HBOS plc, 2008), a higher average weekly cost of £116 per resident was obtained. It may be that residents were not aware of the current market value of their homes, or that a relatively low selling price was obtained because of the poor condition of the home or the need for a quick sale. In terms of rented accommodation, 80 per cent and 20 per cent, respectively, indicated that the council and a housing association were their previous landlords. Based on the average capital cost of a new housing association dwelling[3] from BCIS (Building Cost Information Services, 2007), a weekly equivalent cost of approximately £73 was calculated for these previous social sector tenants. In estimating the accommodation costs of tenants, all of whom indicated having either the local authority or a housing association as their landlord, the most meaningful resource cost was considered as that of a new housing association dwelling. The rationale is that because the need for social sector tenancies is increasing, fewer departures to live in extra care would mean correspondingly fewer dwellings vacated and available for re-letting to new tenants; hence to make the same impact on housing need, an equivalent increase in the number of new social rented sector dwellings would be required. The approach adopted here in costing accommodation follows the approach outlined in the research for the Royal Commission on Long Term Care (Tinker et al, 1999).

The necessary housing-related (i.e. revenue) costs such as maintenance of dwellings, plus – for rented housing – the management costs, need to be added to the capital cost of the accommodation to arrive at a complete resource cost. With respect to owner-occupied dwellings, maintenance cost approximations were obtained from the 2006 Expenditure and Food Survey (Office for National Statistics, 2008), and inflated to 2007/08 prices. For rented accommodation, estimates were obtained from the Communities and Local Government's Housing Revenue Account 2007/2008. With respect to housing-related running costs at Rowanberries, MHA was asked to provide information on expenditure at Rowanberries. Preliminary accounts were received for the first six months of trading, which accounted separately for expenditure on any services provided to non-residents, such as the day centre and domiciliary care to the community. A weekly cost of £57 per resident was estimated from the revenue costs obtained. This figure included running costs in terms of:

- staff costs – managers, senior staff, domestic staff and housekeeper, maintenance workers, administration assistant;
- repairs – maintenance of equipment, lift, heating, alarm, call system, furnishings, cleaning equipment, building upkeep;
- utilities – electricity, gas, water;
- local costs – office costs, consumable supplies, travel.

Thus, in addition to housing management and maintenance costs, utility costs supplied to the scheme as a whole – i.e. also to residents' individual apartments – were included in the revenue costs. Consequently, for consistency and to ensure a like-with-like comparison, estimates of expenditure on

water rates and hot water/heating were included in the estimate of the weekly average accommodation cost of residents' previous homes. These estimates were based on those reported for a single-person retired household, and a one-man/one-woman retired household, mainly dependent on state pensions in the 2006 Expenditure and Food Survey (inflated to 2007/08 prices).

One effect of a person relinquishing their current dwelling to move to extra care is to release housing for use by others. An older person living in an owned or rented home that is unnecessarily large incurs an opportunity cost to society from the inefficient use of housing resources. The 'bedroom standard' is widely used in social housing allocation procedures, and having two or more bedrooms more than the bedroom standard is the universally agreed measure of under-occupancy. The bedroom standard assumes a separate bedroom for a co-habiting couple, anyone over 21, and gender segregation when there are children over 10 years. Using this definition, the estimate of under-occupancy in our sample was 9 per cent of households, i.e. only two out of the 13 people who had previously lived alone (units of housing are not freed up unless occupants vacate them altogether). Of these two, one person had been living in a semi-detached house rented from the local authority; the other had been an owner-occupier of a semi-detached house. This suggests a limited degree to which there was an overall net increase in housing stock as a result of the moves into extra care. Moreover, definitions of under-occupancy need to be treated with caution. There is an increasing demand for extra space that has resulted in some housing associations adapting their allocations policies so that they can offer new tenants (or shared owners) an extra room (Harding, 2007).

The above method of costing accommodation resulted in an average cost to residents of £110 per week before moving to Rowanberries, and £141 per week after the move: thus an average cost difference of £31 per week per resident. These values take into consideration the differences in the size of accommodation, suggesting that the value of the improved accessibility and facilities available to residents in extra care outweighed the value of the housing stock released.

Living expenses

Detailed information was not collected about other living expenses from respondents. An estimate was obtained from the 2006 Expenditure and Food Survey (uprated to 2007/08 price levels[4]) for a single-person retired household and a one-man/one-woman retired household, mainly dependent on state pensions. This figure was adjusted to exclude housing fuel/power expenditure, as this was classified under accommodation-related expenses in our analysis. The derived weekly living expense per resident was therefore approximately £78, with additional personal weekly expenditure of £7.60 (e.g. on leisure). The slight variation in the living expenses estimated for before and after moving to Rowanberries occurs because two more people were living alone compared to in their previous homes.

Total costs

Table 4 shows the total costs, summarising the detailed results discussed above. Estimates for each of the broad cost components are provided for residents' circumstances before and after moving to Rowanberries. The sum of these gives an average cost per person in our sample of £380 per week before moving in, compared with £470 six months after moving to Rowanberries.

Clearly this suggests an increase in resource use. Before we start to draw any conclusions, however, it is important that we have the full picture. This includes the care that is provided by the informal sector.

6 Informal care-givers

A key element of care is the contribution of unpaid, informal carers. The aim of this study was to reflect, as far as possible, carer characteristics, their experiences of the caring process and, importantly, the hidden costs of caring. A self-completion questionnaire sent to carers asked about direct and indirect costs they incurred, their commitment of time, and their personal circumstances before and after the move into Rowanberries.

As we identified in Chapter 2, of the 40 residents who were interviewed when they first moved into Rowanberries, 25 reported receiving help from family members, neighbours, friends and/or other carers in their previous home. Of these 25 residents, 13 were included in our follow-up analysis. We received back eleven completed questionnaires. Clearly the numbers are very small, but this is an important and under-researched area so we feel it is important to report our findings and illustrate the basis on which costs can be estimated. Interestingly, none of the married residents identified their spouse as their carer in the interview on moving into Rowanberries.

Care-giver characteristics

Table 5 shows the characteristics of the carers. Their ages ranged from 34 to 68, with a mean of 53 years. Over half were aged between 50 and 60. Three of the carers were male and eight were married. All but one carer was an owner-occupier. All carers had lived separately from the person cared for. In seven instances the older person was their parent. The average length of time of informal care provided, prior to the move to Rowanberries, was just under seven years. Excluding the two instances where people had been caring for 15 and 18 years, however, this average decreased to 4½ years. Just over half of the carers considered themselves in good health, with a third reporting very good health, and only one carer reporting fair health. Carers were asked whether care-giving had had, and was still having, negative effects on their physical health. While the cared-for person lived in their own home, only a third of carers indicated that care-giving never affected their physical health, whereas this proportion increased to nearly two-thirds after the move to Rowanberries. More than one-third of carers considered their own quality of

Table 5: Demographic characteristics of care-givers

	Informal carers (*n* = 11)
	No.
Age	
Minimum	34
Mean	53
Maximum	68
Age group	
Under 50	2
50 to 60	6
60 to 69	3
Sex	
Male	3
Female	8
Marital status	
Single	1
Married/living as married	8
Divorced/separated	2
Widowed	0
Relationship to the resident	
Parent	7
Sibling	1
Other relative	2
Non-relative	1
Period of care before Rowanberries	
1 year or less	0
1–2 years	1
3–4 years	4
5–6 years	2
7–8 years	2
8 or more years	2
Resident lived with carer	
Yes	0
No	11
Carer's accommodation	
Owner-occupied	10
Rented	1

life to have improved using a single quality-of-life question that measures well-being (Bowling, 1995). As Table 6 shows, carers indicated that care-giving had become less demanding, and that they did not feel as trapped in their role as care-givers.

Table 6: Informal care – care-giver burden

	In previous home (*n* = 11)	In Rowanberries (*n* = 11)
	No.	No.
Care-giving too demanding		
Always	0	0
Often	4	0
Sometimes	4	2
Never	3	9
Trapped in role as care-giver		
Always	0	0
Often	5	1
Sometimes	5	4
Never	1	6
Caused difficulties with family		
Always	0	0
Often	3	1
Sometimes	4	3
Never	4	7
Caused difficulties with friends		
Always	0	0
Often	1	0
Sometimes	2	2
Never	8	9
Caused financial difficulties		
Always	0	0
Often	0	0
Sometimes	4	3
Never	7	8
Negative effect on health		
Always	0	0
Often	2	0
Sometimes	5	4
Never	4	7
Negative effect on quality of life		
Always	0	0
Often	5	0
Sometimes	3	7
Never	3	4

Care-giving costs

There are a variety of types of opportunity costs incurred by carers directly that have been identified in the literature. These include the following:

- direct financial expenditure on goods and services (Glendinning, 1992; Netten, 1993);
- waged and non-waged time spent caring;
- the financial impact of giving up career opportunities/prospects;
- accommodation costs: where the cared-for person moves into the carer's house, the cost of the room can be costed in terms of the opportunity to earn a market rent (Netten, 1993).

The first two of these categories were included in the calculations here. The third requires more detailed information than it was practical to collect, although we asked generally about the impact on careers. Accommodation costs were not relevant as all carers lived separately from the person cared for.

Financial expenditure

The financial costs of care include consumable goods and services, i.e. additional household expenses or extra lighting/heating that would not have been purchased in the absence of disability. Information was collected relating to the type but not the level of increased expenditure due to caring. Estimates for food, heating and laundry expenses were based on those used in Netten (1993), inflated to 2007/08 prices (£4.90 for food per week, £7.20 for heating per week, £0.51 for an additional washload per week). These estimates were comparable to figures obtained from other sources. In terms of expenditure on capital goods, such as stairlifts and handrails, only one carer indicated contributing to the purchase of these together with the person cared for. Insufficient detail was included to allow an estimate of the costs of this.

To this nominal financial outlay, travelling costs were added for the 82 per cent of carers

who travelled by car. No one reported travelling by public transport. The average number of visits per week was identified, from which the expected number of visits in the absence of disability was deducted (e.g. three visits per week unless the carer lived over 20 minutes away (Netten, 1990)). A difficulty that arises in identifying opportunity cost is that, given the relationship between the cared-for person and the carer, a certain amount of time would have been spent together in the absence of disability, and therefore should not be regarded as part of the opportunity cost (Netten, 1990). From the information on the time taken to travel and an assumption of an average speed of 30 mph, estimated miles were calculated and costed at 18.6p per mile using AA 2007 figures for running costs only. The resulting travel costs when these assumptions are made were on average £3.02 per week before the cared-for person moved to Rowanberries, and £0.74 after the move.

On average, the financial opportunity cost to the carer that could be identified was therefore £5.30 per week before and £0.74 per week after the move to Rowanberries. No direct financial contributions from the cared-for person to the carer were made, although one carer did indicate receiving payment in kind (such as meals, road tax etc.) and another indicated receiving a Carer Allowance. Carers were asked whether care-giving had caused and still caused them financial difficulties. While the cared-for persons lived in their own homes, approximately 36 per cent of carers 'sometimes' considered care-giving a financial burden, although more than two-thirds did not. After the move to Rowanberries, one more carer indicated that care-giving 'never' caused financial difficulties (i.e. eight out of the eleven carers).

Care-giving time

The majority of the cost of informal care is in terms of a commitment of time. Carers were asked to identify their care input, both in terms of the type of care tasks provided and the time spent on these tasks specifically, as opposed to social interaction alone. The proportion of carers who carried out the various tasks regularly, as opposed to occasionally or never, is presented in Table 7.

Table 7: Informal care – care tasks undertaken

	In previous home (*n* = 11)	In Rowanberries (*n* = 11)
	No.	No.
Care tasks provided *regularly*		
Shopping	10	9
Managing/reminding of medication	7	1
Managing paperwork/ finances	7	7
Housework	7	4
Providing transport/going out	7	4
Preparing meals	5	2
Gardening	4	0
Other health-related (e.g. catheter)	4	0
Personal care (bathing, dressing etc.)	3	0
DIY/home improvements	3	0
Managing care arrangements	2	1
Physical help (walking, stairs etc.)	2	0
Looking after pets	0	0
Proportion of overall care provided		
Majority	5	1
Half	3	1
Minority	3	9

In estimating the cost of time, the method of costing is dependent on whether the carer has given up time that would have been spent in waged work or not. Approximately two-thirds of the carers indicated that they were in full-time employment, with another third in part-time employment. Only one carer was retired. None, however, reported that their employment status had changed as a result of their care responsibilities. While 40 per cent did indicate that care commitments had affected their work hours ('I would leave work for an hour or so', 'I was often phoned at work' etc.), this time off work had not resulted in lost pay. Thus, the employers had borne the cost and there was no cost to the carer. In estimating the opportunity cost of unwaged time given up (the opportunity cost of time is the value of what would have been done with the time), the assumption has been made that the bulk of productive activity that is common to households is housework (Netten,

1990). The market rate for this is the hourly rate for domestic help. The average cost of domestic help in Bradford was approximately £6.50 per hour in 2007/08. The amount of time indicated by care-givers (plus the estimates available of the time taken to travel to the cared-for person, as discussed above) was multiplied by this hourly rate. The average opportunity cost of caring time, which is borne directly by the carer, was thereby estimated at £76 before the move to Rowanberries, and £25 afterwards.

Another cost of caring can be an impact on the career of the carer. One carer indicated that they had to forgo a promotion and another indicated that they had had to remain in part-time employment. As lost expected future income is difficult to estimate in practice, and not enough suitable data was collected, this effect was not included in our calculations.

Total costs

The above method of costing informal care resulted in an average cost to the carer of £80 per week before the person they cared for moved to Rowanberries, and £25 per week after the move: thus an average cost difference of £55 per week per carer.

If we add this to the total costs reported in the previous chapter, imputing this average cost for the missing values and assuming zero additional cost for those who indicated that they did not receive any informal care, the total additional opportunity costs associated with the move to Rowanberries are reduced to approximately £60 per week. However, any such estimates need to be seen in the context of outcomes and needs: what the costs incurred have effectively bought. More than one-third of carers considered their own quality of life to have improved, and all thought that the quality of life of the person they cared for had improved since the move to Rowanberries. Before we examine these, however, we turn to another important question: who bore the costs?

7 Funding

We have examined the gross resource cost per resident per week before and after their move to Rowanberries, including the costs borne by their informal care-givers. Now we turn to the information, albeit limited, obtained in relation to the funding streams associated with the various cost components outlined in Chapter 5. The intention is to identify the burden of cost falling on the different parties in relation to a resident's move to Rowanberries.

Capital costs

In the discussion so far, the capital cost of accommodation has been converted to a weekly equivalent cost. Of interest is the proportion of rent funded by the public sector. MHA was asked to provide the proportion of capital costs financed by contributions from other agencies. MHA received a capital grant from the Department of Health's Extra Care Housing Fund after a successful bid: this met 46 per cent of the capital costs. Additionally, the local authority's contribution was to dispose of the land to the developer at 'best consideration', i.e. a nominal figure, with a public subsidy contribution of 8 per cent of the capital costs. These subsidies converted to a weekly equivalent per resident are approximately £50.

Rent and service charges

Charges to residents are the principal way in which revenue costs of the scheme are recovered, and an operating surplus was achieved in the first six months of trading. The breakdown of operating income consisted of approximately 60 per cent rent income, 37 per cent from Housing Benefit-eligible service charge income and approximately 5 per cent from Housing Benefit-ineligible service charge income. A very small contribution was also received from charges for the guest room, and other sundry income.

Where the resident's income or savings are low enough, their contribution to both rent and the components of the service charge that are considered eligible (housing management, communal cleaning and heating/lighting, maintenance of equipment) may be met in part or in full by Housing Benefit. From assessment records at admission, 45 per cent received Housing Benefit in their previous homes. Fifty-five per cent of residents confirmed receipt of Housing Benefit while living in Rowanberries; of these, 42 per cent received it directly rather than through MHA. The information supplied by MHA showed that the Department of Work and Pensions (DWP) on average contributed £56 per week per resident towards running costs through Housing Benefit. Across those in receipt of Housing Benefit and known to MHA, the average contribution received was £102 per week per resident: therefore, in most instances both the rent (average rent of £63.50 per resident) and the service charge of £39.25 were financed on behalf of the resident. Ineligible charges for water and heating, which the resident must pay to MHA directly, amounted to £9.45 per flat regardless of its size. These are payable by the resident, but can of course be paid from income from other benefits/pensions etc.

Care and support

Care and support includes health and social care and the type of lower-level occasional support provided in supported housing settings.[1] All health service costs were assumed to be met by the NHS.

Personal care provided by staff at Rowanberries is funded by Bradford Adult Services Department regardless of the resident's income or savings. The price of care was set independently of resident dependency at the scheme level, at £91.92 per place. MHA also invoices Bradford Adult Services Department on a weekly basis for additional care provided, if and when this is needed by residents not currently receiving care. In the six-month expenditure accounts provided by MHA, a very small income figure was listed under purchased

care which only equated to approximately £0.11 weekly per resident.

Residents are, however, required to pay a flat-rate 'well-being' charge of £51.60 directly to MHA, which in essence pays for the support services.[2] This well-being charge is not formally means-tested, as it is set at a level such as to be affordable to any individual on higher-rate Attendance Allowance (further detail on charges to residents at Rowanberries is presented in Appendix 3). Residents were assessed before moving into the scheme to ensure that they had the means to pay this charge – i.e. that they would not be left with less than the Pension Credit guarantee. It seems, therefore, that someone with 24-hour care needs would be better off financially paying the well-being charge than they would be in residential care, especially if they were previously an owner-occupier. In comparison, an individual with lower levels of care need may not necessarily have a financial incentive to move to Rowanberries, as it may be more advantageous for them to remain under the normal non-residential charging policy when receiving home care in their homes.

Benefits received

The State Pension forms the majority of state benefits paid. Data obtained from assessment records in relation to residents' circumstances in their previous homes indicated that 70 per cent were in receipt of State Pension. However, 91 per cent of residents reported receipt of State Pension when asked in the six-month interview at Rowanberries, and this figure was used in the calculations. In addition, approximately 41 per cent of residents received a private pension, and 36 per cent reported entitlement to Pension Credit. Just over one-third of residents reported receipt of Attendance Allowance and about one-third claimed Disability Living Allowance. Approximately 60 per cent indicated receipt of Council Tax Benefit: according to assessment records this was 36 per cent before the move to Rowanberries.

The rates assumed for the benefits and allowances were the national averages obtained from the National Statistics published by the Department for Work and Pensions (2007), and the standard fixed rates where applicable. These

Table 8: Benefits and allowances received

	In previous home[a] (*n* = 22)	In Rowanberries[b] (*n* = 22)
	No.	No.
Benefits and allowances		
State Pension	16	20
Private pension	5	9
Pension Credit	8	8
Housing Benefit	10	12
Council Tax Benefit	8	13
Disability Living Allowance	5	7
Attendance Allowance	8	7

[a] *Based on assessment records.*

[b] *Based on self-report.*

were: a State Pension of £91.63, Second Tier Pension of £70, Pension Credit of £50.04, Council Tax Benefit of £14, Disability Living Allowance of £40.55 (assuming the mid-rate), and Attendance Allowance of £40.55 (assuming the lower rate). It is therefore estimated that, in terms of the sample of 22 residents, on average these benefits and allowances totalled £164 per week; the range was from £92 to £307.

Public sector funding

We estimate that, in total, approximately £360 per week was the average cost falling to the public sector per Rowanberries resident. This figure includes the estimates of subsidised capital cost, Housing Benefit payments towards rent and the service charge, care package funding by social services and the average amount of benefits/allowances received. If we put this alongside the cost of £470 per resident per week it would suggest that, on average, approximately 75 per cent of the formal costs per resident per week fall to the public sector.

Direct like-for-like comparisons with the situation before moving to Rowanberries are problematic. Clearly there has been an increase in the costs to the public sector. In particular, the level of capital subsidy for accommodation costs has increased substantially: fewer than a quarter of the sample were previously in public sector housing. Similarly, there has been a considerable

increase in care and support costs, with residents not being charged for personal care services when they would have been in their previous homes. For care received in their previous homes, the net cost to social services would have depended on the amount of client contribution, which itself would have depended on several factors such as the person's income from benefits and their capital. In Rowanberries, all costs for care are met by Bradford Adult Services Department regardless of residents' income, savings or tenancies. However, residents do have to meet the 'well-being' charge that, as we describe above, covers the costs of some aspects of personal and social care.

Clearly, comparisons between costs are rendered more difficult because of the different charging systems for domiciliary care, residential care and extra care housing – not just in Bradford, but nationally. It seems that the direct cost to social services departments may be less for extra care housing, because Attendance Allowance and Housing Benefit can be claimed to effectively cover a significant proportion of the well-being charge and accommodation costs respectively which in, for example, residential care are nearly all covered by the social services budget. However, the public purse is picking up this bill.

When we identify the degree to which these costs are borne by the public sector, it is important to reflect the degree to which these costs are met by benefits. While a substantial proportion of financial benefits were being received by people before they moved to Rowanberries, the increase in take-up after moving in represents people receiving income that they were previously entitled to, rather than an increase in public expenditure. It can be argued that since social security payments are transfer payments, it is inappropriate to include them in cost estimates, and that the only relevant cost to be considered is the cost of administration relating to these benefits payments. From an efficiency standpoint this is correct, but from a distributional perspective it is helpful to know what these payments amount to, as they represent transfers of wealth from one part of society (taxpayers) to another (social security recipients). It should also be noted that the level of receipt and costs of services have increased, in part through meeting previously unmet needs: we therefore need to put costs in context. In the next chapter we turn to the consideration of what the costs are incurred to achieve: quality of life and outcomes.

8 Outcomes and satisfaction

While the key objective of this study was to identify the cost consequences of residents living in Rowanberries compared with living in their previous homes, this information can only be correctly interpreted in the light of needs and outcomes. A variety of indicators were used to measure psychological well-being, self-perceived health, quality of life and social care outcome. These measures reflected residents' own perceptions of their lives and well-being. We also asked both about residents' current levels of functioning (as reported in Chapter 3) and about their overall satisfaction with and views about specific aspects of quality of care that previous studies have identified as important. More details about the measures used are provided in Appendix 1.

Ideally we want to reflect the situation before people have moved in, but we were interviewing people after they had moved to Rowanberries and there are problems with recall for most measures of well-being. When we were asking about self-perceived health and psychological well-being we needed to focus on the current situation, as recall was likely to be unreliable. We did, however, ask people about how they would rate their quality of life before moving in and, when it came to questions about social care outcomes and quality of care, we asked people to identify their situation before moving. The reports of people's functional ability prior to moving in drew on third-party views. In the follow-up interview at six months, all the questions reflected residents' current perceptions of life at Rowanberries.

If outcomes have improved then the expectation is for higher levels of well-being, fewer needs in the social care domains, and higher levels of satisfaction and quality at six months. Self-reported health and quality of life were converted into composite scores for the purposes of comparison: lower scores reflect better outcomes.

Self-perceived health and quality of life

Table 10 shows the results obtained from the measures of self-perceived health in the interview at admission and in the interview at six months – in both instances, residents were asked to focus on their *current* situation, as recall was likely to be unreliable. Just over two-thirds of residents considered themselves in fair health, and approximately a fifth reported good health. While there were a few minor changes, no difference overall was found in self-perceived health during the six-month period, shown by the unchanged composite score of 2.9.

In the interview at admission, residents were asked to reflect on their quality of life *prior to* moving in: Table 11 shows that most people opted for the middle option, 'alright', with three residents deeming their previous quality of life to be so bad that it could not be worse. Six months later there is a noticeable shift in how people describe their current quality of life in Rowanberries, with the largest proportion reporting a 'good' and no one reporting very poor quality of life. When converted

Table 9: Qualify-of-life and outcome measures

Quality-of-life and outcome measures	Initial interview at moving in Perception	Six months after moving in Perception
Psychological well-being (CASP-19)	Current situation at moving in	All measures reflected residents' current perception at six months
Self-perceived health (single question)	Current situation at moving in	
Quality of life (single question)	Situation before moving in	
Social care outcomes (ASCOT)	Situation before moving in	
Quality of care questions	Situation before moving in	
Resident levels of functioning (Barthel Index of ADL and MDS Cognitive Performance Scale)	Situation before moving in: third-party views	

Table 10: Self-perceived health

Self-perceived health	Initial interview (*n* = 22)		Six months after moving in (*n* = 22)	
	No.	%	No.	%
Mean[a]	2.9	–	2.9	–
Very good	1	4.5	0	0.0
Good	3	13.6	5	22.7
Fair	15	68.2	14	63.6
Bad	3	13.6	3	13.6
Very bad	0	0.0	0	0.0

[a] *Higher scores indicate* poorer *self-perceived health.*

Table 11: Quality of life

Perception of quality of life	In previous home (*n* = 22)		In Rowanberries (*n* = 22)	
	No.	%	No.	%
Mean[a]	4.2	–	3.1	–
So good, it could not be better	0	0.0	0	0.0
Very good	2	9.1	6	27.3
Good	3	13.6	9	40.9
Alright	12	54.5	5	22.7
Bad	2	9.1	2	9.1
Very bad	0	0.0	0	0.0
So bad, it could not be worse	3	13.6	0	0.0

[a] *Higher scores indicate* worse *self-perceived quality of life.*

to a composite score, the lower average score (reflecting a higher quality of life) six months after moving in was statistically significant (mean scores 4.2 and 3.1, $p < 0.005$), even given the small sample size.

Assuming that this reflects a real change, much, if not all, of this change may have already occurred on moving in. Using the CASP-19 psychological well-being measure (see Appendix 1), there was no real difference between people's well-being as reported in the interview at admission and in the interview six months later: residents were again asked to focus on their current situation, as recall was likely to be unreliable.

Social care outcomes: levels of met need

People's perceptions of their levels of met need as measured by the ASCOT score (Adult Social Care Outcome Toolkit – see Appendix 1) were reported as higher after the move to Rowanberries ($p < 0.005$). Responses for each of the seven ASCOT domains are shown in Table 12, and can be compared in terms of reported levels of need

Table 12: ASCOT outcomes

	In previous home (*n* = 20)		In Rowanberries (*n* = 22)	
	No.	%	No.	%
Personal care/comfort				
No needs	14	70.0	21	95.5
Low needs	6	30.0	1	4.5
High needs	0	0.0	0	0.0
Social participation				
No needs	2	10.0	14	63.6
Low needs	8	40.0	6	27.3
High needs	10	50.0	2	9.1
Control over daily life				
No needs	12	60.0	21	95.5
Low needs	8	40.0	1	4.5
High needs	0	0.0	0	0.0
Meals and nutrition				
No needs	16	80.0	20	90.9
Low needs	1	5.0	1	4.5
High needs	3	15.0	1	4.5
Safety				
No needs	7	35.0	17	77.3
Low needs	7	35.0	4	18.2
High needs	6	30.0	1	4.5
Accommodation cleanliness/comfort				
No needs	11	55.0	19	86.4
Low needs	6	30.0	3	13.6
High needs	3	15.0	0	0.0
Occupation				
No needs	9	45.0	16	72.7
Low needs	5	25.0	2	9.1
High needs	6	30.0	4	18.2
Total ASCOT score[b]				
Mean score (Standard deviation)	3.4 (0.9)		4.2 (0.6)	

Notes: The actual terminology used for each domain is presented in Table A1.1 in Appendix 1.

Higher scores indicate lower levels of current needs.

in people's previous homes before moving to Rowanberries and subsequently in Rowanberries. Overall, the results reflected a decrease in reported unmet need across all seven domains. For all domains, apart from meals and nutrition, the differences were statistically significant. As we might expect, the most significant difference found was with respect to social participation and involvement ($p < 0.001$). Nearly two-thirds of residents reported that they had a good social life after moving to Rowanberries, whereas half of the residents had said that they had felt lonely and socially isolated in their previous homes. Residents also reported increased feelings of control over daily living; only one resident felt that they did not have enough control over their daily life in Rowanberries, compared with nine in their previous homes. It is also worth noting that, as we would hope, nearly all the residents indicated no current level of need with respect to personal care/comfort at six months in Rowanberries: i.e. they now 'always feel clean and able to wear what they want'.

Abilities in activities of daily living

One reason why people may have lower needs is that they may need less help once they have moved to a more enabling environment. Table 13 shows levels of functioning and need for assistance in activities of daily living on moving in and from residents' self-reports six months thereafter. The reports of people's functional ability prior to moving in drew on third-party views. In the follow-up interview at six months, all the questions reflected residents' current perceptions of life at Rowanberries. This shows no real change: using the Barthel Index of ADL only one resident declined from low to moderate dependency. Cognitive functioning was measured in this study using the MDS Cognitive Performance Scale. For the majority their scores remained unchanged: only three residents recovered to a higher level of functioning. These findings correspond with those from the self-perceived health indicator – i.e. our sample residents do not seem to consider their health to have changed in the six months since moving to Rowanberries.

Table 13: Physical and cognitive functioning of residents

	In previous home		In Rowanberries	
	No.	%	No.	%
ADLs: unable to do without help				
Go out of doors	7	33.3	12	54.5
Bath/shower/wash all over	6	30.0	9	40.9
Get up/down stairs or steps	8	40.0	9	40.9
Dress/undress	4	20.0	2	10.0
Get in/out of bed (or chair)	1	4.8	2	9.1
Get around indoors (except steps)	4	19.0	1	4.5
Wash face and hands	1	4.8	3	13.6
Use WC	2	9.5	1	4.8
Feed self	0	0.0	1	4.5
IADLs: unable to do without help				
Do housework	12	57.1	10	45.4
Do household shopping	13	61.9	15	68.2
Do personal laundry	10	47.6	7	31.8
Do paperwork/pay bills/ write letters	11	52.4	10	45.5
Prepare hot meals	10	47.6	4	18.2
Make snacks and hot drinks	7	33.3	5	22.7
Use telephone	1	4.8	0	0.0
Barthel Index of ADL (grouped)				
Very low dependence (score 17–20)	13	68.4	13	68.4
Low dependence (score 13–16)	4	21.1	3	15.8
Moderate dependence (score 9–12)	1	5.3	2	10.5
Severe dependence (score 5–8)	1	5.3	1	5.3
Total dependence (score 0–4)	0	0.0	0	0.0
Not known	3	–	3	–
Barthel Index of ADL				
Mean	17.1	–	17.1	–
MDS Cognitive Performance Scale				
Intact (0)	13	61.9	15	68.2
Borderline intact (1)	3	14.3	4	18.2
Mild impairment (2)	3	14.3	3	13.6
Moderate impairment (3)	1	4.8	0	0.0
Moderately severe impairment (4)	1	4.8	0	0.0
Severe impairment (5)	0	0.0	0	0.0
Very severe impairment (6)	0	0.0	0	0.0
Not known	1	–	0	–
Total number of individuals	*22*	*100.0*	*22*	*100.0*

Satisfaction and quality of care

Residents were asked to comment on their levels of satisfaction with the support they received in their previous homes. Table 14 shows that one-third of residents were either extremely or very satisfied with the help they received in their previous homes, while just over a fifth expressed some dissatisfaction. In terms of the care received at Rowanberries nearly all (95 per cent) of the respondents were either quite or very satisfied. Table 15 presents the proportion of residents, both before and after their move to Rowanberries, who gave the highest quality rating (from a four-point scale) to each of a number of aspects of care/support. Although the results are very similar, high quality ratings were given slightly less often for being treated with dignity and respect by the care/support workers at Rowanberries, and for always being kept informed about changes in their care at Rowanberries, compared with when they were in their previous home. However, it should be noted that the response rates on these questions were relatively low (only approximately half of the sample) and therefore no inferences can, or should, be made. Indeed, when the quality items were summed into a composite quality indicator, no statistically significant difference was found.

Table 14: Satisfaction with help from services

	In previous home		In Rowanberries	
	No.	%	No.	%
Extremely satisfied	1	5.3	0	0.0
Very satisfied	5	26.3	10	50.0
Quite satisfied	7	36.8	9	45.0
Neutral	2	10.5	1	5.0
Fairly dissatisfied	3	15.7	0	0.0
Very dissatisfied	1	5.3	0	0.0
Extremely dissatisfied	0	0.0	0	0.0
Total number of individuals	*19*	*100.0*	*20*	*100.0*

Table 15: Quality of care/support received

	In previous home		In Rowanberries	
	No.	%	No.	%
Always come at times that suit me	10	83.3	12	92.3
Are never in a rush	10	83.3	11	84.6
Always arrive on time	12	100.0	13	100.0
Always do the things I want done	9	75.0	11	84.6
Never do things in their own way	9	75.0	10	76.9
Always treat me with respect	8	66.7	7	53.8
I always see the same care worker	9	75.0	13	100.0
I am always kept informed of changes	10	83.3	8	61.5
Total number of individuals	*12*	*100.0*	*13*	*100.0*

Conclusion

Clearly there are problems in identifying outcomes when we have to base many of our measures on recall and different sources. However, given the small sample size the direction of effects and consistency of the findings is encouraging. Across all seven domains of the ASCOT instrument we observed an increase in the proportion of residents who reported that they had no unmet need, and the strongest effects were in the domains that we might expect, such as social participation and feelings of security.

9 Discussion

The core aims of the study were to investigate the resource implications of people moving into Rowanberries and to reflect on the methodological implications for a possible larger study. We start by considering the implications of our findings before discussing the necessary caveats in terms of sample size, representativeness etc., and then draw out some of the implications of the work for studies of cost-effectiveness of extra care.

Implications of moving into Rowanberries

Our findings suggest that the costs associated with living in Rowanberries are higher than when people received services in their previous homes. Estimates for each of the broad cost components (health care, social care, accommodation and living expenses) were provided. The sum of these gives an average cost per person per week of £380 before, compared with £470 after, moving to Rowanberries. Informal care costs fell, with estimated costs to the carer of £80 per week before the person they cared for moved to Rowanberries compared with £25 per week after the move. Total average costs per resident per week from a societal perspective would be £430 and £490, respectively, for before and after the move. We have further estimated that a total of approximately £360 is the average cost falling to the public sector per resident living at Rowanberries.

Some of the higher costs were due to higher accommodation costs. These are not unexpected, given the new, purpose-built nature of the scheme, its design features catering for a range of dependency levels, and its extensive communal facilities. All of these factors would be reflected in aspects of the capital cost and the revenue cost. When making the comparison it is important to ensure we compare like with like, so we reflected the societal cost of the accommodation that had previously been occupied and now would contribute to the wider housing stock.

The increased costs were mainly attributable to a twofold increase in the cost of home care and the additional cost of support services provided to residents. It may be that some moves were precipitated by health problems, in which case a potential need would exist for higher care following the move. However, in the sample as a whole there was evidence of more than a 50 per cent reduction in health care costs after the move, mainly resulting from a reduction in the intensity of nurse consultations and hospital visits. There was also evidence of a change in the pattern with which health care resources were accessed: more residents accessed the services but less frequently after their move to Rowanberries. This, together with the stable findings in terms of both self-perceived health and functional ability, suggests that the residents had better access to health care resources rather than increased needs.

The fact that health and cognitive functioning were effectively unchanged after living at Rowanberries for six months was of particular interest when put alongside the significant decrease in unmet need across all seven social care outcome domains. This, placed alongside our other findings (including reductions in informal care input), suggests that it was primarily the higher levels of formal support received in Rowanberries that resulted in improved outcomes for residents and carers. Unmet needs associated with people's previous community care packages were being met by care services and support provided at Rowanberries.

The lack of a reduction in the need for help in activities of daily living suggests that the impact of the physical environment on functional ability is limited, but some domains of outcome, for example social participation and security, may well be affected by the extra care environment. For us to be clear about the impact of Rowanberries or any other extra care scheme in terms of resources and outcomes it is important to have one or more points of comparison. Would the same effect found in this study (of improved levels of met need

but relatively constant physical and cognitive functioning) have been achieved if the care services had been provided in residents' previous homes, potentially at less cost than those associated with living at Rowanberries? At £470, the estimated weekly package costs in Rowanberries are comparable with residential care (£483 per week (Curtis, 2007)), while the people moving into extra care are considerably less dependent (Darton et al, 2008). Would we have seen the same effect if the more dependent individuals had moved into care homes? All cost comparisons, such as the one presented here, are based on a local situation and are therefore only indicative of costs elsewhere. Conclusions reached for one scheme in Bradford are clearly limited and may not necessarily be transferable to other areas.

The lack of change in functioning is consistent with the findings of an earlier study of frail elderly people supported in their own homes by specially trained home care assistants, instead of in hospital (Challis et al, 1995). That study demonstrated improvements in quality of life, social activity and quality of care, compared with a comparison group of hospital patients.

This brings us to the issue of methodological reservations and implications. We start by considering the assumptions made in the cost estimation, before going on to consider what would be an ideal study design in light of the difficulties experienced in this study, and the issues of sample size and questionnaire design.

Cost estimation

Necessarily, we have had to make a number of assumptions throughout. Some of these could potentially be tested at a later stage through sensitivity analysis or further work:

- Living expenses – while we have identified the core elements it is feasible that other living expenses in this type of accommodation are less than in private households. We have identified the problem of both allocating and estimating the important component of meals.

- The annuitising period used for all accommodation is 60 years by convention, but some sheltered housing and care homes built in the 1960s and 1970s are no longer regarded as fit for purpose. We would want to retain the current assumption here as future-proofing was part of the Extra Care Housing Funding Initiative brief, but in the wider context it is important to consider the implications of different expected lifetimes of these homes in terms of cost-effectiveness.

- A high proportion of funding consists of transfer payments: that is, a movement from one part of the economy to another, rather than a true cost. Shifting costs between sectors is a concern in this field so we want to reflect this but, as we identified in Chapter 7, making valid comparisons is far from straightforward when considering entitlement to benefits.

- In this study we needed to draw on less than a year of accounts data. Scheme costs generally would be expected to level out after two to three years of operation (Fletcher et al, 1999).

Methodological issues and recommendations for future studies

An aim of the study was to evaluate whether the methodology used for collecting the data would be practical and feasible for the purposes of a larger study. While all fieldwork can run into problems at some stage, there appear to be a number of more fundamental problems that it would be important to consider in the commissioning and conduct of future research in this area.

Comparability

We have reiterated throughout the report the importance of ensuring a like-with-like comparison. This applies at all levels of an evaluation – from costing individual components to the overall design. Extra care provides a number of challenges as the basis for comparison is far from straightforward: people who move to extra care may otherwise have moved to a care home, stayed in their home or moved in with relatives. A before-and-after approach, as adopted in this study, simply raises the question of what would have happened otherwise: would needs have remained unmet,

costs risen by as much or more, or combinations of these?

Problems of recall

Another problem associated with the before-and-after design used in this study is the complication of establishing a meaningful 'before' point after people have moved in, in addition to the problems of recall associated with most measures of outcome/well-being. In the study, residents were required to answer questions retrospectively, reflecting on their previous circumstances after they had already moved. The results of the analyses suggested positive outcomes, but we need to be aware that people may not accurately recall previous states. The results were plausible for those measures that we used, but if this type of approach were to be pursued in future, ideally people would be interviewed prior to moving in and/or data collected at the point of assessment. In the absence of this, further methodological work should investigate the reliability and validity of the measures in this context. As recall was likely to be too unreliable for some questions, such as self-perceived health and psychological well-being, residents were in fact asked to focus on the current situation at admission. For these measures, very little difference was found overall between what people reported at admission and six months thereafter, which suggests that much of the change may have already occurred on moving in and therefore was not recorded by these measures.

Data collection

It is the case generally that follow-up stages tend to be problematic. However, the decline in participation in this study was higher than anticipated: the non-consent to the six-month interviews yielded a smaller than desired sample of 22 residents. It is important to draw lessons from this. The decision was made initially to focus on in-depth data collection in order to inform the required comprehensive costing of residents' circumstances before and after moving in. As such, the various cost components discussed in the report each required several questions: consequently the interviews with the residents lasted for about 1¼–1½ hours, on average. The local fieldworker was able, through his previous experience of working with older people, to alleviate the intensity/strain to some extent. However, the decline in the response rate at follow-up and the increased amount of missing data towards the end of the questionnaire suggest that the questionnaire was not appropriately designed for its audience, in terms of both the length in relation to the frailty of the respondents and the content in relation to their interests. It would be important in any future work to pilot the questionnaire carefully and possibly undertake cognitive testing of key questions.

The small sample size in itself was problematic in this study as we had only one scheme. In a larger study with more schemes this may be less of an issue. However, the issue of representativeness is of rather more concern. While not statistically significant, there were indications that those people who were less likely to participate in the follow-up were more impaired and more likely to have moved in from care homes. Thus we may not be getting the perspective of more dependent residents, but getting a biased sample resulting potentially in an underestimate of costs. The issue of representativeness is thus of concern, and in reviewing the methodology employed in this study is an important one to consider.

Greater emphasis should be given to the recruitment of potential proxy interviewees – i.e. to setting up a process of contacting and obtaining consent and participation from proxies, particularly in relation to residents with dementia. In implementing this it would be important to take into consideration the implications of the Mental Capacity Act 2005, which came into effect in October 2007.[1]

We obtained some data from MHA and Bradford Adult Services Department which suggests that social services and housing and care providers could potentially be used as a useful source. However, although we were successful in this instance, it is important not to underestimate the problems associated with this. Considerable time is involved in establishing the relevant contacts and liaising to obtain the data, and there is a lot of variation in the ability of different organisations to provide data. Where resources are limited, participation in a research study may well be a low priority for those requested to provide the data, even when there is enthusiasm for the study at the

top of the organisation. Self-report was consistent with these other sources, and in a large study this can be a more reliable source of information than a variety of agencies.

While the number of carers included in this study was very small, a good proportion of eligible carers was represented, suggesting that this approach to estimating the costs to carers and identifying outcomes is a promising course of action. It should be noted, however, that there have been a number of studies that have attempted to quantify the costs of caring, and that there is, at present, no agreed methodology for calculating the costs of informal care.[2] If valuing the costs borne by carers is an important focus of the study, then more in-depth work with informal carers would be required. In this study, restrictions upon the data that it was feasible to collect and the limitations in the data that was collected mean that the opportunity costs estimates should be treated with some caution. Furthermore, none of the married residents identified their spouse as providing care; in fact only two indicated receiving informal care, and this was from friends/neighbours. Although receiving care from one's spouse was included as an option in the relevant question, it seems that the fact that any kind of help which is provided is to be considered as valid must be made more explicit: residents might be assessing their spouse relative to their own dependency.

Design of future studies of cost-effectiveness

An ideal study design would collect information at the point of assessment, when the decision is made as to which service is most appropriate to the person's needs. Each person in the survey would then be followed up once in receipt of the service (moving to extra care housing or a care home or receiving additional care at home) and again six months thereafter, and at further regular intervals. This would generate valid comparison groups consisting of those people eligible for extra care housing, but who received an alternative intervention such as a care home, additional home care, or an individual budget. Ideally, individuals would be followed up over a sufficient period of time to identify changes in dependency and survival reliably. For example, in a study of individuals admitted to care homes conducted by the PSSRU in 1995, residents were followed up for a period of 42 months to obtain reliable estimates of survival (Bebbington et al, 2001).

In selecting the local authorities in which to conduct the research, thought should be given to variations in demand (the type of resident approaching authorities), supply (the level and type of provision available for local authorities), and policy (in terms of eligibility criteria or interpretations of need). Criteria for inclusion of individuals in the study could be that the person is over 65 and in receipt of the service identified as most appropriate to their needs by a certain date. If the study is not limited to those people assessed as first time publicly supported, long-term residents, then thought must be given to how certain categories of people are to be located and included in the study's comparison groups. In practice, a number of people are admitted to extra care housing from other care homes, from short-stay places or from hospital, or who were previously self-supporting. In fact, this latter group might, rather than through a local authority's referral, apply to extra care housing independently in response to marketing campaigns, and see extra care housing as purely a housing option. This is particularly relevant to care villages, where a high proportion of residents are more comparable to the general population in terms of levels of care need, and for whom to obtain any significant outcomes would require a longer duration of follow-up. It is important to compare like with like, in terms of both timing and level of care need. It might therefore be advisable to focus the initial study exclusively on those with needs, and lay the groundwork for a second, or later, study for those with much lower to no care needs.

The ideal study design outlined above goes some way in answering the problems of comparability and recall associated with a before-and-after approach. However, the difficulties and uncertainties of a survey of this nature should not be underestimated. Using the point of an individual's assessment as the starting point of the study creates inherent difficulties. One is the reliance placed on third parties to establish the sample: i.e. the local authorities must assess who is appropriate for inclusion in the study (people eligible for extra care) and obtain individuals' consent. However, by their nature, assessments often

occur at times of stress, when people themselves may be reluctant to be interviewed, and social workers and care managers are often cautious about allowing access. Moreover, the sources of drop-out are multiple: by local authorities that agree to participate; by staff unwilling or reluctant to participate; and by service users. It is important to establish local liaison arrangements early, and leave a sufficiently long period between negotiations with the selected authorities and the beginning of the fieldwork. Moreover, consideration needs to be given to the changing external environment: the introduction of individual budgets will mean that, increasingly, the person who is supported, or given services, will control the decision as to what support or services they receive.

For a larger study, the sample of schemes needs to be representative of the range of costs facing schemes, and the types of scheme. Costs and the financial circumstances of residents are likely to vary geographically, and so the sample would need to be representative of the geographical range of costs. Extra care schemes broadly fall into two groups: smaller schemes such as Rowanberries, typically with 30–60 units of accommodation; and care villages, which may have 250 units of accommodation or more. However, within each of these broad groups there is considerable variation, and the sample would need to cover the range of sizes within each. Although many extra care schemes, such as Rowanberries, are managed by Registered Social Landlords (RSL), the private for-profit sector also owns similar schemes, and it would be necessary to confirm the scope of a larger study. Among both the RSL and the private sectors, there are a number of large providers, and it would be necessary to represent both national and regional organisations. A scoping exercise to establish the population from which the sample of schemes would be drawn would help to clarify the factors to be considered in selecting a sample of schemes. National providers should be able to help in identifying regional variations in costs that would help in the development of the sampling scheme, but just to represent each of the regions in England would require eight schemes. At a minimum, it is likely that 15–20 smaller schemes and four villages would need to be included in a larger study, but this number would have to be examined carefully before being accepted.

Within the selected schemes, information could be collected from a sample of residents or from the entire population, subject to consent. For larger villages, a sample of residents would be appropriate, but for smaller schemes the complexities of drawing a sample of individuals to represent the range of resident characteristics might outweigh the saving in fieldwork costs for the scheme, and a complete census of residents might be easier to manage.

Conclusion

The main findings of the study were that overall costs per person increased as a result of residents moving into Rowanberries, but that these increases were associated with improved social care outcomes and improvements in quality of life. The increase in costs was primarily associated with higher accommodation costs and higher social care and support costs. However, health care costs were lower. Although more residents made use of health services following the move, a reduction in the intensity of nurse consultations and hospital visits reduced the health care costs overall. Costs to residents' informal carers were also lower.

It is important that the limitations of the study are recognised. It was undertaken in a single scheme and the residents who dropped out of the study at the follow-up stage tended to be more impaired than those who remained. The results may not necessarily be transferable to other schemes in other locations, and the small sample size limited the scope for examining the relationships between costs and outcomes in any detail. However, the results provide a detailed picture of the circumstances of residents who moved into Rowanberries and the costs associated with the support for their housing and care needs, together with an indication of the impact on some of their informal carers. Tentatively, we might conclude that, when costs of moving to extra care are measured comprehensively, they are substantial, but that extra care appears to deliver important benefits to residents and their informal carers.

The second main aim of the study was to examine the methodological issues involved in undertaking a cost-effectiveness study of extra care, to inform the development of a possible larger-scale study.

The study examined a number of practical issues relating to the collection of cost and resident outcome information for extra care housing. In particular, it examined whether residents could provide reliable information about their receipt of health and social care services, or whether such information should be collected from health and social care agencies. The study indicated that residents could provide such information, and that the costs of obtaining information from agencies should not be underestimated. However, problems of respondent fatigue and drop-out could affect the quality of the data collected, and the data collection procedure adopted in any future study would have to be planned and tested to ensure that such problems were overcome. Another, more general, issue relating to the planning of a future study concerns the timing of the data collection. The study of Rowanberries collected information from residents after they had moved into the scheme, and thus the information about their previous circumstances had to be collected retrospectively. Ideally, a before-and-after study would involve the collection of information at the relevant time, and thus the initial collection of information should take place before the person moved.

For a cost-effectiveness study, the costs and outcomes for people moving into extra care would need to be compared with those for people receiving alternative services. Again, this would require the collection of information before the person began receiving the new service. Information would need to be collected at the point of assessment, when the decision is made about the most appropriate service for the individual. Planning a study to collect such information would require detailed preparation and negotiation with the relevant agencies before the sample of individuals was selected, and sufficient time for this would need to be included in the overall research timetable.

Although limited in scale, the study of residents who moved to Rowanberries produced useful findings about the costs and outcomes for residents in an extra care scheme, together with methodological information that should help in the development of a larger-scale study.

Notes

Chapter 2

1 In light of the fact that Rowanberries is intended to serve as a Centre of Dementia Excellence, staff/family were in a few select cases interviewed as proxies for residents who, owing to a cognitive impairment, were unable to provide the necessary data.

Chapter 5

1 An inflator of 3.6 per cent was used for converting 2006/07 prices to 2007/08 prices: this is the average of the Personal Social Services (PSS) Pay and Prices Index for 2005/06 and 2006/07.

2 As recommended by HM Treasury.

3 Bradford council transferred much of its housing stock to housing associations before 21 March 2006 under the Large Scale Voluntary Transfer (LSVT) Programme.

4 An inflator of 2.4 per cent was used for converting 2006/07 prices to 2007/08 prices: this is the average of the PSS Prices Index for 2005/06 (2 per cent) and 2006/07 (2.8 per cent).

Chapter 7

1 Rowanberries did not receive funding from the Supporting People programme grant (Supporting People funding is cash-limited), which often pays for this type of care and support services, which is not eligible for Housing Benefit funding.

2 This weekly 'well-being' charge, which is payable directly to MHA, covers the support of staff 24 hours a day, which includes support and assistance in emergencies, medication ordering and administration, contacting and arranging appointments with other professionals, the provision of social activities etc.

Chapter 9

1 The Mental Capacity Act provides a statutory framework for people who lack the mental capacity to make their own decisions. It sets out who can take decisions, in which situations, and the steps they should take. The explanatory notes to the Act state that 'the decision-maker should consult anyone the person concerned has named as someone to consult and anyone who has a caring role or is interested in his welfare'.

2 Common methodologies include calculating the replacement cost of care, or calculating the cost of opportunities forgone as a result of caregiving (McDaid, 2001), or the friction cost approach which is an extension of the opportunity cost approach (Koopmanschap et al, 1995; Brouwer et al, 2001).

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Appendix 1

Data collection

The objective was to collect data for a comprehensive analysis of residents' circumstances and costs before and after moving into Rowanberries. As we describe in Chapter 2 of the main report, this involved supplementing the data that was already being collected as part of the main DH-funded PSSRU evaluation.

Ethics

The residents of extra care housing schemes are vulnerable people in need of social care and support. The local fieldworker the PSSRU recruited for the Rowanberries extra care scheme, whose role was to help explain the research and interview the residents, had experience of working with vulnerable older people, had been trained by the PSSRU and had completed a Criminal Records Bureau (CRB) check. All new residents in the scheme were informed about the evaluation and what it would entail. Informed consent was established at each stage of the work, so that residents were always clear about the proceedings and their ability to opt out. The University of Kent's departmental ethical review committee reviewed the research procedures.

Service use

For the main evaluation, only very basic service receipt information is being collected from the assessment prior to people moving in. The data collection for this study focused on gaining a more in-depth understanding of the resource use of social care, health services and housing. Residents and their carers were asked about their use of health (including hospital) and social care services prior to moving in. Combining this resource use information with the respective unit costs, the aim was to provide a bottom-up costing. For the most part the intention was to draw on national unit cost information (Curtis, 2007), although local sources were drawn on where this was seen as particularly important or where there was reason to believe that they would produce information that was very different from nationally applicable data.

In the DH-funded PSSRU evaluation, it is intended that information about running costs will be obtained from the financial statements after the scheme has been operational for at least one year. However, in order not to delay this study by waiting for the full year's accounts, the scheme manager was interviewed at the six-month stage to provide estimates of these running costs and any associated services provided to residents as a chargeable extra. MHA was willing to provide more specific information on expenditure at Rowanberries: preliminary accounts were received for the first six months of trading – midway during the financial year. It should, therefore, be noted that the possibility exists that figures are distorted owing to take-up rates of the services.

Accommodation

It was important to estimate the costs of accommodation prior to moving to Rowanberries. Owing to both sensitivity and often lack of information about financial issues, information about rent and maintenance costs may not be forthcoming if individuals are approached directly about their levels of expenditure. For residents who previously lived in rented accommodation, it was more feasible to enquire about type of housing/household structure/tenure information, and to generate a comparable rent and associated expenditure from sources such as the Building Cost Information Survey (BICS) and the Expenditure and Food Survey than to ask for it directly. Owner-occupiers were asked to provide an estimate of the market value of their previous homes – either an exact figure or by indicating which band of values was most likely.

To provide a comprehensive economic evaluation of Rowanberries, and estimate the accommodation costs, we enquired about the capital/development cost of the scheme from MHA. We also drew on previous work providing insight into the relationship between the capital costs, the capital funding sources and the affordability of rents in extra care housing schemes (Bäumker, 2006).

Outcomes and quality

The measures of well-being used in the study included the CASP-19 scale, and a single quality-of-life question using a seven-point scale (Bowling, 1995). For the CASP-19 scale, results are reported in terms of a continuous variable ranging from 0 to 57, which reflects psychological well-being and is obtained by summing all the 19 items in the questionnaire. The 19 items cover four theoretical domains: control, autonomy, self-realisation and pleasure. An indicator of self-perceived health (Robine et al, 2002) was also included, from which any self-perceived change in the resident's health status since living at Rowanberries could be assessed. Self-perceived health has been found in previous work to be a reliable predictor of objective health, and to be closely associated with psychological well-being (e.g. Palmore and Luikart, 1972).

The Adult Social Care Outcome Toolkit (ASCOT) is a developing approach that seeks to identify the specific aspects of people's lives that are addressed by social care interventions (Netten et al, 2006). The measure has seven domains, ranging from basic areas of need such as personal care and food and nutrition to more aspirational aspects such as social participation and involvement and control over daily life. For each domain, respondents were asked to indicate which of three options best described their situation: no needs, low-level needs and high-level needs. Table A1.1 shows the option for each domain reflecting each level of need. Responses were then weighted and summed to reflect the relative importance of each domain and the level of need, drawing on previous work on population preferences (Burge et al, 2006).

Measures of satisfaction and quality of care were based on quality indicators derived from the extensions to national User Experience Surveys for older home care service users and younger adults (Malley et al, 2006; Jones et al, 2007).

Table A1.1: ASCOT domains and levels of need

Domain	Need level	Description
Control	No	I feel in control of my daily life
	Low	I have some control over my daily life but not enough
	High	I have no control over my daily life
Safety	No	I have no worries about my personal safety
	Low	I have some worries about my personal safety
	High	I am extremely worried about my personal safety
Personal care	No	I would always feel clean and would be able to wear what I want
	Low	I would occasionally feel less clean than I would like or would not be able to wear what I want
	High	I would feel much less clean than I would like, with poor personal hygiene
Accommodation	No	My home is as clean and comfortable as I'd like it to be My home is as clean and comfortable as it can be
	Low	My home could be more clean and comfortable than it is
	High	My home is not at all clean or comfortable
Food and nutrition	No	I am able to eat the meals I like when I want
	Low	I can't always eat the meals I like when I want to, but I don't think there is a risk to my health
	High	I can't always eat the meals I like when I want to, and I think there is a risk to my health
Social participation	No	I have a good social life
	Low	I have a social life but sometimes I feel lonely
	High	I feel socially isolated and often feel lonely
Occupation	No	I am fully occupied in activities of my choice
	Low	I am occupied but not in activities of my choice I don't have enough to do to keep me occupied
	High	I have nothing much to do and am usually bored

Appendix 2

Costs

Table A2.1: Unit costs of health care services, 2007/08

Service resource	Unit cost 2007/08
Day hospital per visit	£142[a]
District nurse, health visitor or other kind of nurse[b]	
Home	£77[c]
Clinic	£55[d]
Occupation therapist, physiotherapist, speech therapist or any other kind of therapist[e]	
Home	£38[f]
Clinic	£29[g]
Local authority social worker[h]	£131
General practitioner	
Home	£50[i]
Surgery	£31[j]
Chiropodist	
Home	£17[k]
Clinic	£9[l]
Hospital accident and emergency department	
Accident and emergency	£32[m]
Outpatient appointment	£88
Inpatient service – per bed day	£231

[a] General inpatient cost-weighted average of all day care attendances in a hospital.

[b] Based on an average unit cost between a community nurse (including a district nursing sister and district nurse) and health visitor.

[c] Based on an hour spent on home visit.

[d] Based on an hour of clinic contact.

[e] Based on an average unit cost between a hospital physiotherapist, community physiotherapist, community occupational therapist and community speech and language therapist.

[f] Based on an hour spent on home visit.

[g] Based on an hour of clinic contact.

[h] Based on an hour of face-to-face contact.

[i] Based on a clinic consultation lasting 11.7 minutes including direct care staff costs.

[j] Based on a home visit lasting 11.7 minutes including 12 minutes for travel and direct care staff costs.

[k] Based on a home visit.

[l] Based on a clinic visit.

[m] Based on an average between cost of walk-in, follow-up attendance and non-24 hour A&E department.

Table A2.2: Costs of health care services

		In previous home		In Rowan-berries
		Residents		Residents
Costs in 6 months		**40**	**22**	**22**
Day hospital				
Mean no. of consultations		0.6 (24)	1.1 (24)	0
Recipients		1	1	0
All	Mean cost (£)	85	155	0
	Mean cost pw (£)	4 (142)	7	0
Recipients	Mean cost (£)	3,408	3,408	0
	Mean cost pw (£)	142	142	0
GP at surgery				
Mean no. of consultations		1.8 (12)	1.8 (12)	1.9 (9)
Recipients		15	8	11
All	Mean cost (£)	54	58	39
	Mean cost pw (£)	2 (16)	2 (16)	2
Recipients	Mean cost (£)	144	159	77
	Mean cost pw (£)	6	7	3
GP at home				
Mean no. of consultations		1.7 (5)	1.2 (5)	0.8 (4)
Recipients		15	6	13
All	Mean cost (£)	83	61	61
	Mean cost pw (£)	3 (10)	3 (10)	2
Recipients	Mean cost (£)	220	225	102
	Mean cost pw (£)	9	9	4
Nurse at GP surgery				
Mean no. of consultations		1 (5)	0.9 (5)	1 (6)
Recipients		9	4	7
All	Mean cost (£)	45	35	55
	Mean cost pw (£)	2 (12)	1 (11)	2 (13)
Recipients	Mean cost (£)	201	192	173
	Mean cost pw (£)	8	8	7
Nurse at home				
Mean no. of consultations		24.3 (180)	22.4 (180)	10.9 (60)
Recipients		17	7	16
All	Mean cost (£)	1871	1722	840
	Mean cost pw (£)	78 (578)	72 (578)	35 (193)
Recipients	Mean cost (£)	4,402	5,412	1,155
	Mean cost pw (£)	183	225	48

(continued)

Table A2.2: Costs of health care services (contd.)

Costs in 6 months		In previous home		In Rowan-berries
		Residents		Residents
		40	22	22
Therapist				
Mean no. of consultations		0.8 (7.5)	0.4 (5)	3.8 (48)
Recipients		9	4	3
All	Mean cost (£)	26	14	145
	Mean cost pw (£)	1 (9)	0.5 (4)	6 (76)
Recipients	Mean cost (£)	117	75	1,064
	Mean cost pw (£)	5	3	44
Chiropodist				
Mean no. of consultations		1.1 (6)	1.4 (7)	2.1 (8)
Recipients		23	15	16
All	Mean cost (£)	17	20	35
	Mean cost pw (£)	0.6 (4)	0.8 (3)	1(5)
Recipients	Mean cost (£)	29	30	49
	Mean cost pw (£)	1	1	2
A&E department				
Mean no. of consultations		0.6 (6)	0.5 (2.5)	0.2 (1)
Recipients		10	6	5
All	Mean cost (£)	18	17	7
	Mean cost pw (£)	0.7 (7)	0.7 (3)	0.3 (1)
Recipients	Mean cost (£)	72	64	32
	Mean cost pw (£)	3	3	1
Hospital outpatient				
Mean no. of consultations		1.5 (6)	1.5 (6)	1.1 (9)
Recipients		21	11	9
All	Mean cost (£)	135	128	100
	Mean cost pw (£)	5 (20)	5 (20)	4 (30)
Recipients	Mean cost (£)	258	256	244
	Mean cost pw (£)	10	10	9
Hospital inpatient				
Mean no. of consultations		3 (43)	3.3 (43)	0.1 (1)
Recipients		11	5	2
All	Mean cost (£)	699	767	21
	Mean cost pw (£)	27 (382)	30 (382)	0.8 (9)
Recipients	Mean cost (£)	2,541	3,373	231
	Mean cost pw (£)	98	130	9

Note: Figures in brackets () indicate the maximum.

Table A2.4: Costs of social care services

Costs over 6 months		In previous home		In Rowan-berries
		Residents		Residents
		40	22	22
Day centre				
Mean no. of attendances		9.6 (60)	6 (60)	0
Recipients		9	3	
All	Mean cost (£)	484	303	
	Mean cost pw (£)	20 (126)	13 (126)	
Recipients	Mean cost (£)	2153	2221	0
	Mean cost pw (£)	90	93	
Lunch club				
Mean no. of meals		1.8 (24)	2.2 (24)	
Recipients		3	2	0
All	Mean cost (£)	5	6	
	Mean cost pw (£)	0.2 (3)	0.3 (3)	
Recipients	Mean cost (£)	66	66	
	Mean cost pw (£)	3	3	
Meals on wheels				
Mean no. of meals		19.5 (180)	13.6 (180)	
Recipients		7	3	
All	Mean cost (£)	88	62	
	Mean cost pw (£)	4 (34)	3 (34)	
Recipients	Mean cost (£)	505	453	
	Mean cost pw (£)	21	19	
Social worker				
Mean no. of visits		11.9 (30)	10.7 (30)	1 (6)
Recipients		4	2	10
All	Mean cost (£)	239	242	133
	Mean cost pw (£)	9 (153)	9 (153)	33 (200)
Recipients	Mean cost (£)	2394	2660	293
	Mean cost pw (£)	92	102	73
Home care				
Mean no. of visits		16.8 (77)	17.6 (77)	118.6 (453)
Recipients		16	10	12
All	Mean cost (£)	1043	1040	2208
	Mean cost pw (£)	40 (234)	40 (234)	86 (327)
Recipients	Mean cost (£)	2607	2289	4047
	Mean cost pw (£)	101	89	157

Note: Figures in brackets () indicate the maximum

Table A2.3: Unit costs of social care services, 2007/08

Social care resource	Local unit cost (supplied by Bradford MBC) (£)	National average unit cost[a] (£)	Other sources (£)
Home care per hour	18.62	19.86	
Day centre per attendance	50.47		28.14[b]
Lunch club per session		2.76	
Meals on wheels (per meal)	4.53	3.50	
Restaurant (per meal)			4.00[c]
Social worker (per contact)			131.00[d]

[a] *Based on PSS EX1 2006/07 inflated to 2007/08 figures. The inflator of 3.6 per cent was based on the average of the PSS Pay and Prices Index for 2005/06 and 2006/07.*

[b] *Data from Curtis (2007). Day care costs are difficult to compare as they can be reported as sessions (morning/afternoon/evening) or attendances which could involve more than one session.*

[c] *Data supplied by MHA (2007).*

[d] *Data from Curtis (2007).*

Appendix 3

Charges to residents in Rowanberries

Care and well-being charges

All prospective residents have a full community care assessment, including financial assessment and a benefits check to support them in claiming benefits they may be entitled to. The care package costs are set up as 'flat rate' for both (i) Bradford council's Department of Adult Services and (ii) service users.

Care charges to the Bradford Adult Services Department

The local authority's contractual arrangement with Methodist Homes is in the form of a care block contract for 46 clients receiving care.[1] The 'flat rate' paid by Bradford Adult Services Department is £91.92 per person per week. This flat rate of £91.92 was arrived at by Methodist Homes offering Bradford's Department of Adult Services a choice of service levels – £91.92 reflects the option that was chosen: that the 46 block be split to provide for 10 dementia, 12 low, 12 medium and 12 high care needs. However, Methodist Homes is allowed to provide care over block for additional residents who require care, and these are charged at the same flat rate. There are 52 residents living at Rowanberries and at the six-month stage 47 of these had care needs, while 5 were spouses without care needs. Of the 47 with care needs, these were classified as 13 residents with dementia, 10 low, 12 medium and 12 high care need. Methodist Homes invoices Adult Services four-weekly for the actual number of residents receiving care. All costs for care are met by Adult Services regardless of residents' income or savings or tenancies.

Well-being charges to the service user (Attendance Allowance)

Service users are charged a flat-rate 'well-being charge' of £51.60 per week, which is calculated at 80 per cent of the higher rate of Attendance Allowance. This well-being charge is not formally a charge for care, and it falls outside statutory guidance on 'Fairer Charging' for care. It pays for the guarantee that care and support needs will be met, including changing and unpredictable needs: amongst other things, that the building is staffed 24 hours per day, the manager service and the activities/events.[2] The 47 tenants who require care have to pay the well-being charge directly to MHA regardless of tenure. The well-being charge is not formally means-tested, as it is set at a level such as to be affordable to any individual on higher-rate Attendance Allowance. However, for anyone who is not on higher-rate Attendance Allowance, and who is known to Adult Services not to have their own income to afford the well-being charge (through the financial assessment and benefits check described above), there is scope for Adult Services to use its discretion to pay an individual's well-being charge. So far this situation has not arisen.[3] Thus, in essence, the financial assessment of residents is used in a different way to elsewhere in the community: residents are assessed to 'ensure that they have the means to pay' this charge. The fact that an individual who is on Income Support/ Pension Credit but not on Attendance Allowance would have to go through a 'special consideration'-type process to have their well-being charge paid by the council could potentially be a disincentive to move to Rowanberries. However, there is no evidence of this so far from the assessment and allocation process.

Originally all residents had to pay this charge; however, as from January 2008 for those residents without care needs (five spouses), Adult Services is paying the £51.60 per week on their behalf. Thus, for a few residents with care needs, the costs to the council will be higher than the flat rate of £91.92 as Adult Services have agreed to pay the service-user element of £51.60 for their spouses who do not have care needs themselves.

Rationale behind the well-being charge

Adult Services had carried out a review of commissioned extra care schemes developed prior to Rowanberries. This had highlighted that extra care housing was often an attractive option for people with no or low levels of care need. There was some concern that extra care housing was not achieving all of its aims, in particular providing a genuine alternative to residential care and an

enabling environment for people with higher levels of care need. By setting the level of the well-being charge at 80 per cent of higher-rate Attendance Allowance (increasing each year in line with benefit increases), Adult Services seeks to encourage individuals with higher levels of care need to move to extra care housing, i.e. qualification for higher-rate Attendance Allowance represents a threshold for care needs. An individual with lower levels of care need thereby does not have a financial incentive to move to extra care housing, as it is more advantageous for them to remain under the normal non-residential charging policy when receiving home care in their homes. However, someone with 24-hour care needs would be better off financially paying the well-being charge than they would be in residential care. Of course the council also benefits, because Attendance Allowance and Housing Benefit can be claimed to effectively cover a significant proportion of care and accommodation costs, which in residential care are nearly all covered by the council (people in care homes are not eligible for Housing Benefit, and council-funded residents cannot claim Attendance Allowance).

The flat-rate well-being charge alongside the flat-rate charge to the council also has the advantage of allowing the provider to be flexible and meet changing and unpredictable needs, without the need for any additional systems for approval or brokerage. Similarly, the individual does not have to deal with changes in their weekly care charge if additional hours of care are provided.

Accommodation charges

Accommodation charges to the service user (Housing Benefit)

The scheme consists of 20 one-bed apartments and 26 two-bed apartments. Of these two-bedroom apartments eight were for 100 per cent purchase (ii) and six for 60 per cent shared ownership (iii). Car parking spaces are available to leaseholders and were designated on a first come first served basis. The remaining 32 apartments were for rent.

(i) *Rent*: The weekly rent for a one-bedroom apartment is £59.34 and for a two-bedroom apartment is £67.67. The rent of the property can be paid by Housing Benefit if the resident meets the criteria for this.

(ii) *Full purchase*: Apartments at Rowanberries were available to purchase on a leasehold for sale basis of 125 years. A one-bedroom apartment cost in the region of £125,000 to £130,000, in addition to £300 per annum ground rent. A two-bedroom apartment cost £145,000 to £150,000, with an £400 per annum ground rent.

(iii) *60 per cent shared ownership*: Properties were available for shared ownership at 60 per cent of the value of the property. A one-bedroom apartment cost £75,000 to £78,000 plus a £25 weekly rent for the outstanding amount of capital payment and £180 per annum ground rent (60 per cent of the full ground rent). A two-bedroom apartment cost £87,000 to £90,000 plus £25 weekly rent and £240 per annum ground rent.

(iv) For (ii) + (iii) – *Fees at end of lease*: The weekly service charge (described below) pays only the day-to-day costs. Thus the fee levied at the end of the lease covers capital costs and major refurbishments for the whole community, as well as legal fees and refurbishment costs for the individual apartments. The fee relates to the number of years of residence. MHA offered two options from which purchasers could choose when taking on the lease:

(a) *No guaranteed buy-back:*
   i. MHA may re-purchase the lease at 95 per cent of the open market value at the time of sale. If MHA does not take up this option, the lessor may sell the lease privately to another qualifying person.
   ii. A fee is payable to MHA comprising 1 per cent of the market value for each year of occupation.

(b) *Guaranteed buy-back:*
   i. MHA will re-purchase the lease at 95 per cent of the original price paid.
   ii. No fee is payable for years of occupation.

Service charge to the service user (Housing Benefit)
The weekly service charge for the properties is £39.35, regardless of the type of tenure. This charge also can be met by Housing Benefit following an assessment. The weekly ineligible service charge for the properties is £9.45, which is for water and heating in the individual apartments. This charge is not covered by Housing Benefit and so must be paid directly to MHA (it is not an additional charge for living in extra care, as people in their own homes would receive utilities bills).

Council tax to the service user (Council Tax Benefit)
The council tax charge for each apartment will vary depending on the resident's own circumstances. This is payable directly to Bradford council either by the individual or via benefits (if a resident is entitled to Housing Benefit, then they will also be entitled to Council Tax Benefit).

Additional services for the service user

Meals at the restaurant can be purchased on a pay-as-you-go basis: the approximate cost is £3–5 per meal. For residents who wish to purchase domestic or household support from MHA, such services are charged at an hourly rate of £10 and can be agreed with scheme staff. Services may include for example:

- personal care services: escort trips to hospital, shopping, trips out;
- household support: housework, bed change, shopping, collecting pensions, paying bills;
- maintenance service: fitting shelves, decorating, moving furniture, clearing flat.

Where an individual is assessed by the Adult Services care management service as needing help with domestic tasks, these will be stated on the care plan and MHA will provide the help at no extra cost, i.e. covered by the well-being charge and the council's flat-rate payment. This requires trust on the part of MHA that Adult Services will assess individuals at Rowanberries consistently with individuals elsewhere in the community, and not put domestic tasks on the care plan in the knowledge that there is no cost to the council or the individual.

Notes

1 Other contracts, which do not affect residents in the scheme, are also in place between MHA and Bradford Adult Services Department. A contract is also in place for 75 non-resident clients (15 clients five days a week) at the day care centre at £34.00 per place per week, and an annual domiciliary care contract at an annual rate of £172,865 for services provided to non-resident clients in the local community. These funds are received regardless of the actual number of clients to whom these services are provided weekly.

2 This weekly 'well-being' charge, which is payable directly to MHA, covers the support of staff 24 hours a day, which includes support and assistance in emergencies, medication ordering and administration, contacting and arranging appointments with other professionals, the provision of social activities etc.

3 It is anticipated that it might occur, e.g. if an individual had care needs but was still in the 'qualifying period' for Attendance Allowance.

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