The cost of extra care housing

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Extra care housing aims to meet the housing, care and support needs of older people, while helping them to maintain their independence in their own private self-contained accommodation. Between 2004 and 2010, the Department of Health's Extra Care Housing Fund (ECHF) provided £227 million capital funding for local authority social services departments and housing associations, to stimulate provision of innovative schemes and encourage partnerships in that process (Department for Communities and Local Government, 2008; Department of Health, 2003, 2005).

Although there is no agreed definition of extra care housing, Laing and Buisson (2010) suggest that it can be recognised by several characteristics: it is primarily for older people; the accommodation is (almost always) self-contained; care can be delivered flexibly, usually by a team of staff based on the premises; support staff are available on the premises for 24 hours a day; domestic care is available; communal facilities and services are available; meals are usually available, and charged for when taken; it aims to be a home for life; and it offers security of tenure. Smaller extra care schemes typically have 40 or more units of accommodation (Evans, 2009a), while retirement villages, typically with more than 100 units (Croucher et al., 2006; Evans, 2009a) provide a wider range of social and leisure activities and more accommodation for purchase. Individuals are encouraged to move into retirement villages at a younger age to stimulate the development of a mixed community of interests and abilities.

Extra care housing is an important innovation that has considerable potential to support older people in leading active, engaged lives. Factors encouraging the development of extra care schemes include the ageing of the population, the policy endorsement of 'ageing in place', the development of new lifestyles in later life, and the wide recognition of the need for greater choice and flexibility in housing options for older people (Evans, 2009b; Heywood et al., 2002). The generally very positive experience that extra care residents report (e.g. Bernard et al., 2007; Callaghan et al., 2009; Croucher et al., 2007; Evans and Vallelly, 2007) suggest that this is indeed a promising type of provision. However, particularly in the current financial climate, this raises the issue of cost. In this article we discuss the costing of extra care housing based on an evaluation by the Personal Social Services Research Unit (PSSRU). Over four years, the evaluation followed the development of 19 new-build extra care housing schemes located across England, which received support from the 2004–2006 funding rounds of the Department of Health's Extra Care Housing Fund (Darton et al., 2011).

Methodology

As far as possible, our analysis adopted the economic principles of reflecting the long-run marginal opportunity cost to society of extra care provision. Marginal cost is the addition to total cost attributable to the inclusion of one more individual. Opportunity cost means that the resource implications should reflect opportunities foregone rather than amounts expended, although often the two are the same. A long-run approach is required that takes into account the need to create new services which are associated with, for example, the expansion of services to respond to unmet needs in the community (Allen & Beecham, 1993). However, trade-offs are inevitably required between these theoretical principles and the practical constraints facing an empirical study. For example, while interested in calculating long-run marginal opportunity costs, it is conventional for short-run average revenue costs plus the cost implications of capital and overheads to be used as a proxy value (Beecham, 1995; Drummond et al., 1987).

Our examination of costs of extra care housing was guided by several cost estimation principles widely applied in economic evaluations of health and social care (e.g. Beecham, 1995, 2000; Knapp, 1993, 1995; Netten & Beecham, 1993). Most importantly, costs were measured comprehensively to include as many service components as possible. This is a particularly important principle for extra care housing since the complexity of funding and charging can lead to distorted views about the relative cost of provision. In turn, this can lead to inefficient allocation of resources. We discuss the separate cost components in turn, which together provide an estimate of the unit cost of extra care housing (per person per week).

Data from the 2006-2011 Department of Health-funded PSSRU evaluation of extra-care housing were used in the analyses. Cost information was drawn from a variety of sources, as described in Bäumker & Netten (2011):

- the bid forms submitted to the Extra Care Housing Fund;
- development costs and annual financial accounts provided by the housing associations including some contractors' bids;
- self-completion questionnaires circulated to managers, which covered scheme characteristics, staffing and charges to residents;
- a survey conducted in mid-2007 with local authorities' extra-care housing leads, which sought information on working partnerships, major changes to schemes and implementation issues;
- resident interviews at admission and six-months, which included questions on individuals' health and social care service use.

The (opportunity) cost of capital was calculated as the annuity which depletes the lump-sum value over the lifetime of the building, commonly estimated at 60 years (Beecham, 1995). The appropriate discount-rate is the one set by HM Treasury for public services in the UK at 3.5 per cent (Netten, 2003). Current market values were provided by the housing associations or obtained from the relevant District Valuer's Office. For those properties constructed pre-2008, capital values were uprated to 2008 Quarter 4 prices using the BCIS Tender Price index (Building Cost Information Service, 2008). To avoid double-counting, items such as capital financing and depreciation were removed from schemes' annual income and expenditure accounts when calculating revenue costs. For health and social care expenditure, service use information reported by residents was combined with unit costs for those services (per hour, per visit etc.). The intention was to draw on local sources unless there was no reason to expect these to be different from nationally applicable data. Unless otherwise stated, national unit costs and inflation indices came from Curtis (2008). Information was collected on services for which the residents left their accommodation to attend, such as day-activity centres, appointments at general practitioner surgeries, or hospital-based services. Some professional services were provided to residents in their homes: personal care, community nurse, occupational therapist, chiropodist or social worker visits are examples. For services that absorb a high proportion of total costs, more detail was collected. For example, the duration of hospital admission we adopted was recorded. As far as possible, we adopted a bottom-up costing approach, which 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 occur. The cost for non-recipients of each service was zero. Although some support was provided by family members and friends (informal care-givers), it was not feasible to collect sufficiently detailed information to estimate costs for these inputs.

Results

Our cost estimates are based on a sample of 465 individuals, 67 in two villages and 398 in the 16 smaller schemes. The mean age was 76 years, with half of respondents aged between 70 and 85. About two-thirds were female and the majority of residents (77 per cent) lived alone at the time of the interview. Most people had previously been living in ordinary housing (63 per cent), but 18 per cent had been living in sheltered or supported housing, and 10 per cent had been living in a care home. The mean score of 14.73 on the Barthel Index (Mahoney & Barthel, 1965) illustrates residents' functional ability to perform activities of daily living (ADLs). Approximately 43 per cent of residents were quite able scoring 17 or more (scores can range from 0 maximum disability to 20 minimum disability). Scores on the Minimum Data Set Cognitive Performance Scale (MDS CPS; Morris et al., 1994) indicate that only 3 per cent of those who moved into extra care suffered from moderate to severe cognitive impairment, and challenging behaviour was rare. In terms of residents' medical histories, more than 75 per cent were assessed as having an underlying long-term condition, but only one-quarter of residents needed any nursing care. The mean score on the CASP19 scale (Hyde et al., 2003), for which higher scores indicated better self-reported quality of life, was 36 (scores can range from 0-57).

The mean cost, at 2008 prices, of living in extra care housing, was estimated at £416 per resident per week, with a standard deviation of £180 and a range of £175 to £1,240. As is usual for cost data, there was a positively skewed distribution and the median cost was lower than the mean of £362 per week. Figure 1 shows the proportions of cost accounted for by the different elements, and Table 1 presents more detail on their distribution. Most variability was observed in the estimates of health care (mean £65, range £0-£634) and social care costs (mean £102, range £0-£612), reflecting variation in the way individuals use services.

Service use and the average contribution to total costs are summarised in Table 2, aggregating the care package information for each study member. The figures in the first column illustrate the variety of services used by extra care residents, spanning secondary and primary health care services, as well as social care services provided by local authority and independent sector organisations (e.g. personal care). The final two columns of Table 2 show the relative contribution to the total care package costs for those people using each service and, in the final column, across all residents. As would be expected, accommodation absorbed a high proportion of total cost as residents live in new schemes built to a high quality and specification. Accommodation, housing management and living expenses accounted for 60 per cent of total cost. In terms of non-accommodation costs, the level of personal care provision is noteworthy: 65 per cent of residents reported receipt, and the associated cost accounted for 22 per cent of the total costs of support for all residents (final column). Hospital-based services also played a major role. In-patient services were used by only 28 per cent of sample members, but absorbed 17 per cent of the costs for those admitted. Similarly, therapy services, whether provided within or outside the hospital, were used by only 27 per cent but together accounted for just less than 6 per cent of the costs for those using these services. In contrast to these quite expensive services, some services were used by a much higher proportion of residents but made a smaller contribution to total cost; chiropody, nurse and the GP are examples. This type of descriptive information begins to reveal where the cost burdens lie.

Conclusion

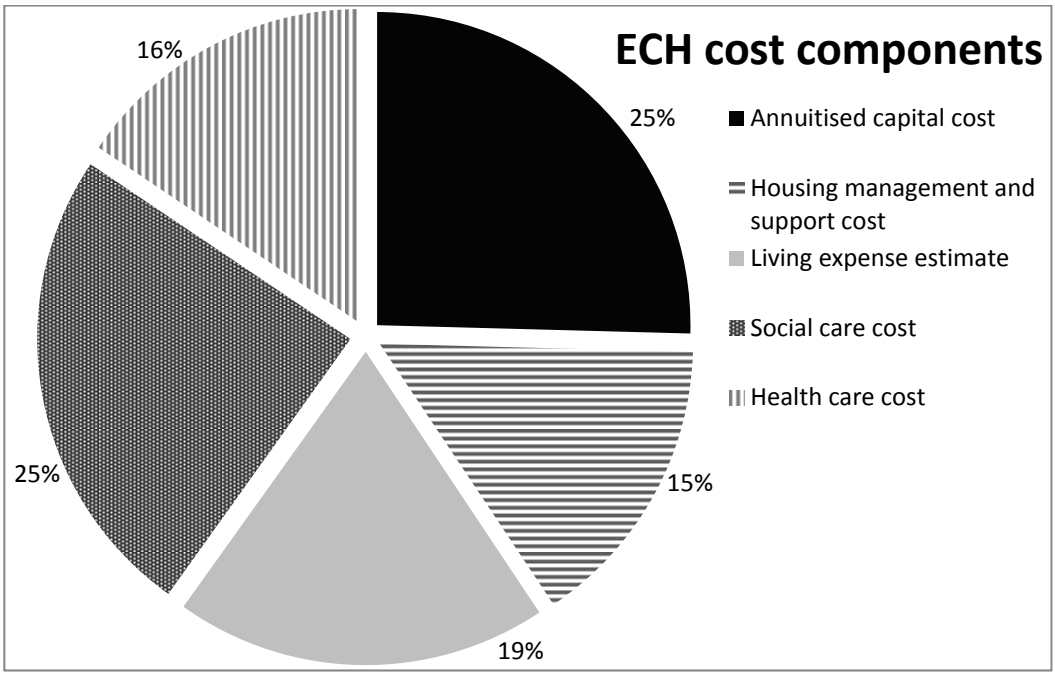
A major contribution of the evaluation of extra care housing by the PSSRU has been a greater understanding of the costs of this type of provision. However, because it is a complex area to cost, it is important to be cautious in the interpretation and generalisation of the findings reported. The diverse charging arrangements across schemes, the varied funding arrangements, and the interplay between welfare benefits and affordability all contribute to this complexity. However, a clear picture emerges showing that no one sector will both bear the costs and reap the benefits.

Table 1: Cost per resident, per week

Cost component	No. residents	Mean	Std. Dev	Min	Max
Capital, incl. land	465	£105.67	£21.29	£50.93	£157.12
Housing management	465	£52.76	£15.90	£21.17	£77.67
Support costs	465	£9.81	£4.80	£2.41	£22.14
Activities cost*	119	£2.85	£0.81	£1.41	£3.52
Social care	465	£102.04	£111.81	£0.00	£612.00
Health care	465	£64.76	£106.55	£0.00	£634.29
Living expenses	465	£79.95	£3.38	£73.80	£81.80
Unit cost per week	**465**	**£415.79**	**£179.10**	**£173.98**	**£1241.70**

* Average across 4 schemes with specific cost outlay for activity provision

Figure 1: Distribution of components of costs of extra care housing



Note: Housing management and support include organising activities where this was specified and housing support tasks such as general counselling, advice, and assistance with domestic tasks and cleaning. Housing support costs accounted for 2 per cent of the total overall.

Table 2: Distribution of costs by service

Services used in Extra Care Housing	Average contribution of service to total cost (%)		
	Residents using each service (%)	Residents using service (%)	All residents (%)
Accommodation	100.0	28.7	25.4
Housing management	100.0	14.0	12.7
Housing support services	100.0	2.7	2.4
Activities provision	25.6	0.8	0.2
Living expenses	100.0	22.3	19.2
Health services			
GP visit at home	52.8	1.5	0.8
GP visit at GP surgery	58.0	1.7	0.8
Nurse visit at home	51.9	5.2	3.5
Nurse visit at GP surgery	30.3	0.4	0.1
Chiropody	63.1	0.7	0.4
Health clinic visit	5.7	3.6	0.2
Therapist visit at home	19.3	3.7	0.8
Therapist visit at hospital	7.3	2.0	0.2
Hospital accident & emergency	27.0	1.0	0.3
Hospital out-patient services	48.4	2.9	1.3
Hospital in-patient stay	27.8	17.0	7.2
Social care services			
Daycare services	11.7	14.2	1.8
Social worker/care manager visit	45.8	1.6	0.6
Personal care at home	65.4	28.0	22.2

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