



# Improving housing with care choices for older people:

## an evaluation of extra care housing

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# Foreword

**The right to choice, personalised services and independence does not fade with age. Historically, however, older people requiring personal care have faced limited options when they have sought housing with care.**

Over the last decade or so extra care housing has emerged as a welcome alternative to residential care and the various forms of sheltered housing previously available.

With its wide variety of tenure, design and care options, extra care housing represents - in physical form - the principles that underpin the Government's approach to personal care: prevention, personalisation, choice and partnership.

This important study of the extra care schemes supported through Department of Health capital funding since 2004 confirms that extra care housing can provide many people with a qualitative alternative to residential care. It shows that it can also limit the growth in health and social care costs as the population ages.

More importantly, this study is a weighty addition to an accumulating body of evidence showing that extra care housing is an attractive option for a generation of older people who prize independence and high quality design and service delivery.

Local authorities with social care, housing and planning responsibilities can use this research to take the lead in ensuring that such provision is available in their community. I urge enterprising councils to forge partnerships with developers, the voluntary sector, housing associations and financiers to embrace this exciting development in the provision of housing and care for older people.

As this evaluation demonstrates, extra care housing truly could keep the light burning for older people determined not to slip quietly into the night.

**Jeremy Porteus**

*Chair, Extra Care Housing Evaluation Advisory Group*

# Summary

This report summarises the results of a Department of Health (DH) funded evaluation of 19 extra care housing schemes that opened between April 2006 and November 2008, and which received capital funding from the Department's Extra Care Housing Fund. Key findings on delivering outcomes, costs and cost-effectiveness, and improving choice were that:

## Delivering person-centred outcomes

- Outcomes were generally very positive, with most people reporting a good quality of life.
- A year after moving in most residents enjoyed a good social life, valued the social activities and events on offer, and had made new friends.
- People had a range of functional abilities on moving in and were generally less dependent than people moving into residential care, particularly with respect to cognitive impairment.
- One-quarter of residents had died by the end of the study, and about a third of those who died were able to end their lives in the scheme.
- Of those who were still alive at the end of the study, over 90 per cent remained in the scheme.
- For most of those followed-up, physical functional ability appeared to improve or remain stable over the first 18 months compared with when they moved in. Although more residents had a lower level of functioning at 30 months, more than a half had still either improved or remained stable by 30 months.

- Cognitive functioning remained stable for the majority of those followed-up, but at 30 months a larger proportion had improved than had deteriorated.

## Costs and cost-effectiveness

- Accommodation, housing management and living expenses accounted for approximately 60 per cent of total cost. The costs of social care and health care showed most variability across schemes, partly because most detail was collected about these elements.
- Comparisons with a study of remodelling appear to support the conclusion that new building is not inherently more expensive than remodelling, when like is compared with like.
- Higher costs were associated with higher levels of physical and cognitive impairment and with higher levels of well-being.
- Combined care and housing management arrangements were associated with lower costs.
- When matched with a group of equivalent people moving into residential care, costs were the same or lower in extra care housing.
- Better outcomes and similar or lower costs indicate that extra care housing appears to be a cost-effective alternative for people with the same characteristics who currently move into residential care.

## Improving choice

- People had generally made a positive choice to move into extra care housing, with high expectations focused on improved social life, in particular.

- Alternative forms of housing such as extra care housing are seen as providing a means of encouraging downsizing, but although larger villages appeal to a wider range of residents, different expectations among residents can create tensions and misunderstandings about the nature of the accommodation and services being offered.
- While the results support the use of extra care housing as an alternative to residential care homes for some individuals, levels of supply are relatively low.
- Funding of extra care housing is complex and, particularly in the current financial climate, it

is important that incentives that deliver a cost-effective return on investment in local care economies are in place if this is to be a viable option for older people in the future.

- More capital investment and further development of marketing strategies are needed if extra care housing is to be made more available and more appealing to more able residents. Without continuing to attract a wide range of residents, including those with few or no care and support needs as well as those with higher levels of need, extra care housing may become more like residential care and lose its distinctiveness.

## Background

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 accommodation. It could be argued that it is the embodiment of many of the core principles of current social care policy: prevention, personalisation, partnership, plurality and protection (Department of Health, 2010). Extra care housing has been viewed as a possible alternative to, or even a replacement for, residential care, and includes a range of specialist housing models. Most recently, the Commission on Funding of Care and Support (2011) has identified extra care housing as providing a means by which people might exercise greater control over their lives by planning ahead and moving to more suitable housing before developing significant care and support needs. However, there is a lack of robust evidence about the effectiveness and, in particular, the costs of extra care housing.

This report summarises the results of a national evaluation that focused on the outcomes for residents and evaluated the ‘productivity’ or cost-effectiveness of this promising type of provision, and draws on the results reported in more detail elsewhere (Bäumker and Netten, 2011; Bäumker et al., 2011a,b,c; Darton et al., 2011a,b).

Although there is no agreed definition, Laing and Buisson (2010) suggest that extra care housing can be recognised by a combination of characteristics:

- It is primarily for older people;
- The accommodation is (almost always) self-contained;
- Personal care can be delivered flexibly, usually by 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 to allow people to age in place; and
- It is owner-occupied or offers security of tenure if rented.

A distinction needs to be made between smaller extra care housing schemes, typically with 40 or more units of accommodation, and larger retirement villages, with 100 or more units (Evans, 2009). Retirement villages provide a wider range of social and leisure activities and more accommodation for purchase. Individuals are encouraged to move in at a younger age to stimulate the development of a mixed or balanced community of interests and abilities. However, developments described as retirement villages vary in the degree to which they provide extra care housing, and some have no extra care housing element.

In order to stimulate provision of a wide variety of innovative schemes and encourage partnerships in that process, the Extra Care Housing Fund provided a total of £227 million capital funding from the Department of Health for local authority social services departments and housing associations between 2004 and 2010 (Department of Health, 2003a, 2005; Department for Communities and Local Government, 2008). The successful schemes

included smaller schemes and larger retirement villages, and included both new build and remodelled schemes and buildings.

Participation in the evaluation reported here was a condition of receiving support from the first two rounds of the Fund. The aim of the evaluation was to examine the development of new build schemes from their implementation, and to follow the residents' experiences and health over time. A core objective was to compare costs and outcomes with those for residents moving into care homes, drawing on the results of previous studies (Bebbington et al., 2001; Netten et al., 2001a,b; Darton et al., 2006, 2010). Linked studies funded by the Joseph Rowntree Foundation (JRF) focused on the before-and-after costs of one scheme (Bäumker et al., 2008, 2010) and the social well-being of residents (Callaghan et al., 2009). An additional linked study funded by the Engineering and Physical Sciences Research Council (EPSRC) developed a tool for evaluating the design of housing and care environments (Lewis et al., 2010). Funding was also agreed with one of the local authorities included in the evaluation and the relevant housing association partner to enable the collection of comparable information about a second scheme in the local authority. Finally, the Thomas Pocklington Trust provided funding for studies of two extra care housing schemes for people with sight loss, in order to provide comparative information to that collected in the main evaluation.



## The schemes

**Nineteen extra care housing schemes that opened between April 2006 and November 2008 participated in the evaluation, including three villages, each with approximately 250 units of accommodation, and 16 smaller developments, with between 35 and 75 units. The dwelling units included apartments and bungalows.**

Among the 19 schemes, 16 were built on brownfield sites, five on the sites of previous sheltered housing or housing for older people, one of which involved re-modelling, and two on the sites of residential care homes. A third scheme was part of a more extensive re-development involving the replacement of a residential care home. The schemes offered a

**Figure 1:** The extra care housing schemes included in the PSSRU evaluation





range of different communal facilities, including shared lounges, craft rooms, restaurants, shops, and hair and beauty salons. The schemes were also intended to provide facilities for members of the local community. Details of the schemes are shown in the Appendix, while the map in Figure 1, opposite, shows their locations.

The schemes offered a mixture of housing tenures, including rented accommodation and leasehold and shared ownership arrangements. The villages provided relatively more accommodation for sale, while seven of the 16 smaller schemes only provided accommodation for rent. The schemes were intended to support residents with a range of levels of abilities. The smaller schemes aimed to achieve a balance of dependency among residents, such as one-third low, one-third medium and one-third high care needs. However, the villages aimed to provide accommodation for active older people as well as those with care needs, and the majority of new residents were not expected to require care services at the time of moving into the villages.

Seventeen of the schemes provided specific information about their policy for providing accommodation for people suffering from dementia. Five of the schemes were designed to make specific provision, two providing specific dementia units and three dispersing residents throughout the scheme. Five schemes indicated that they would meet the needs of people with dementia without stating restrictions, and three limited new residents to those with mild levels of dementia. Four schemes, including the three care villages, indicated that they would meet the needs of residents who developed dementia after they moved in.

Local authorities nominated some residents in every scheme, usually by a joint panel involving housing and social care, but other routes, including self-referral, were also used, particularly for the accommodation for sale in the villages. A number of the schemes provided intermediate care, designed to help people make the transition from hospital care back to their own homes. Since the individuals concerned were not permanent residents, they were not included in the evaluation.

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## The residents

**Information was collected from all permanent residents who consented to participate about their expectations and their experience of moving into extra care housing. Information was also collected about the demographic characteristics and care needs of residents who had received an assessment for care services, subject to the consent of the resident or their representative. In the villages, the majority of residents entered without a care assessment and information was only collected about their expectations and experiences.**

Darton et al. (2011b) describe the residents for whom assessment information was obtained on

moving in and how they compared with people who moved into care homes providing personal care (formerly described as residential homes) in 2005. The comparison was restricted to residents of care homes providing personal care since extra care housing is more likely to provide an alternative for these residents than for residents in nursing homes (Laing and Buisson, 2010). The people who moved into care homes were supported by local authorities, and excluded self-funders, that is, individuals with financial assets that exceed the level for public funding. Self-funders have a wider range of levels of disability than those supported by local authorities, and include a higher proportion with higher levels of

functioning (Netten and Darton, 2003). The proportion of residents who were owner-occupiers was somewhat higher among those who moved into extra care housing (33 per cent) than among those who moved into care homes (26 per cent), suggesting that the extra care housing sample might have included some individuals who would have been self-funders if they had entered a care home. However, the proportion of social housing tenants was the same for both groups (57 per cent).

Information was collected for 817 individuals who had received a care assessment, 172 in the villages and 645 in the smaller schemes. Of these individuals, 609 moved into the schemes within six months of opening, 132 to the villages and 477 to the smaller schemes. There were 909 units of accommodation in these schemes, excluding accommodation designated for intermediate care and for residents in the villages who did not require care services. Thus, information was collected for approximately 67 per cent of the residents who had received a care assessment and who moved into these units in the first six months. A period of six months was chosen to provide comparability across the schemes.

Compared with care home residents, people who moved into the extra care housing schemes within six months of opening and following a care assessment were younger (77 compared with 85 years old, on average), more likely to be male (34 per cent compared with 27 per cent) and less likely to be widowed (47 per cent compared with 68 per cent). People were much less likely to move directly from hospital into extra care housing compared with care homes (4 per cent compared with 38 per cent) and to have been living alone prior to the move (60 per cent compared with 76 per cent). Very few

people who moved to either location were not of white ethnic origin. People who moved into extra care housing were less likely than care home residents to have been receiving informal care (67 per cent compared with 86 per cent), community nursing (20 per cent compared with 30 per cent) or home care (49 per cent compared with 65 per cent) prior to moving in.

As would be expected from these differences, the people who moved into extra care housing had much less need for assistance with activities of daily living (ADLs) and fewer problems of cognitive impairment than those who moved into care homes.<sup>1</sup> However, over half of the residents of extra care housing were unable to go out of doors, use stairs or steps or bath or wash all over without assistance, and about one-third required assistance with dressing, but fewer than 15 per cent required assistance with personal care needs, and only 3 per cent required assistance with feeding themselves. There was also much less cognitive impairment: only 3 per cent of those who moved into extra care housing suffered from severe cognitive impairment, compared with 39 per cent of those who moved into a care home. For those who moved into a care home providing nursing care, the equivalent figure was 54 per cent.

Although the residents were much less dependent than those moving into care homes as a whole, the results are consistent with the aim of creating balanced communities. Compared with residents of private households, those in extra care housing were less able to undertake personal care and domestic tasks. For example, among the residents aged 75 and over in the 2001 General Household Survey, only 11 per cent were unable to bath, shower or wash all over, and 4 per cent were unable to dress or undress (Traynor and Walker, 2003).

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1) The Barthel Index of ADL (Mahoney and Barthel, 1965) was used to measure physical functioning and the Minimum Data Set Cognitive Performance Scale (MDS CPS) (Morris et al., 1994) was used to measure cognitive functioning.

# Residents' experiences

## Moving into extra care housing

All residents who moved in were invited to complete a questionnaire about their reasons for moving in and their expectations of the scheme. Bäumker et al. (2011a) report the results of this. In total, 949 people who moved into the schemes within six months of opening responded, 456 into the smaller schemes and 493 into the villages. Of the residents who moved into the villages, most (368 or 75 per cent) had not received a care assessment prior to moving in.

Reasons for moving were classified as 'push' factors (related to residents' previous accommodation) or 'pull' factors (related to the attractions of the extra care housing environment). For residents with care needs the most important 'push' factors for moving were related to health and managing their long-term condition. Physical health was also identified as a reason for moving by those without care needs, but other health reasons were of much less importance. For example, difficulty with mobility in their previous home was an important incentive to move for the majority of residents with care needs, compared with less than a third of residents without care needs.

Among the housing problems considered as 'push' factors, the need for adaptations was an important incentive to move for about half of the residents with care needs, again compared with less than a third of residents without care needs. Problems with managing their previous home were also given as reasons to move for about half of the overall sample. Garden maintenance was a relatively more important reason for residents without care needs than for residents with care needs.

A quarter to a third of residents identified various social issues related to their previous living circumstances as quite or very important

'push' factors involved in their decision to move. In general, the proportions were quite similar for the smaller schemes and the villages. However, residents in the smaller schemes attached slightly more importance to isolation from the community, whereas residents without care needs in the villages attached more importance to a fear of crime.

Of the 'pull' factors, the most important attractions of extra care housing for the vast majority (over 90 per cent) of residents were: tenancy rights or 'having your own front door'; flexible on-site care and support; security offered by the scheme; accessible living arrangements and bathrooms; and the size of the units. The majority of residents indicated that these factors were very important reasons in their decision to move. There was little difference between those in the smaller schemes or the villages, although on-site care and support was slightly more important for residents with care needs than those without.

Among the other 'pull' factors, the type of tenure and the availability of social or leisure facilities were more often identified as important by those without care needs. The people without care needs who moved into the villages were slightly younger, on average, and more likely to be married. Married respondents were more likely to cite the availability of communal or social facilities as an important factor in moving. The proximity of the scheme or village to family and/or friends was a very or quite important consideration for most, particularly for female residents. The reputation of the provider (the housing association) was a more important attraction for residents in the villages, whether with or without care needs, than for residents in the smaller schemes.

The box on the next page illustrates some of the 'push' and 'pull' factors experienced by residents.

## 'Push' and 'Pull' factors in the decision to move

*'My age and health indicated that I should look to the future for myself and not become a burden to my daughter. The prospect of needing future care plus the security aspect that was on offer was very appealing.'*

(Village resident)

*'We could not manage our previous home owing to having to climb two flights of stairs, as we are both disabled and I need two sticks to walk about. Having a lift here is most helpful.'*

(Scheme resident)

*'I liked the idea of facilities. Where I lived during the day was fine but it was difficult to find evening venues when you don't drive.'*

(Village resident)

In terms of expectations, social life was most important, with more than two-thirds anticipating that their social life would improve. Residents in the smaller schemes were more likely to state that they had no intention of moving to a care home in the future, whereas residents of the villages were more likely to state that the need to move to a care home was less likely, but did not rule it out. Residents in the villages with care needs were more likely than those without care needs to state that they had no intention of moving to a residential care home in the future. However, their views on this were closer to the views of other residents in the villages than to those of residents in the smaller schemes.

Overall, it seemed that residents had made a proactive choice to move, either because independent living was proving difficult, or in anticipation of the need for care services in the future, and taking into account the attractions of extra care housing.

## Social well-being

The JRF-funded study of social well-being (Callaghan et al., 2009) focused on 15 of the schemes, including two of the three villages. The study examined the development of social well-being in the first year after schemes opened and found that:

- The combination of independence, security, availability of care and support and opportunities for social interaction offered by extra care housing were much valued by residents:

*'I think more people should know about [extra care housing]. ... It's far better than sitting by yourself. We get together and talk about all sorts of things, and there's entertainment. ... And there's always somebody around you; there's people next door, even if you can't hear them, you know there's somebody in the rooms. And you've got a bell on there to push if you need anybody. No, it couldn't be better.'*

(Scheme resident)

- A year after moving in most residents enjoyed a good social life, valued the social activities and events on offer, and had made new friends, as illustrated by the following quote:

*'I didn't have a social life when I was at home... and now I've got the friends I've made in here, we have little dos and some of us, we do use downstairs at night, the television ... put DVDs on and have a drink or two.'*

(Scheme resident)

- It was important that communal facilities (particularly restaurants and shops) and social activities were available when schemes opened as they helped residents interact in the early stages of forming a community.
- A wide range of social activities was needed to provide for the diverse mix of residents' interests and backgrounds.

- Those residents involved in running social activities found it gave them ownership of their social lives, and supported their independence. Residents' leadership encouraged others to join in.
- Adequate staff time and resources to support social activities and wider social well-being were crucial, particularly when schemes were first open, but also over time as some residents became frailer.
- Villages appeared well suited to more active older people, and had social advantages over smaller schemes for some. However, they may not always suit more dependent residents. There were also some indications of tension regarding attitudes to frailty and disability, with some residents expressing the view that an increasing number of people with disabilities and greater care needs were moving in, an issue identified in a number of studies (Croucher et al., 2003; Evans and Means, 2007; Croucher and Bevan, 2010). Marketing and not meeting expectations seemed to be mainly, although not exclusively, a village problem, as illustrated in the following quotes:

*'It seems to be more of a care home than an independent living retirement village like it said in the brochures.'*

**(Village resident)**

*'I was told I would have more help and support to be able to live here with my husband, but now my husband has had to go into a nursing home.'*

**(Scheme resident)**

- Residents who felt socially isolated were often in poorer health and received care, which sometimes made social involvement harder:

*'There are only about twelve at the coffee morning. Again, you have to get your carers to push you down and take you back. Everything comes down to if it's on your care plan, it's a bit hard.'*

**(Scheme resident)**

- However, when staff or volunteers were available to help residents move around the scheme, and support participation more generally, these barriers could be overcome. In addition, care and support that was delivered in a flexible way helped to ensure that the care process did not form a barrier to social participation, as described by one scheme manager:

*'If we've got something on the go, we work in conjunction with the care team, and if we know that we've got to be out, then they will reschedule the care that goes in... So we work together like that, with the residents, so they don't miss out just because they've got to have their bath or whatever done.'*

**(Scheme manager)**

Residents valued retaining existing links with the local community, as well as developing new ones. Centrally-located schemes, or those meeting an existing local need for services, found it easier to build up these links. However, residents had mixed opinions about people from the local community coming into the scheme. Some residents were keen to encourage links, recognising the potential social and financial benefit, while others felt resentment towards others coming into their home and using what they perceived as being 'their' facilities.

## Staff turnover

Additional information collected throughout the evaluation, and also from local fieldworkers as the research drew to a close, highlighted some further issues that were important to residents and affected their experience of living in the schemes. The turnover of scheme managers was one such issue: 10 of the 19 schemes had experienced a change in scheme manager since opening. Each village had had three or four managers since opening, as had two of the smaller schemes. Ten of the 15 schemes that had a separate care manager had also experienced a change in this post. These changes could create instability and feelings of uncertainty among residents,

particularly if a replacement was not recruited for some time. The management of a scheme is a very demanding position, requiring a diverse range of skills, and it is not surprising that there may be relatively few suitable candidates for the role. The following comment illustrates some of the problems associated with a change in manager:

*'They can't seem to make up their minds how exactly they want to do something or another – you have one village manager who thinks "we'll do it this way", so that procedure gets settled in, and then he/she leaves, and then we have another one and they have another idea.'*

(Village resident)

Nine of the schemes were described as having had problems with care and support staff turnover. This could result in a lack of continuity for residents, who have to adjust to a new care worker. Residents preferred to have the same carers so that a relationship could be built up:

*'Staff seem to turn over quickly and I never know who I will see next.'*

(Scheme resident)

*'It would be better if we had the same carers so they get to know our ways.'*

(Scheme resident)

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## Costs

**The generally very positive experience that residents reported reflected the findings of other research (e.g. Bernard et al., 2004; Croucher et al., 2007; Evans and Vallely, 2007) and suggested that this is a promising type of provision. However, particularly in the current financial climate, this raises the question of cost. The complexity and range of funding and charging arrangements for extra care housing make this a very challenging area to cost, and it is important to be cautious in interpretation and generalisation of the findings.**

As far as possible, the analysis adopted the economic principles of reflecting the long-run marginal opportunity cost to society of extra care housing provision. This requires the analysis to be as comprehensive as possible. This is particularly important since the complexity of funding and charging can lead to distorted views about the relative cost of provision, and cost-shunting. In turn, this can lead to inefficient allocation of resources.

Clearly, the capital costs of the schemes form a fundamental aspect of extra care housing costs overall. The DH funding initiative aimed to address the problem of the lack of capital subsidy, which had been identified as one of the principal obstacles to the continued development of extra care housing (Oldman, 2000). Bäumker et al. (2011b) report on the funding and estimated capital costs of the schemes in the evaluation.

The contribution from the DH Extra Care Housing Fund towards the capital outlay of the schemes was, on average, £2,636,300 per scheme (range £400,100 – £9,844,400). The average grant was £51,250 per dwelling unit. In addition, several housing associations also accessed other funding sources, such as grants from the Housing Corporation (now the Homes and Communities Agency), from partners, from the local authority (housing and social services), Primary Care Trusts, or adopted a wider strategic approach, for example utilising the Private Finance Initiative (Cairncross and Bligh,

2008). The retirement village developments also attracted significant charitable funding. The most common contribution from local authorities was land at nil value (11 schemes) or marginal cost (seven schemes). Overall, funding from these sources provided nearly 55 per cent of the finance required across the schemes (range 20 – 85 per cent). To meet the balance, the housing associations raised private finance in the form of a mortgage (or similar loan mechanism), and/or used receipts from the sale of units. Outright sales and sales on shared ownership terms contributed, on average, 16 per cent of the capital outlay of the nine smaller schemes with mixed tenure arrangements. For two of the three villages the percentage of total development costs funded by sales income was significantly higher, at more than 50 per cent. Mixed tenure arrangements in extra care housing schemes can be used to subsidise some of the capital cost and make extra care housing more attractive to people who own their own homes. However, the economic climate has affected the sale of properties in mixed developments, as well as in schemes designed for outright sale (King and Howarth, 2009; Laing and Buisson, 2010), and some schemes, including some in the evaluation, have converted properties intended for sale to social renting.

Eleven of the 19 schemes reported cost overruns, where the total development costs exceeded initial projections. Excluding one outlier, where the development was over budget due to planning difficulties, the average cost overrun was £750,000 (range £65,400 – £1,700,000) per scheme, approximately 10 per cent of budgeted costs. The larger housing associations formed the majority of the project partners for the schemes in the evaluation, and their greater institutional capacity and expertise were likely to have played a major role in anticipating and shaping costs, and dealing with expensive surprises during construction.

The average total comprehensive cost per standard apartment (based on the average floor area), including land, building and on-costs,

was £158,500 (range £110,000 – £247,000). A number of factors can cause variation in capital costs, such as scheme design, quality standards, different space allocations (e.g. for communal facilities), the development and construction process, the partnership arrangements in place, and institutional capacity and experience. This makes like-with-like comparison difficult, but the results seem to support Tinker and colleagues' (2008) conclusion that 'When like is compared, as far as possible, with like, remodelling is not inherently less expensive than new building.' The costs were higher than the equivalent for residential care, but much of this could be accounted for by the higher space standards and high levels of communal space, which on average accounted for more than 40 per cent of the floor area in the schemes.

The capital costs were annuitised so that they could be included with the costs of care and support and living expenses, in order to estimate the comprehensive costs for people living in the schemes (Bäumker and Netten, 2011). Costs were estimated for 465 residents for whom information was available six months after they had moved into the schemes. At 2008 prices, the average (mean) total cost was £416 per week; as is usual for cost data there was a positively skewed distribution and the median cost was lower: £362 per week. Figure 2 shows the proportions of cost accounted for by the different elements. Accommodation, housing management and living expenses accounted for 60 per cent of total cost. Costs of social care (mean £102, range £0 – £612) and health care (mean £65, range £0 – £634) showed most variability, partly because most detail was collected about these elements.

A multi-level analysis of cost variation showed that at an individual level higher costs were associated with:

- Living alone;
- Higher levels of physical and cognitive impairment;
- Need for nursing-type care;

- Presence of a long-standing illness; and
- Higher levels of well-being.<sup>2</sup>

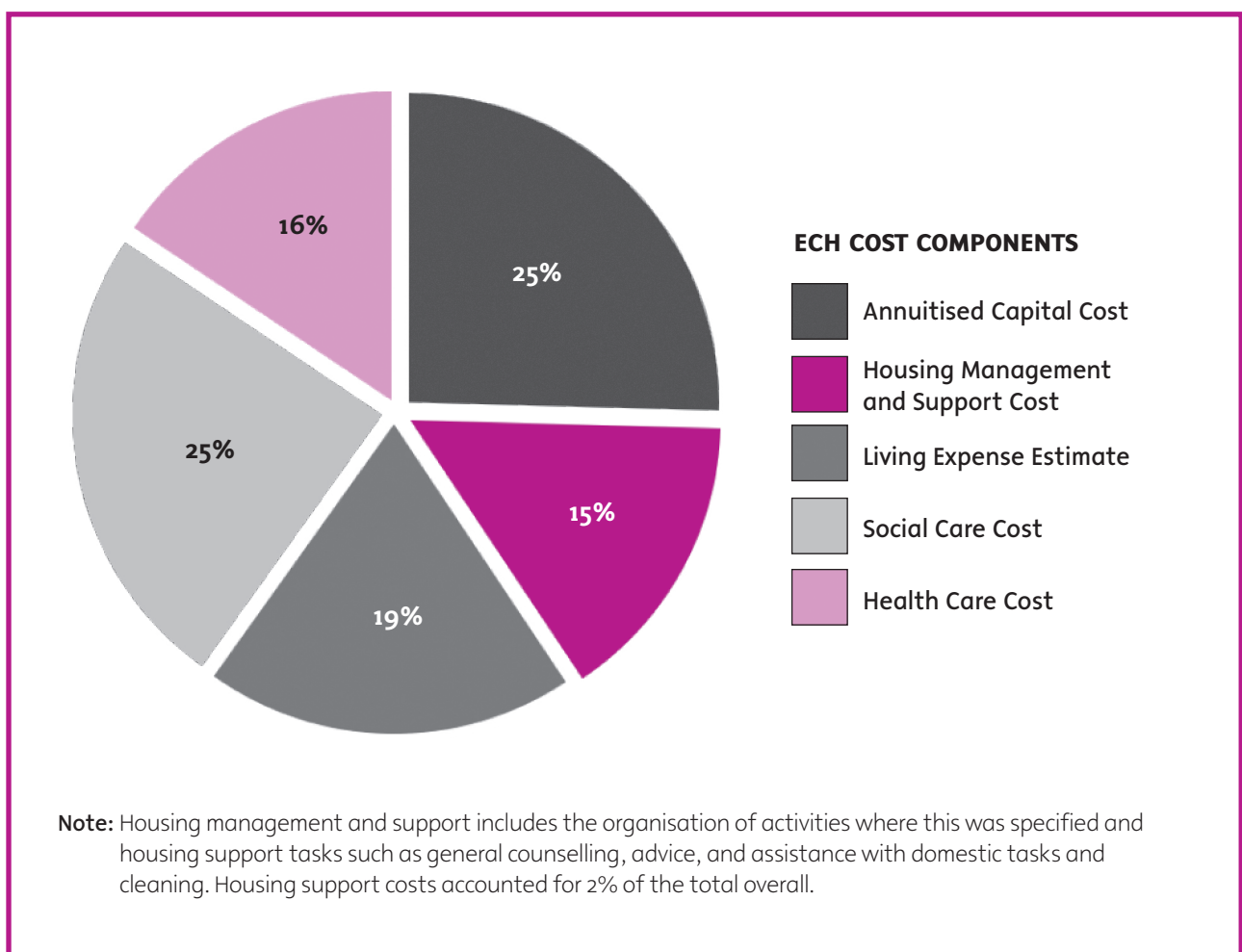
Once this individual-level variation was allowed for, at the scheme level higher costs were associated with:

- Separate housing management and care arrangements;
- Higher staff turnover;

- Larger housing association size; and
- Being located in London.

This suggests that aligned housing management and care arrangements, and incentives to reduce staff turnover, should help keep costs down. The effect of housing association size may be associated with the design characteristics of the schemes and market characteristics at the time of the study.

**Figure 2: Distribution of components of costs of extra care housing**



2) The CASP-19 (Hyde et al., 2003) was used to measure well-being.



# Person-centred outcomes

There are a number of ways in which the outcomes of extra care housing could be defined: people's quality of life; whether they stay or have to move on from the setting; the degree to which they are enabled to live independently; and even mortality – as better outcomes in terms of functional ability and quality of life may well have an impact on mortality. Outcomes are difficult to measure as most move in with, or in anticipation of, deteriorating health. Ideally, information is needed on what would have happened if people had not moved into extra care housing. Quality of life, insofar as this could be explored, is discussed in terms of residents' experiences (see above). What happened to people, in terms of moves, mortality and changes in the functional ability of those who remained in the scheme is discussed here, and is described in more detail in Darton et al. (2011a).

A unique aspect of the evaluation was the longitudinal follow-up of residents up to 30 months after they had moved in, with follow-ups at six, 18 and 30 months. The data were particularly complex to analyse because the schemes opened at different times, people moved in and out of the schemes and dropped in and out of the study, and the follow-ups were not always completed at the nominal times. Thus, people were followed up for different lengths of time and the data were not always consistent.<sup>3</sup> However, it was possible to track whether people stayed, moved on and how long they survived. It was also possible to examine changes in physical and cognitive functioning over time, and to link all of these outcomes to characteristics of people when they moved in.

At least some information was obtained about the destination for 688, or 84 per cent, of the 817 residents for whom assessment information

was collected. Of these, two-thirds (67 per cent) were still living in the scheme by the end of the study. Just 10 per cent had moved on, usually to a care home, most frequently to a nursing home.

By the end of the study about a quarter (24 per cent) had died, usually after going to hospital, although about a third (37 per cent) of those who died were able to end their lives in the scheme. Work has been undertaken (Easterbrook with Vallely, undated) to develop end of life care in extra care housing in line with the objectives of the national End of Life Care Strategy (Department of Health, 2008), and further work is needed to enhance the quality of end of life care (Croucher, 2009). For the residents who died, the average survival time from moving in was around one-and-a-half years. When compared with predictions of survival using a model of the factors associated with death rates based on people who moved into care homes (Bebbington et al., 2001), levels of mortality were much lower in extra care housing than predicted. The model predicted that 50 per cent of the residents aged 65 or over would have died by 32 months. In fact, among the residents aged 65 or over who were followed up over the full period of 30 months, only 34 per cent died, that is, around 70 per cent of the predicted number.

In terms of changes in dependency over time, using the Barthel Index of ADL, over 40 per cent of people followed up were at a better level of physical functioning at six months and at 18 months after moving in, although using the most conservative criterion to define change in the index reduced this proportion to about 12 per cent. On this more conservative basis, most people (over 70 per cent) remained at the same level even at 30 months after moving in. However, whatever criterion is used, by 30

3) Although the length of follow-up was restricted for some schemes, information was collected about residents up to 30 months after they moved in for 11 of the 19 schemes.

months the balance had changed and a higher proportion were at a lower level of physical functioning than had improved: 47 per cent or 22 per cent had deteriorated, compared with 27 per cent or 8 per cent who had improved, depending on the criterion used. In terms of cognitive impairment, however, the balance

appeared to go the other way, with a larger proportion improving (14 per cent on a conservative estimate) than deteriorating (6 per cent). However, this result must be interpreted particularly carefully since those whose mental state was deteriorating were more likely to drop out during the course of the study.

## Cost-effectiveness

**In the current financial climate, it is critical that resources are targeted effectively. To do this, information is needed about the comparative costs and benefits of alternative courses of action. It is essential in this process that like is compared with like. This is particularly challenging for extra care housing, where comparisons are far from straightforward in terms of individuals, costs or outcomes.**

An in-depth study of the costs before and after moving into one of the schemes was funded by JRF (Bäumker et al., 2008, 2010). The main finding was that the overall cost per person increased after a move from the community to extra care housing, but that this increase was associated with improved social care outcomes and improvements in quality of life. This raises the question: 'what would have happened if people had not moved into extra care housing?'. If they had remained in their own homes or moved into a care home their costs and outcomes would also have changed.

As described above, the evaluation was designed to facilitate comparison with previous studies of people moving into care homes. These included a longitudinal study of publicly-funded people moving into care homes in 1995 and followed up for 42 months (Bebbington et al.,

2001). Bäumker et al. (2011c) describe how, in order to compare like with like, propensity score matching<sup>4</sup> was used to match people who survived to six months in care homes with those in the extra care housing sample. As in the comparisons with residents of care homes described above, the matching procedure was restricted to residents of care homes providing personal care. Of the 614 people who moved into care homes, 240 or 39 per cent could be matched with people who moved into extra care housing. In order to address the probable increase in levels of dependency of publicly-funded people moving into care homes since 1995, the sample was also matched with people admitted to care homes in 2005 (Darton et al., 2006, 2010), just a year before people moved into the first schemes that opened. Of the people who were admitted to a care home in 2005, 30 per cent (n = 136) were matched to an extra care housing resident, all of whom were in the sample of extra care housing residents matched with the 1995 cohort.

In order to compare costs, the weekly prices paid for care home places were uprated to 2008 levels. These prices cover accommodation, living and social care costs, but not health care, so the weekly costs for the extra care housing sample also excluded this element. Outcomes were compared in terms of a change in physical functioning between moving in

4) A technique for ensuring that the residential care and extra care housing residents included in the analysis were closely matched in terms of relevant characteristics.

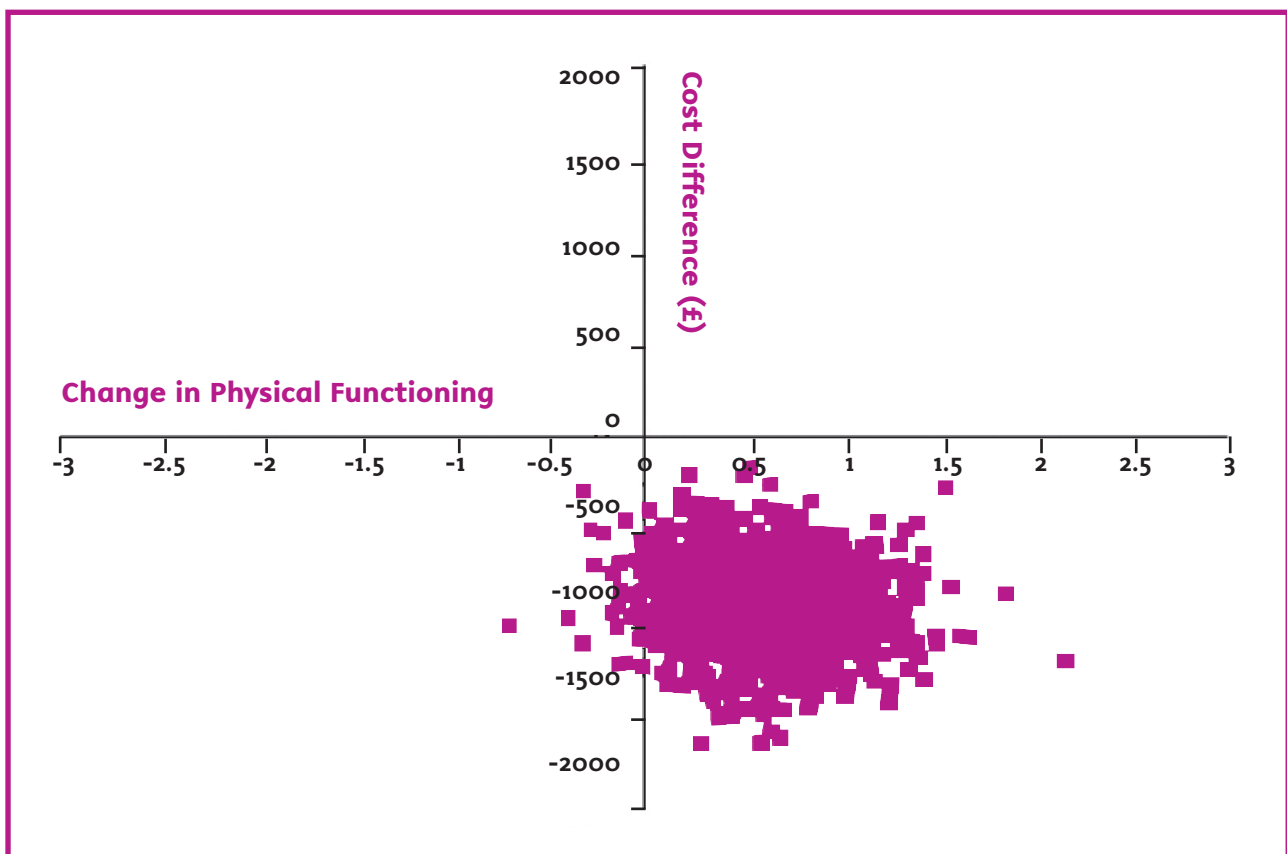
and six months later. Costs in extra care housing were slightly lower for the matched sample, compared with care homes (£374 and £409 per week respectively). There was a slight improvement in physical functioning and the level of cognitive functioning was stable in the extra care housing sub-sample. This contrasted with slight declines in both physical and cognitive functioning in the matched care home sample.

To allow for uncertainty in estimates a bootstrapping exercise was undertaken, which repeats the comparison for randomly selected subsamples from the two groups. Figure 3 shows the relationship between costs and physical

functioning (measured using the Barthel Index of ADL) for the full matched sample. This suggests that extra care housing is a cost-effective alternative to care homes overall when the full matched sample is used. When the comparison was limited to those who could be matched to people who moved into care homes in 2005, outcomes remained clearly better, although there was less evidence of cost savings.

Cost acceptability curves<sup>5</sup> were also estimated, revealing, as would be expected given these results, a high probability that the extra care housing would be regarded as cost-effective by decision makers (Bäumker et al., 2011c).

**Figure 3: Cost-effectiveness of extra care housing compared with care homes**



5) Cost acceptability curves plot the probability that an intervention is cost-effective relative to alternatives for different values placed on incremental outcome improvements.

# Key messages and implications

**The evaluation reported on here, the first large-scale evaluation of extra care housing of its kind funded by the Department of Health, focused on schemes that were developed in response to a specific government capital funding programme. While this focus means the schemes may not be representative of extra care housing schemes in general, the study adds significantly to the evidence base on extra care housing schemes and their residents.**

It was argued above that extra care housing could be seen as potentially addressing many of the core principles of current social care policy. The schemes required partnerships between housing providers, local councils and care providers (Department of Health, 2003b). Drawing on the expertise of these partners was particularly helpful in the early developmental stages of the schemes in anticipating delays and potential problems (Bäumker et al., 2011b). Extra care housing adds to the plurality or diversity of provision, an alternative way of living, providing balanced communities for people with a range of levels of needs, including those who otherwise would be expected to move into care homes (Darton et al., 2011b). The evidence from the evaluation suggests that people opt into this type of provision with primarily positive expectations (Bäumker et al., 2011a), particularly focused on the social aspects of living in the schemes. The nature of extra care housing, where people have their own front door with 24-hour care and support available, is personalised, largely meeting their expectations: delivering high levels of social well-being and friendship formation (Callaghan et al., 2009).

It is always difficult to identify prevention, as by definition what does not happen cannot be observed, and it is difficult to make legitimate comparisons for such a diverse group.

As would be expected, given the age and other characteristics of the individuals who opted to move into extra care housing, there was some decline in physical functioning among those who remained in the schemes. However, only a minority of residents moved on, and there was also evidence of improvement in the shorter term. Furthermore, comparisons with people who moved into residential care indicate that extra care housing could provide positive benefits. When the sample was matched with people who moved into care homes in 1995 and 2005, the analyses suggested better outcomes in extra care housing, in terms of functional and cognitive ability, at six months, which would be expected to have beneficial implications for people's future needs for care and support. In terms of mortality, the best estimate is 34 per cent in 30 months for residents aged 65 or over (Darton et al., 2011a), around 70 per cent of the predicted number based on residents' individual characteristics on moving in.

This positive picture raises the issue of cost. For improved productivity, both better outcomes and either the same or (ideally) lower costs are required. The complex funding arrangements for extra care housing make comprehensive accurate costing difficult and a major contribution of the evaluation is a greater understanding of the costs of this type of provision. Costs were lower when residents were compared with equivalent people who moved into publicly-funded care home accommodation in 1995, and similar when compared with those for the more dependent type of person who moved into care homes in 2005. Despite this shift, for about a third of people moving into care homes, extra care housing appears to be a cost-effective alternative.

A cost-effective alternative to care homes which is positively regarded by older people is clearly very welcome. However, the complexities of the funding arrangements are such that no one sector will both bear the costs and reap the benefits. In such situations, individual sector perspectives can be expected to drive decision-making, rather than the overall public good. It would be expected that the allocation of costs for these schemes would reflect the fact that they were partially funded by the Department of Health's Extra Care Housing Fund, which was intended to encourage innovation. As such, it was not surprising that the JRF study of one of the schemes showed that, in that instance, the public purse bore the vast majority of the cost (Bäumker et al., 2008). Whatever the pattern for these schemes at the time of the study, this is likely to change in the future, with changes in the basis for long-term care funding. One important implication of this study is that one would hope to see incentives in place that encourage this type of provision in any future policy recommendations.

The policy to maintain older people in their own homes as long as possible has been a long-standing objective of successive governments, set out most recently in *A Vision for Adult Social Care* (Department of Health, 2010). However, with increasing impairment, people's accommodation often makes this difficult, and this is reflected the 'push' factors identified as being associated with moving into extra care housing. Overall, the motivation for moving into extra care housing appeared to be a positive choice to live in a more supportive and sociable environment, instead of a response to a crisis that often precipitates a move into a care home.

A major barrier to a shift towards extra care housing is the relatively low level of current provision. Using a broad definition, there were about 43,300 extra care housing units of accommodation and nearly 480,000 units of

ordinary sheltered housing in England in 2009 (Elderly Accommodation Counsel, 2009), compared with about 276,000 personal care (formerly residential care) places and about 179,000 nursing care places in care homes in the United Kingdom (Laing and Buisson, 2009). In a climate of financial austerity, investment in such provision seems unlikely if decision makers are focused on immediate rather than longer-term cost savings. Even within the course of the study, the downturn in the property market suggested that private investment and a willingness of individuals to purchase extra care housing property was not looking promising.

An important aspect of both overall costs and incentives for investment is that, while the focus here is on the comparison with residential care, a substantial proportion of people who live in extra care housing schemes are more able, and it is this element of a balanced community, including the active involvement of residents in the schemes, that contributes to their success. With the exception of the very able people in the villages, residents still have higher needs for help than in the general population. It was not possible in this study to compare outcomes for those that would otherwise have remained in their previous homes. With pressures on councils to raise eligibility thresholds for social care receipt, the chances are high that the true alternative would be a lack of any wholly publicly-funded support for most. Increasing provision for such individuals, therefore, requires improved strategic planning by social services departments and their planning, health and housing partners to facilitate the market development of a range of housing with care solutions locally, with extra care housing forming part of a spectrum of improved housing with care choices for older people, including private sector developments (Miller, 2008; Housing LIN, 2011).

While it is clearly critical that there is sufficient investment in extra care housing generally, other findings are important if extra care housing is to deliver its full potential:

- Factors associated with costs can be used to consider how best to manage resources, for example lower costs being associated with joint housing management and care arrangements.
- While the cost-effectiveness analysis focused on changes in functional ability, ultimately the objective is improved quality of life. In extra care housing, as in other care settings, higher costs are associated with greater well-being, after allowing for people's levels of functioning.
- In delivering outcomes, communal facilities, particularly restaurants and shops, and activities are important. In a period of cost cutting, this might be particularly challenging, but careful design and location of schemes and economies of scale can help ensure the accessibility and/or viability of such facilities (Homes and Communities Agency, 2009). Moreover, when setting up a scheme, communal facilities and organised activities need to be available from when the scheme opens.
- Some questions were raised about the degree to which the most impaired residents were

able to benefit from the opportunities for social participation. Schemes should ensure that support and care is as flexible as possible to facilitate this.

- The aims of the extra care housing scheme should be explained to prospective residents, particularly when the intention is to support diverse groups of older people (some with high care and support needs) or encourage local people to use the scheme's facilities.
- Good design, incorporating the principles of 'progressive privacy', with clear demarcation between public and private spaces, could also make local community use of the scheme more acceptable to residents.

Necessarily, this type of research serves to highlight unanswered questions which would warrant further research. If extra care housing is to be used as an alternative to residential care, further work is needed on how best to support those who are most dependent. Further work is also needed on the cost and outcome implications for the more able, especially self-funders making a lifestyle choice. Specifically, 'does extra care housing provide an attractive proposition to encourage downsizing' (Homes and Communities Agency, 2009; Sutherland, 2011)?'; and, not necessarily very compatible with the first question, 'how can this limited form of provision be best targeted?'

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## Methods

**In order to develop close relationships with the schemes, local interviewers were recruited and trained to liaise with each scheme and assist in data collection, including helping residents to complete questionnaires when required. All residents who consented to**

**participate were provided with a questionnaire on their expectations and experience of moving in.**

Information on demographic characteristics and care needs drew on the information collected in the assessment process using a questionnaire designed to correspond to one

used in a recent study of admissions of older people to care homes (Darton et al., 2006, 2010). Similar information was collected about residents six, 18 and 30 months after moving in, to identify their current level of physical and mental functioning and their use of care services.

Cost information was drawn from a variety of sources: the original bid forms to the DH; actual development costs and funding obtained from the housing associations; questionnaires circulated to scheme managers after one year of operation, which covered scheme characteristics and charges to residents; a survey conducted in mid-2007 of the councils' extra care housing that identified any major

changes to schemes since the bids were successful; and the six month data collection stage with residents.

Additional information on the schemes was collected through a survey of the local fieldworkers towards the end of data collection.

The project received ethical approval from the appropriate Research Ethics Committee at the University of Kent and, because some residents may have lacked the mental capacity to consent, from a local research ethics committee within the NHS National Research Ethics Service (Leeds (West) Research Ethics Committee, reference number 08/H1307/98). The evaluation is described in more detail in Darton et al. (2011c).



## References

- Bäumker, T. and Netten, A. (2011) **Examining Cost Variation Across Housing and Long-Term Care Schemes for Older People in England.** PSSRU Discussion Paper No. 2765/5. Personal Social Services Research Unit, University of Kent, Canterbury.
- Bäumker, T., Netten, A. and Darton, R. (2008) **Costs and Outcomes of an Extra-Care Housing Scheme in Bradford.** Joseph Rowntree Foundation, York.
- Bäumker, T., Netten, A. and Darton, R. (2010) **Costs and outcomes of an extra care housing scheme in England.** *Journal of Housing for the Elderly*, 24, 2, 151-170.
- Bäumker, T., Callaghan, L., Darton, R., Holder, J., Netten, A. and Towers, A. (2011a) **Deciding to move into extra care housing: residents' views.** *Ageing and Society*, published online: 17 October 2011.
- Bäumker, T., Darton, R., Netten, A. and Holder, J. (2011b) **Development costs and funding of extra care housing.** *Public Money and Management*, 31, 6, 411-418.
- Bäumker, T., Netten, A., Darton, R. and Callaghan, L. (2011c) **Evaluating Extra Care Housing in the United Kingdom Social Care Context: A Comparative Cost and Outcome Analysis with Residential Care.** PSSRU Discussion Paper No. 2766/5. Personal Social Services Research Unit, University of Kent, Canterbury.
- Bebbington, A., Darton, R. and Netten, A. (2001) **Care Homes for Older People: Volume 2. Admissions, Needs and Outcomes.** The 1995/96 National Longitudinal Survey of Publicly-Funded Admissions. Personal Social Services Research Unit, University of Kent at Canterbury, Canterbury.
- Bernard, M., Bartlam, B., Biggs, S. and Sim, J. (2004) **New Lifestyles in Old Age: Health, Identity and Well-Being in Berryhill Retirement Village.** Policy Press, Bristol.
- Cairncross, L. and Bligh, J. (2008) **Shared Equity: Using the Private Finance Initiative to Boost Extra Care Housing.** Housing LIN Report No. 28. Housing Learning and Improvement Network, Care Services Information Partnership, Department of Health, London.
- Callaghan, L., Netten, A. and Darton, R. (2009) **The Development of Social Well-Being in New Extra Care Housing Schemes.** Joseph Rowntree Foundation, York.
- Commission on Funding of Care and Support (2011) **Fairer Care Funding: The Report of the Commission on Funding of Care and Support.** Commission on Funding of Care and Support, London.
- Croucher, K. (2009) **End of Life Care in Housing with Care Settings: Update on Policy and Recent Research.** Factsheet No. 18. Housing Learning and Improvement Network, Department of Health, London.
- Croucher, K. and Bevan, M. (2010) **Telling the Story of Hartfields: A New Retirement Village for the 21st Century.** Joseph Rowntree Foundation, York.
- Croucher, K., Pleave, N. and Bevan, M. (2003) **Living at Hartrigg Oaks: Residents' Views of the UK's First Continuing Care Retirement Community.** Joseph Rowntree Foundation, York.
- Croucher, K., Hicks, L., Bevan, M. and Sanderson, D. (2007) **Comparative Evaluation of Models of Housing with Care for Later Life.** Joseph Rowntree Foundation, York.
- Darton, R., Forder, J., Bebbington, A., Netten, A., Towers, A. and Williams, J. (2006) **Analysis to Support the Development of the Relative Needs Formula for Older People: Final Report.** PSSRU Discussion Paper No. 2265/3. Personal Social Services Research Unit, University of Kent, Canterbury.
- Darton, R., Forder, J., Netten, A., Bebbington, A., Holder, J. and Towers, A. (2010) **Slicing up the pie: allocation of central government funding of care of older people.** *Social Policy and Administration*, 44, 5, 529-553.
- Darton, R., Bäumker, T., Callaghan, L. and Netten, A. (2011a) **Residents in Extra Care Housing: Changes in Dependency over Time, Survival and Destinations of Leavers.** PSSRU Discussion Paper No. 2775/2. Personal Social Services Research Unit, University of Kent, Canterbury.
- Darton, R., Bäumker, T., Callaghan, L., Holder, J., Netten, A. and Towers, A. (2011b) **The characteristics of residents in extra care housing and care homes in England.** *Health and Social Care in the Community*, published online: 5 August 2011.
- Darton, R., Bäumker, T., Callaghan, L. and Netten, A. (2011c) **Evaluation of the Extra Care Housing Initiative: PSSRU Technical Report.** PSSRU Discussion Paper No. 2783/2. Personal Social Services Research Unit, University of Kent, Canterbury.
- Department for Communities and Local Government (2008) **Lifetime Homes, Lifetime Neighbourhoods. A National Strategy for Housing in an Ageing Society.** Department for Communities and Local Government, London.
- Department of Health (2003a) **Government announces funding for extra care housing.** Press Release 2003/0248. Department of Health, London.



- Department of Health (2003b) **Extra Care Housing for Older People: An Introduction for Commissioners.** Department of Health, London.
- Department of Health (2005) **Independence, Well-Being and Choice.** Department of Health, London.
- Department of Health (2008) **End of Life Care Strategy – Promoting High Quality Care for All Adults at the End of Life.** Department of Health, London.
- Department of Health (2010) **A Vision for Adult Social Care: Capable Communities and Active Citizens.** Department of Health, London.
- Easterbrook, L. with Vallely, S. (undated) **“Is It That Time Already?” Extra Care Housing at the End of Life: A Policy-into-Practice Evaluation.** Housing 21, Beaconsfield.
- Elderly Accommodation Counsel (2009) **Statistics on Specialist Housing Provision for Older People in England.** Elderly Accommodation Counsel, London.
- Evans, S. (2009) **Community and Ageing: Maintaining Quality of Life in Housing with Care Settings.** Policy Press, Bristol.
- Evans, S. and Means, R. (2007) **Balanced Retirement Communities? A Case Study of Westbury Fields.** St Monica Trust, Bristol.
- Evans, S. and Vallely, S. (2007) **Social Well-Being in Extra Care Housing.** Joseph Rowntree Foundation, York.
- Homes and Communities Agency (2009) **HAPPI. Housing Our Ageing Population: Panel for Innovation.** Homes and Communities Agency, London.
- Housing Learning and Improvement Network (2011) **Strategic Housing for Older People: A Toolkit and Resource Pack.** Housing Learning and Improvement Network, London.
- Hyde, M., Wiggins, R.D., Higgs, P. and Blane, D.B. (2003) **A measure of quality of life in early old age: the theory, development and properties of a needs satisfaction model (CASP-19).** *Aging and Mental Health*, 7, 3, 186-194.
- King, N. and Howarth, A. (2009) **Extra Care Housing and the Credit Crunch: Impact and Opportunities.** Factsheet No. 30. Housing Learning and Improvement Network, Department of Health, London.
- Laing and Buisson (2009) **Care of Elderly People UK Market Survey 2009, 22nd ed.** Laing and Buisson, London.
- Laing and Buisson (2010) **Extra-Care Housing UK Market Report 2010, 10th ed.** Laing and Buisson, London.
- Lewis, A., Torrington, J., Barnes, S., Darton, R., Holder, J., McKee, K., Netten, A. and Orrell, A. (2010) **EVOLVE: a tool for evaluating the design of older people’s housing.** *Housing, Care and Support*, 13, 3, 36-41.
- Mahoney, F.I. and Barthel, D.W. (1965) **Functional evaluation: the Barthel Index.** *Maryland State Medical Journal*, 14, 2, 61-65.
- Miller, L. (2008) **Whose Market? Understanding the Demand for Extra Care Housing: A Strategic Approach.** Housing LIN Report No. 29. Housing Learning and Improvement Network, Care Services Information Partnership, Department of Health, London.
- Morris, J.N., Fries, B.E., Mehr, D.R., Hawes, C., Phillips, C., Mor, V. and Lipsitz, L.A. (1994) **MDS Cognitive Performance Scale.** *Journal of Gerontology: Medical Sciences*, 49, 4, M174-M182.
- Netten, A. and Darton, R. (2003) **The effect of financial incentives and access to services on self-funded admissions to long-term care.** *Social Policy and Administration*, 37, 5, 483-497.
- Netten, A., Darton, R., Bebbington, A. and Brown, P. (2001a) **Residential or nursing home care? The appropriateness of placement decisions.** *Ageing and Society*, 21, 1, 3-23.
- Netten, A., Bebbington, A., Darton, R. and Forder, J. (2001b) **Care Homes for Older People: Volume 1. Facilities, Residents and Costs.** Personal Social Services Research Unit, University of Kent at Canterbury, Canterbury.
- Oldman, C. (2000) **Blurring the Boundaries: A Fresh Look at Housing and Care Provision for Older People.** Pavilion Publishing (Brighton) Ltd, Brighton.
- Sutherland, J. (2011) **Viewpoint on Downsizing for Older People into Specialist Accommodation.** Housing LIN Viewpoint No. 19. Housing Learning and Improvement Network, London.
- Tinker, A., Wright, F., Hanson, J., Mayagoitia, R., Wojgani, H. and Holmans, A. (2008) **Remodelling to extra care housing: some implications for policy and practice.** *Quality in Ageing*, 9, 1, 4-12.
- Traynor, J. and Walker, A. (2003) **People Aged 65 and Over: Results of a study carried out on behalf of the Department of Health as part of the 2001 General Household Survey.** The Stationary Office, London.

## Appendix: Details of the schemes included in the evaluation

Social services authority	Housing provider	Opening date <sup>1</sup>	Total units
<b>2004–05 (Round 1)</b>			
Brighton and Hove City Council	Hanover HA	07/06	38
East Riding Council	Housing 21	04/06	39
London Borough of Enfield	Hanover HA	11/06	48
London Borough of Havering	Housing 21	08/06	64
Milton Keynes Council	ExtraCare Charitable Trust	06/07	258
Northamptonshire CC	ExtraCare Charitable Trust	08/06	270
Peterborough City Council	Axiom HA	07/06	40
Stoke-on-Trent City Council <sup>2</sup>	Staffordshire HA	05/08	75
West Sussex CC (Horsham DC)	Saxon Weald Homes Ltd	07/06	40
<b>2005–06 (Round 2)</b>			
Blackburn with Darwen BC	Housing 21	11/07	48
Bradford Metropolitan DC	MHA Care Group	04/07	46
Darlington Borough Council	Hanover HA	10/07	42
Derbyshire County Council	Housing 21	08/08	43
London Borough of Ealing	Hanover HA	10/07	35
Hartlepool Borough Council	Joseph Rowntree Housing Trust	08/08	242
North Yorkshire CC	Housing 21	12/07	39
Rotherham Metropolitan BC	Chevin HA	04/07	35
Wakefield Metropolitan DC <sup>3</sup>	Yorkshire Housing	09/07	45
West Sussex (Crawley BC) <sup>4</sup>	Housing 21	11/08	39

### Notes:

- 1) This was the date when the first residents moved in, apart from one scheme where 8 residents moved back into remodelled accommodation one month beforehand.
- 2) The Stoke-on-Trent scheme replaced the original 53 unit scheme, and was built on a new site.
- 3) The Wakefield scheme replaced the original 45 unit scheme, and was built on a new site by a different housing provider (Yorkshire Housing).
- 4) The West Sussex (Crawley Borough Council) scheme replaced the original 50 unit scheme.



A web page containing links to the reports, including this summary, and other documents produced about the evaluation is available on the PSSRU website: [www.pssru.ac.uk/projects/echi.htm](http://www.pssru.ac.uk/projects/echi.htm).

Information on the Department of Health's Extra Care Housing Programme, including the scheme locator and resources available for housing, health and social care professionals involved in the development of housing with care options for older people, is available on the Housing Learning and Improvement Network website: [www.housinglin.org.uk](http://www.housinglin.org.uk).

## About the PSSRU

The PSSRU was established at the University of Kent at Canterbury in 1974. From 1996 it has also had branches at the London School of Economics and the University of Manchester. The PSSRU aims to conduct high quality research on social and health care to inform and influence policy, practice and theory. The evaluation was conducted at the University of Kent branch of the PSSRU.

## About the Housing LIN

The Housing LIN, formerly responsible for managing the Department of Health's Extra Care Housing capital programme, is now the leading 'knowledge hub' for housing, health and social care professionals in England involved in planning, commissioning, designing, funding, building and managing housing with care for older people.

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