

# The health and social care costbenefits of housing for older people

A report for Mears Group

## The health and social care cost-benefits of housing for older people

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## **Executive summary**

This report outlines the evidence for the health and social care benefits, and specifically cost-benefits, of housing for older people, particularly extra care housing. Overall there is reasonably strong evidence to suggest that housing for older people, particularly extra care housing, provide significant cost-benefits to the NHS and local authority adult social care.

- There is reasonably strong evidence that extra care housing residents **visit a GP less frequently**, most likely due to the support from on-site care staff and the resident community in general.
- There is evidence to suggest that extra care housing residents require **fewer community nurse visits**, for similar reasons as GP visits.
- There is evidence that specialist housing for older people can reduce the number of ambulance callouts, particularly in response to falls at home, due to the property being better designed and adapted to meet the needs of older people and regular contact with staff and other residents.
- There is reasonably strong evidence that the duration of unplanned hospital stays is
  shorter on average for those living in extra care housing. There is also some evidence that
  living in specialist housing for older people reduces the frequency of unplanned
  admissions overall. Communities where homes are accessible, care support is readily
  available and existing care needs are understood influence positively these cost-benefits.
- Extra care housing can be viewed as a **preventative** alternative to residential care for many people. Lifetime savings to the taxpayer per person from delaying or preventing this move could be as much as £5,000.
- Those living in extra care housing are **less likely to enter long-term care**, compared to those living in the community in receipt of home care.
- There is strong evidence that residents of specialist housing for older people have **improved wellbeing and quality of life**, including:
  - Reduced Ioneliness
  - Improved psychological well-being, mental health and memory
  - Higher feelings of autonomy and security
- Overall, the evidence indicates that one older person living in extra care housing generates health and social care cost-benefits of £2,441 per annum, not including some savings that are difficult to reduce to a per-person figure due to the nature of the evidence.
- In summary, there is a strong argument for providing more specialist housing for older people, particularly extra care housing, on the basis of the significant cost-benefits that it provides to the NHS and local authority adult social care.

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## 1. Introduction

- 1.01. This is a report from the Housing Learning and Improvement Network (LIN). Mears Group commissioned research to identify the specific benefits to NHS organisations and local authority social care from housing for older people particularly extra care housing.
- 1.02. This report sets out the evidence of the benefits, particularly the cost-benefits, to the NHS and adult social care of people being supported to live independently in extra care housing and older people's housing generally. Section 3 sets out this evidence in detail. Section 4 summarises the cost-benefits. Appendix 1 provides the calculations and assumptions used for determining the cost-benefits.

## 2. About the Housing LIN

- 2.01. The Housing LIN<sup>1</sup> is the leading 'learning lab' for a growing network of housing, health and social care professionals in England, Wales and Scotland involved in planning, commissioning, designing, funding, building and managing housing, care and support services for older people and vulnerable adults with long term conditions.
- 2.02. Previously responsible for managing the UK Government Department of Health's Extra Care Housing Fund, the Housing LIN is called upon by a wide range of statutory and other organisations to provide expert advice and support regarding the implementation of policy and good practice in the field of housing, care and support services.
- 2.03. The Housing LIN team has an impressive and unique knowledge transfer track record with access to market intelligence in relation to older people's housing options and solutions via its national and regional networks. We are familiar with and publish a range of data and evidence in relation to the cost-benefits of older people's housing for public services, particularly health and social care services, and also gave evidence on the state of the market to the Select Committee on Housing for Older People.
- 2.04 The Housing LIN's Chief Executive is also author of the All Party Parliamentary Group on Housing and Care for Older People's HAPPI (Housing our Ageing Population: Panel for Innovation) reports<sup>2</sup> and has recently co-written a book on Age Friendly Housing for the Royal Institute of British Architects<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup>\_www.housinglin.org.uk

https://www.housinglin.org.uk/Topics/browse/Design-building/HAPPI/

<sup>&</sup>lt;sup>3</sup> https://www.housinglin.org.uk/Topics/type/RIBA-age-friendly-housing/

## 3. Evidence review: The health and social care benefits of older people's housing, particularly extra care housing

- 3.01. This report sets out the evidence of the health and social care cost-benefits that can be delivered by older people's housing, particularly extra care housing. Extra care housing is housing with care primarily for older people where occupants have specific tenure rights to occupy self-contained dwellings and where they have agreements that cover the provision of care, support, domestic, social, community or other services<sup>4</sup>. This is based on a review of available and relevant evidence, including research and market intelligence about the financial and health benefits of specialised older people's housing, particularly extra care housing. We have synthesised information from the Housing LIN's extensive resource library and from published academic research gathered from multidisciplinary database searches.
- 3.02. The review covers the evidence that the use of older people's and extra care housing leads to
  - Reductions in the use of NHS services, for example reductions in unplanned hospital admissions, reductions in delayed transfers of care, reductions in the use of GP services etc, and the consequent evidence of financial efficiencies generated
  - Improved outcomes and cost savings compared to the use of residential care.
  - Reductions in, or reduced growth in, care needs occurring in older people's housing compared to the deployment of domiciliary care in the community.
  - Improved outcomes for residents in extra care housing and other older people's designated housing compared to other settings.

## Effect on the use of NHS services

#### Use of GP services

3.03. There is evidence to suggest that living in housing with care can reduce the number of visits to GP services by older people, as residents are supported within their home environment by on-site care staff as well as each other. Aston University's longitudinal study at an Extra Care Charitable Trust (ECCT) extra care housing village found that after 12 months, planned GP usage by extra care housing residents in the sample had decreased by 46%<sup>5</sup>. They investigated the hypothesis that this may be because residents use the well-being drop-in

<sup>&</sup>lt;sup>4</sup>https://www.housinglin.org.uk/ assets/Resources/Housing/Housing advice/Extra Care Housing What is it.p df

<sup>5.</sup> https://www.housinglin.org.uk/finder.cfm?i=9605

- clinic as a substitute for booking routine GP appointments, given that well-being drop-in appointments steadily increased over the period. At the time of writing, the Housing LIN is waiting for Aston University's updated findings about the health gain in one of ECCT's extra care housing villages.
- 3.04. McCarthy and Stone<sup>6</sup> found that on average, residents of their housing with care schemes reported that they had made 4.0 visits to their GP in the last 12 months. For comparison, Polisson (2011)<sup>7</sup> found the average number of annual visits to a GP in England was 7.4 for women aged 65 and over, and 6.7 for older men. Across the nine McCarthy and Stone schemes where interviews were carried out, owners had made 67 fewer visits to their GP in the previous 12 months compared with the 12 months before they moved into the McCarthy and Stone scheme; or 0.66 fewer visits per resident.
- 3.05. There is evidence that lonely people use health services more frequently and are 1.8 times more likely to visit the GP. The International Longevity Centre (ILC) found that a retirement village resident experiences half the amount of loneliness (12.17%) than those in the community (22.83%). This evidence indicates that living in extra care housing reduces the amount an older person typically visits a GP<sup>8</sup>.
- 3.06. According to the University of Kent's Policy and Social Services Research Unit's (PSSRU) most recent analysis of the costs of health and social care, a brief (11.7 minutes) consultation with a GP costs £43. This would mean for a typical scheme of 50 residents, a reduction in costs to the NHS £1,419 per annum for GP visits.

#### **Use of community health nurses**

- 3.07. Bäumker and colleagues (2008)<sup>9</sup> presented comprehensive evidence from twenty-two residents of one extra care housing scheme that showed the cost of health care dropped substantially with the single largest component drop being in nurse consultations. Likewise, the Aston University study concluded that over a 12-month period there were significant saving to the NHS this included the reduction in practice and district nurse visits<sup>10</sup>.
- 3.08. A Joseph Rowntree Foundation study of a Bradford extra care housing scheme, Rowanberries, found that the better health enjoyed by those living in the scheme meant that health care costs were lower (more than a 50% reduction), mainly through a reduction in the intensity of nurse consultations and hospital visits<sup>11</sup>. The proportion of residents using acute services such

<sup>&</sup>lt;sup>6</sup> IPC: McCarthy and Stone Local area economic impact assessment Report, March 2014

<sup>&</sup>lt;sup>7</sup> Polisson, M. (2011). Do waiting times matter in primary care? GP visits and list sizes in England.

<sup>&</sup>lt;sup>8</sup> The Social Value of Sheltered Housing, Demos Briefing Paper 2017.

<sup>&</sup>lt;sup>9</sup> Bäumker, T., Netten, A. & Darton, R. (2008) Costs and Outcomes of an Extra care Housing Scheme in Bradford. Joseph Rowntree Foundation.

<sup>&</sup>lt;sup>10</sup> https://www.housinglin.org.uk/finder.cfm?i=9605

<sup>11</sup> https://ipc.brookes.ac.uk/publications/Identifying the health gain from retirement housing.pdf

- as accident and emergency, outpatient appointments and inpatient stays was slightly lower in all instances after the move into the scheme<sup>12</sup>.
- 3.09. The total cost of community health nurse visits in 2015/16 was £2.8 billion. Housing that offers preventative services e.g. adaptations, activities, better nutrition, can potentially reduce the use of community health nurses<sup>13</sup>.

#### Ambulance call-outs

- 3.10. The National Housing Federation report 'Home from Hospital'<sup>14</sup> suggests that housing providers with staff who can respond swiftly to emergencies and provide increased levels of support where needed can reduce the numbers of cases where ambulances are called out. Extra care housing is one such example of this. Extra care housing schemes include on site care staff that can act upon and assess emergency situations. People diverted from hospital reduce the pressure on A&E services.
- 3.11. In an extra care housing scheme in the West Midlands, Nehemiah Housing Association found that the presence of an on-site scheme manager 5 days a week with a focus on well-being improved self-reported resident satisfaction and reduced the number of emergency call outs.<sup>15</sup>
- 3.12. The Demos report, 'The Value of Sheltered Housing', 16 estimates that 600,000 older people attend A&E following a fall each year (about 17% of all falls), and around a third are then admitted to hospital. If it is assumed that 91,940 falls are prevented by people living in sheltered housing, then this has prevented 15,629 A&E attendances and 5,209 emergency admissions. As ambulance call outs cost at least £115 each, this is a financial efficiency of £1.79m a year in ambulance costs.

## Non-elective admissions to hospital

3.13. 80% of emergency admissions for more than two weeks are patients aged over 65. Reducing emergency admissions and ensuring that longer lengths of stay by older people are clinically necessary has the greatest potential for efficiency savings<sup>17</sup>. Unsuitable home conditions can

<sup>&</sup>lt;sup>12</sup> https://ipc.brookes.ac.uk/publications/Identifying the health gain from retirement housing.pdf

<sup>&</sup>lt;sup>13</sup> https://www.housinglin.org.uk/Topics/type/Home-from-hospital-How-housing-services-are-relieving-pressure-on-the-NHS/

<sup>&</sup>lt;sup>14</sup> https://www.housinglin.org.uk/Topics/type/Home-from-hospital-How-housing-services-are-relieving-pressure-on-the-NHS/

<sup>&</sup>lt;sup>15</sup> A Fresh Outlook on Wellbeing: Delivering Person-centred care across the West Midlands Housing LIN, Case Study 128. (Yates) Sept. 2016

<sup>&</sup>lt;sup>16</sup> The Social Value of Sheltered Housing. Demos Briefing Paper 2017.

<sup>&</sup>lt;sup>17</sup> http://careandrepair-england.org.uk/wp-content/uploads/2014/12/Integrating-housing-help-in-hospitals-2012.pdf

- directly cause or at least contribute to a hospital admission. Unplanned emergency readmissions have been a growing issue in the NHS in recent years<sup>18</sup>.
- 3.14. Although the Aston University found that the number of unplanned admissions did not change for either group in their study, the duration of unplanned hospital stays for those in extra care housing was recorded as a median of 5-7 days at baseline, but a median of 1-2 days thereafter, i.e. a substantial reduction<sup>19</sup>. This is supported by ILC's longitudinal study from 2002 to 2010 covering 1,400 to 1,600 extra care housing properties. It reports that extra care housing residents were less likely to be admitted to hospital initially than those in unsupported housing in the community and were more likely to be admitted only once a serious condition had developed. The research did find extra care housing residents were more likely to stay longer in hospital if they were admitted, but this may be due to the fact that residents in extra care housing schemes are more likely to have care needs. The incidence of annual hospitalisation was 4.8 nights per year per person among those aged 80+compared to 5.8 nights for those matched and living in the community. Reduction in hospital admissions corresponds to an estimated potential cost saving to the NHS of up to £512 per person per year<sup>20</sup>.
- 3.15. The study at the Rowanberries extra care housing scheme (in Bradford) found that the better health enjoyed by those living in the scheme meant that health care costs were lower (more than a 50% reduction), mainly through a reduction in the intensity of nurse consultations and hospital visits<sup>21</sup>.
- 3.16. Across the schemes covered by the McCarthy and Stone study, there were a total of 13 fewer admissions in the previous year, or 0.13 fewer admissions per resident per year in their new McCarthy and Stone home than before.
- 3.17. According to the PSSRU's analysis of the costs of health and social care, the average cost of a short non-elective in-patient admission was £523 (the lower end of the spectrum). This would mean for a typical scheme of 50 residents, a reduction in costs to the NHS of £3,400 per annum for hospital in-patient admissions<sup>22</sup>.

## Reduction in duration of hospital stays and delayed discharges

<sup>&</sup>lt;sup>18</sup> Ian Blunt, Martin Bardsley and Jennifer Dixon (July 2010) Trends in emergency admissions in England 2004-2009: is greater efficiency breeding inefficiency? The Nuffield Trust.

<sup>&</sup>lt;sup>19</sup> https://www.housinglin.org.uk/finder.cfm?i=9605

<sup>&</sup>lt;sup>20</sup> http://www.ilcuk.org.uk/files/pdf pdf 193.pdf

<sup>&</sup>lt;sup>21</sup> Bäumker, T., Netten, A. & Darton, R. (2008) Costs and Outcomes of an Extra care Housing Scheme in Bradford. Joseph Rowntree Foundation.

<sup>&</sup>lt;sup>22</sup> IPC: McCarthy and Stone Local area economic impact assessment Report March 2014

- 3.18. A key finding from the Aston University study was that the extra care housing model is associated with a significant reduction in the duration of unplanned hospital stays, from an average of 8-14 days to 1-2 days. The duration of unplanned hospital stays reduced from a median of 5-7 days at baseline, to 1-2 days thereafter.
- 3.19. The ILC study of 4,000 extra care housing residents, suggests that extra care housing lowers the likelihood of admittance to hospital for an overnight stay compared to a matched sample living in the community. For example, we would expect an average person aged 80 and above in receipt of domiciliary care in the community to spend around 6 nights of the year in hospital, while a resident in extra care housing with similar demographic characteristics would spend around 5 nights. In a typical year some four-fifths of residents do not spend a single night in hospital, and ILC also found evidence that the hospitalisation rate has fallen in recent years.<sup>23</sup>
- 3.20. A study by McCarthy & Stone found that whilst a higher percentage of those in extra care housing have an inpatient episode, they remained in hospital for only half the time of those not living in retirement housing. This was estimated as producing an annual cost saving to the NHS of £2,598 per resident per annum.<sup>24</sup>
- 3.21. Delayed transfer of care can be costly to both an individual's health as well as to the NHS. There are currently far too many older people in hospitals that do not need to be there, at an estimated cost to the NHS of around £820 million.<sup>25</sup>
- 3.22. NHS delayed transfer of care figures in 2015-16 were associated with either waiting for a care package in own home, awaiting place in a nursing or residential home or awaiting assessment<sup>26</sup>. Communities where homes are accessible, care support is readily available and existing care needs understood may result in reduced length of stays in hospital<sup>27</sup> and avoidance/reduction in delayed transfers of care. Extra care housing can be seen as an example of this type of community, as highlighted in NHS England's Quick Guide on Health and Housing.<sup>28</sup>

<sup>&</sup>lt;sup>23</sup> http://www.ilcuk.org.uk/files/pdf pdf 193.pdf

<sup>&</sup>lt;sup>24</sup> ORB (2004). A Better Life: Private Sheltered Housing and Independent Living for Older People.

<sup>&</sup>lt;sup>25</sup> National Audit Office (2016). Discharging older patients from hospital.

<sup>&</sup>lt;sup>26</sup> https://www.housinglin.org.uk/Topics/type/Home-from-hospital-How-housing-services-are-relieving-pressure-on-the-NHS/

<sup>&</sup>lt;sup>27</sup>https://www.housinglin.org.uk/\_assets/Resources/Housing/Support\_materials/Aston\_ECCT\_research.pdf

<sup>&</sup>lt;sup>28</sup> https://www.nhs.uk/NHSEngland/keogh-review/Documents/quick-guides/Quick-Guide-health-and-housing.pdf

## Costs benefits of older people's housing compared to residential care

- 3.23. A scoping review by Bligh *et al.*<sup>29</sup> found convincing evidence that extra care housing can delay admission into a care home by providing alternative accommodation at the point where someone has to leave their original home and as a means of enabling them to live independently for longer. Kneale<sup>30</sup> found that after five years of residence, those living in extra care housing were less likely to enter long-term care, compared to those living in the community in receipt of home care.
- 3.24. Similarly, a Housing LIN case study 78<sup>31</sup> provides a detailed evaluation of extra care housing schemes undertaken by East Sussex County Council. Extra care housing is presented as a preventative model, supporting independence and avoiding admissions into residential care. East Sussex Council indicates that 63% of people living in the schemes would be placed in residential care, EMI or nursing care if they were not living in extra care housing. This study concluded that the cost of extra care housing was on average half the gross cost of the alternative placements<sup>32</sup>. Garwood (2008)<sup>33</sup> also concluded that the gross cost to the local authority of caring for those with the highest dependency needs in the extra care housing setting was around £65,000 less than would be the case had they entered residential care and £11,000 less than had they entered nursing care.
- 3.25. A department of Health funded evaluation of 19 extra care housing schemes by Netten *et al.*)<sup>34</sup> found considerable variability across schemes in the costs of health and social care. When residents were matched with a group of equivalent people moving into residential care, costs were the same or lower in extra care housing. They cautiously concluded that the better outcomes, and similar or lower costs of extra care housing compared with residential care, indicated that housing was a cost-effective alternative for people with the same characteristics who currently move into residential care.
- 3.26. Amicus Horizon (now Optivo) calculates that around 10% of their 1,200 sheltered residents would require residential care if sheltered housing wasn't available. The cost to the taxpayer of residential care for these notional 120 people would be £2m. This is compared to the £1.4m cost of the sheltered housing service for 1,200 people<sup>35</sup>.

<sup>&</sup>lt;sup>29</sup> Bligh J., Cairncross L., Porteus J. (2015). Housing and Adult Social Care – Scoping Review, London: NIHR SSCR

<sup>&</sup>lt;sup>30</sup> Kneale D. (2011) Establishing the extra in Extra Care: Perspectives from three Extra Care Housing Providers. ILCUK.

<sup>&</sup>lt;sup>31</sup> https://www.housinglin.org.uk/Topics/type/The-Business-Case-for-Extra-Care-Housing-in-Adult-Social-Care-An-Evaluation-of-Extra-Care-Housing-schemes-in-East-Sussex/

<sup>&</sup>lt;sup>32</sup> Weis W & Tuck J (2013) The Business Case for Extra Care Housing in Adult Social Care: An Evaluation of Extra Care Housing schemes in East Sussex, Case Study 78, Housing LIN

<sup>&</sup>lt;sup>33</sup> Garwood, S. (2008a) Reeve Court Retirement Village: an evaluation.

<sup>&</sup>lt;sup>34</sup> Netten A., Darton R., Baumker T. and Callaghan L. (2011). Improving Housing with Care Choices for Older People: An Evaluation of Extra Care Housing. Housing LIN.

<sup>&</sup>lt;sup>35</sup> The Value of Sheltered Housing. National Housing Federation (Berrington), January 2017.

3.27. By combining the available data, an average person aged 65+ will use an average of 9 months of residential care in their lifetime. This care typically will cost £535 per week or £2,300 per month. Multiplying 9 months by £2,300 per month, we can estimate that average expected lifetime cost of residential care for a person in mainstream housing is £20,700. Assuming that an older person living in a specialist retirement housing unit is 0.75% as likely to move into residential care as someone in mainstream housing — i.e. half of the reduced probability achieved through extra care accommodation — we can estimate that: average expected lifetime cost of residential care for a person in specialist retirement housing is £15,500 (after rounding). This represents a saving of around £5,000 per person<sup>36</sup>.

## Reductions in care needs occurring in older people's housing compared to domiciliary care in the community

- 3.28. Care needs often reduce after someone goes into extra care housing due to 24-hour on-site care provision and living in accessible accommodation<sup>37</sup>.People in extra care housing may use less care (domiciliary/home care) hours than if they were living in the community. Research has indicated that people living in extra care housing needed less formal care, as measured by the size of their 'care packages' than a control group in the community. After moving in to the extra scheme their care package costs reduced and were 16% lower compared to the cost pre-admission. The saving to adult social care in home care costs was £2,400 per person per year<sup>38</sup>.
- 3.29. These savings were mirrored in the Aston University study, whereby 19% of the sample was in receipt of care at both time points. Extra care housing costs an average of £427.98 less per person per annum than comparative local authority care costs in the community. This difference is greater at higher levels of care, and varies according to local authority costs in each location. For the people who were in the sample at both time points, the difference reduced from £414.61 to £363.77. Savings for the more expensive levels of care increase over time<sup>39</sup>. The cost of providing lower level social care using the extra care housing model was £1,222 less per person (17.8% less) per year than providing the same level of care in the wider community (on average, with variation by local authority) and the cost of higher level social care was £4,556 less (26% less) per person per year).
- 3.30. The East Sussex extra care housing evaluation demonstrated that some people with low dependency levels would require significantly higher care packages if they were not in extra

<sup>&</sup>lt;sup>36</sup> Comas-Herrera A and Wittenberg R (2010) Expected lifetime costs of social care for people aged 65 and over in England. PSSRU.

<sup>&</sup>lt;sup>37</sup> https://www.housinglin.org.uk/finder.cfm?i=8988

<sup>&</sup>lt;sup>38</sup> https://www.housinglin.org.uk/Topics/type/Demonstrating-the-Health-and-Social-Cost-Benefits-of-Lifestyle-Housing-for-Older-People/

<sup>39</sup> https://www.housinglin.org.uk/finder.cfm?i=9605

care housing<sup>40</sup>. Most residents who enter extra care housing do not require an additional care package on arrival beyond that provided as part of the minimum standard package (for example, 67 per cent of residents of one extra care housing provider)<sup>41</sup>.

## Improved outcomes for residents in extra care housing

## Improved health and wellbeing

- 3.31. In the Aston University study, there were significant continuous improvements across the period in depression, perceived health, memory and autobiographical memory, in a way that was significantly different from the way the measure changed over time for the control group. At baseline new residents had more difficulties with cognitive functions, independence, health perceptions, depression and anxiety than controls, but after 3 months these differences had reduced and some have disappeared, with significant improvements in psychological well-being, memory and social interaction for extra care housing residents. After 18 months extra care housing residents in general showed a reduction in depression and those with low mobility, showed the greatest improvement (from their lower initial levels).
- 3.32. Residents often express high levels of satisfaction with housing with care settings and improvements in their well-being.<sup>44</sup> An evaluation of an extra care housing scheme in Dorset<sup>45</sup> found that older residents' quality of life vastly improved following a planned move into the newly opened scheme.
- 3.33. A Dutch study compared the self-reported life satisfaction of older people in sheltered housing to older people in independent housing in the community<sup>46</sup>. Those in sheltered housing reported higher autonomy, security and quality of life. They also participated more frequently in services like social activities and on-site restaurants.

<sup>40</sup> https://www.housinglin.org.uk/finder.cfm?i=8988

<sup>&</sup>lt;sup>41</sup> Kneale D. (2011) Establishing the extra in Extra Care Perspectives from three Extra Care Housing Providers, ILCUK.

<sup>&</sup>lt;sup>42</sup> ibid

<sup>&</sup>lt;sup>43</sup> ibid

<sup>&</sup>lt;sup>44</sup> The benefits of extra care housing on the quality of life of residents: The impact of living in Campbell Place, Fleet. Housing LIN Case Study 93 (Burns) 2014.

<sup>&</sup>lt;sup>45</sup> Goswell D, Macbeth S, Robertson G (2014) Blazing a trail: Extra care housing in Blandford Forum, Dorset, Housing LIN.

<sup>&</sup>lt;sup>46</sup> van Bilsen *et al.* (2008) Sheltered housing compared to independent housing in the community. Scandinavian Journal of Caring Sciences.

3.34. Robards *et al.*<sup>47</sup> found that, even when accounting for their health status before the move, older people moving into mainstream housing were around 2 to 5 times more likely to die within the first two years of moving than those moving into sheltered housing.

### **Reduced number of falls**

- 3.35. Living in unsuitable housing results in a greater risk of accident or injury. Falls and fractures in people aged 65 and over account for more than four million hospital bed days each year in England alone<sup>48.</sup> Falls among older people have been estimated to cost the state over £1 billion a year, 1 in 4 falls involve stairs, and the majority take place in the home<sup>49</sup>. Extra care housing has been designed to be suitable for older people, coupled with the provision of onsite staff the risk of falling is reduced.
- 3.36. Kneale identified a reduced likelihood of falling in extra care housing. Falls rates were measured at 31% compared to 49% in general housing<sup>50</sup>. Snell et al.<sup>51</sup> estimated that sheltered housing reduces the probability of an older person falling by between 1.5 and 2.8 times. The Aston University study queried the "number of falls in the last 12 months" at baseline and at 12 months. There was a significant overall reduction in falls over the period, with a reduction from an average of 0.66 falls per person at baseline, to 0.36 per person at 12 months<sup>52</sup>.
- 3.37. Snell et al. also measured frailty, finding that 19% of extra care housing residents designated as 'pre-frail' at baseline had returned to a 'resilient' state 18 months later. One can assume that those categorised as resilient are less likely to fall.
- 3.38. This evidence suggests that the development of new specialist retirement housing may reduce NHS expenditure, when such accommodation reduces the incidence of falls among residents.

<sup>&</sup>lt;sup>47</sup> Robards J, Evandrou M, Falkingham J *et al.* (2014) Mortality at older ages and moves in residential and sheltered housing: evidence from the UK Journal of Epidemiological Community Health.

<sup>&</sup>lt;sup>48</sup> Age UK, "Nearly 2 million NHS days lost to delayed discharge" (11 June 2014)

<sup>&</sup>lt;sup>49</sup> https://www.housinglin.org.uk/Topics/type/Demonstrating-the-Health-and-Social-Cost-Benefits-of-Lifestyle-Housing-for-Older-People/

<sup>&</sup>lt;sup>50</sup> Establishing the Extra in Extra Care. International Longevity Centre UK (Kneale), 2011.

<sup>&</sup>lt;sup>51</sup> Snell T, Fernandez J-L, Forder J (2012) Building a business case for investing in adaptive technologies in England, London School of Economics

<sup>52</sup> https://www.housinglin.org.uk/finder.cfm?i=9605

## **Reduced experience of loneliness**

- 3.39. Demos found that those living in age designated housing tend to report feeling much less lonely than their peers<sup>53</sup>. Other research by Beach, found that the average person in a retirement village experienced half the amount of loneliness of those in wider community<sup>54</sup>.
- 3.40. The Joseph Rowntree Foundation Bradford study<sup>55</sup> also found that nearly two-thirds of residents reported that they had a good social life after moving to an extra care housing scheme, whereas half of the residents said that they felt lonely and socially isolated in their previous homes. Residents also reported increased feelings of control and safety.
- 3.41. Community 'hubs' in Gloucestershire have been designed for people over 55 years of age. They provide drop-in health, healthy lifestyle and social services and are usually located within extra care housing schemes. An evaluation of the project found a 19.5% increase in social interaction of participants, an 11.6% improvement in independence and an improvement of reported health and wellbeing of 15%.<sup>56</sup>
- 3.42. The ILC found that a retirement village resident experiences half the amount of loneliness (12.17%) than those in the community (22.83%). Research shows that lonely people use health services more frequently. They are:
  - 1.8 times more likely to visit the GP.
  - 1.6 times more likely to visit A&E.
  - 1.3 times more likely to experience an emergency admission.<sup>57</sup>
- 3.43. National Audit Office (NAO) statistics put the average cost of a GP consultation at £2,138, A&E attendance at £12,439, and an emergency admission at £2,358.50. Combining these figures with the increased likelihood of lonely people using NHS services, we can estimate that the annual total cost of loneliness to the NHS is £714m per year, or £398.10 per person for the over 65s<sup>58</sup>. If we use the aforementioned estimate that older people are 50% less likely to feel lonely in older people's housing, and apply it to the half a million older people currently living in some form of retirement housing, then we can estimate that older people's housing currently saves the NHS £17.8m annually in reduced health service use (£36.30 per person) by tackling loneliness.

<sup>53</sup> www.demos.co.uk/wp-content/uploads/2016/04/Building-Companionship-Report.pdf

<sup>&</sup>lt;sup>54</sup>www.ilcuk.org.uk/index.php/publications/publication details/village life independence loneliness and qual ity of life in retirement vill

<sup>&</sup>lt;sup>55</sup> Bäumker, T., Netten, A. & Darton, R. (2008) Costs and Outcomes of an Extra care Housing Scheme in Bradford. Joseph Rowntree Foundation.

<sup>&</sup>lt;sup>56</sup> NHS England (2016) Op.cit

<sup>&</sup>lt;sup>57</sup> http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing to Tackle Loneliness.pdf

<sup>&</sup>lt;sup>58</sup> The social value of sheltered housing. Demos.

#### CASE STUDY

BALMORAL PLACE EXTRA CARE SCHEME FOR PEOPLE AGED 55 YEARS AND ABOVE OPENED IN NOV 2018. IT WAS ACHIEVED THROUGH PARTNERSHIP WORKING BETWEEN MEARS AND HB VILLAGES (DEVELOPER) AND INVESTMENT FROM FUNDING AFFORDABLE HOMES TO CREATE A FULL TURNKEY EXTRA CARE FACILITY TO NORTHAMPTONSHIRE ADULTS SOCIAL SERVICES (NASS) AND LOCAL DISTRICT COUNCILS. THE BUILDING WAS FULLY FUNDED AT NO COST TO THE COUNCIL.

BALMORAL PLACE OFFERS 80 ONE-BEDROOM SELF-CONTAINED APARTMENTS WITH MEARS PROVIDING A JOINT, COMPREHENSIVE CARE, SUPPORT AND HOUSING MANAGEMENT SERVICE OFFERING. THE INTEGRATED APPROACH HAS MANY BENEFITS INCLUDING; A SEAMLESS HOUSING, CARE AND SUPPORT SERVICE FOR TENANTS AND THEIR FAMILIES PROVIDED BY ONE TEAM MEANING TENANTS DO NOT NEED TO ASCERTAIN THEMSELVES IF AN ISSUE FALLS UNDER "HOUSING" OR "CARE", SINGLE POINT OF CONTACT FOR ALL STAKEHOLDERS (THE LOCAL AUTHORITY, HEALTH, COMMUNITY GROUPS ETC), JOINED UP NOMINATIONS AND ALLOCATION PROCESS, JOINED UP VIEWINGS AND MOVE IN PROCESS, SINGLE ONLINE AND MARKETING PRESENCE.

ALL APARTMENTS ARE AVAILABLE ON AN AFFORDABLE RENT BASIS, WITH 4 OF THE APARTMENTS RING-FENCED TO PROVIDE SHORT TERM, STEP-DOWN SERVICES TO THE CCG TO SUPPORT THE DISCHARGE OF OLDER PEOPLE FROM HOSPITAL.

## 4. Summary: the health and social care cost-benefits of older people's housing

4.01. This review indicates that there is a growing body of evidence pointing to the potential health and social care cost-benefits provided by older people's housing, and extra care housing in particular. It is reasonable to conclude that the benefits are in summary:

### 4.02. NHS cost-benefits and savings:

- Fewer GP visits.
- Fewer community nurse appointments.
- Fewer ambulance call-outs.
- Fewer and shorter unplanned hospital admissions.

## 4.03. Savings compared to residential care:

- Delayed moves to a residential or nursing care setting.
- Lower overall health costs.

## 4.04. Reduced care needs/reduced growth in care needs:

• Less costly social care packages (especially for those with higher care needs).

#### 4.05. Improved outcomes for individuals:

- Increased sense of autonomy and security.
- Fewer falls.
- Reduced loneliness and depression.
- Higher perceived mental health and quality of life.
- Lower death rate in the period following moving in.
- 4.06. From the evidence reviewed, the specific cost-benefits have been calculated. Table 1 shows financial estimates of potential cost-benefits from extra care housing, drawn from the evidence and sources considered earlier in this report. Context and explanations for each figure can be found in Appendix 1. This total does not include savings from reduced ambulance callouts (see Appendix 1).

Table 1. Cost-benefits/savings from use of extra care housing.

Area of cost-benefit/savings	Cost benefit/saving (per extra care
	housing resident per year)
GP visits	£144.78
Community nurse visits	£362.55
Non-elective admissions to hospital	£624.11
Delayed Transfer of Care 'days'	£465.30
Falls	£380.00
Reduction in the number of hours in	£427.98
domiciliary care packages	
Reduced Ioneliness	£36.30
TOTAL	£2,441.02

- 4.07. This evidence indicates that an older person living in extra care housing generates health and social care cost-benefits of £2,441 per annum.
- 4.08. There is a currently a shortage of specialist accommodation for older people. The Housing LIN's SHOP@ tool estimates a shortfall of 61,000 units of extra care housing in England and 7,500 in Wales by 2030 respectively<sup>59</sup>, based on an ageing population. Overall, we estimate a shortfall of 400,000 units of specialist housing for older people by 2035<sup>60</sup>. If none of the required extra care housing was built, this would translate to a missed opportunity to provide cost-benefits to the NHS and local authority adult services in England and Wales £167,209,870 by 2030. It is more difficult to distinguish which savings would apply to just 'specialist housing for older people' in general, but even a modest per-person saving multiplied by 400,000 would offer significant cost-benefits.

Table 2. Potential health cost-benefits if shortfall in provision of extra care housing is delivered by 2030 (England and Wales)

Nation	Estimated shortfall of extra care housing by 2030 (units)	Cost benefit (per extra care housing resident per year)	Total cost-benefit (by 2030)
England	61,000	£2,441.02	£148,902,220
Wales	7,500	£2,441.02	£18,307,650
TOTAL			£167,209,870

<sup>&</sup>lt;sup>59</sup> Housing LIN (2015) Extra care housing: what is it? Housing LIN Factsheet 1. Available at: <a href="https://www.housinglin.org.uk/">https://www.housinglin.org.uk/</a> assets/Resources/Housing/Housing advice/Extra Care Housing What is it.p <a href="mailto:df">df</a>

<sup>&</sup>lt;sup>60</sup> House of Commons Communities and Local Government Committee (2018). Housing for older People: Second Report of Session 2017–19. Available at: https://publications.parliament.uk/pa/cm201719/cmselect/cmcomloc/370/370.pdf

- 4.09. In order to realise these health benefits from the use of extra care housing, there will need to be consideration given to the long-term care workforce requirements. Mears' own evidence indicates that care staff retention rates for extra care housing are higher than for community domiciliary care services. Developing additional extra care housing provides an opportunity to retain a higher proportion of the care workforce. However, there also needs to be long term planning to support and encourage people into the social care workforce in order to deliver additional extra care housing capacity.
- 4.10. This evidence indicates that key to addressing the social and financial pressures of an ageing population is a joined-up approach between housing, health and care based on an understanding of the positive effect of a good quality extra care housing offer.

#### CASE STUDY

BLAISE WESTON EXTRA CARE SCHEME IN BRISTOL HAS BEEN OPEN SINCE 2008 WITH MEARS PROVIDING 24 ONSITE CARE AND SUPPORT ALONGSIDE HANOVER HOUSING SINCE THE SERVICE OPENED. THIS SERVICE IS RATED **OUTSTANDING** WITH CQC, IN PART DUE TO THE EXCELLENT SOCIAL AND EMOTIONAL WELLBEING OFFERING AT THE SCHEME, BLAISE WESTON HAS BECOME A GENUINE INTER-GENERATIONAL COMMUNITY HUB THAT BENEFITS NOT ONLY THE RESIDENTS BUT THE WIDER COMMUNITY. THIS INCLUDES A REGULAR ART PROJECT RAN IN PARTNERSHIP WITH A LOCAL SCHOOL AND THE "PARLOUR OF WONDER" PROJECT WORKING WITH THE UNIVERSITY OF BRISTOL TO DEVELOP TECHNOLOGY TO SUPPORT PEOPLE WITH DEMENTIA .SPECIFICALLY FOR REMINISCENCE AND OTHER SOCIAL ACTIVITIES. THESE ACTIVITIES HAVE BEEN SPECIFICALLY SCHEDULED FOR THIS WORK HAS RESULTED SIGNIFICANT EMOTIONAL WELLBEING BENEFITS TO BOTH OLDER PEOPLE AT THE SCHEME. IN THE WIDER COMMUNITY AND CHILDREN AND YOUNG PEOPLE IN THE COMMUNITY. FOR EXAMPLE THE TENANTS AT BLAISE WESTON HAVE SAID "THE CHILDREN MAKE US LAUGH AND BRING US BACK TO LIFE" "WE LIKE TELLING OUR FAMILIES ABOUT THE TIME WE SPEND AT PAINT PALS" "LIFE IS NEVER BORING WHEN WE HAVE SO MUCH TO DO" CHILDREN ATTENDING THE "PAINT PALS" ART PROJECT HAVE STATED "I ENJOY PAINTING WITH THE PAINT PALS AND SHARING STORIES" "WE HAVE MADE FRIENDS" "I LOOK FORWARD TO SEEING THEM".

MEARS AND HANOVER HAVE ALSO GENERATED FUNDING FOR THE RESIDENTS OF BLAISE WESTON AND THE WIDER COMMUNITY THROUGH LOTTERY FUNDING, LOCAL REGENERATION GRANTS, BRISTOL "AGEING BETTER" FUND AND MATCH FUNDING WITH OTHER ORGANISATIONS SUCH AS A LOCAL SCHOOL.

## Appendix 1: Calculation method for cost-benefit estimates

The financial cost-benefit estimates are based on sources from the evidence review. Some are calculated from information given in the original sources and some are provided directly as given in the sources themselves. There is a description of the context accompanying each one.

**GP visit savings**: Polisson<sup>61</sup> found the average number of annual visits to a GP in England was 7.4 for women aged 65 and over, and 6.7 for older men. This is on average 7.05 visits per annum.

Aston University's longitudinal study at an ExtraCare village<sup>62</sup> found that after 12 months GP usage (planned) by ExtraCare residents in the sample had decreased by 46%. A 46% decrease in GP visits from the 7.05 found by Polisson<sup>63</sup> suggests that extra care housing residents visit a GP on average 3.85 times per annum compared to 7.05 visits on average amongst all 65-year-olds. According to the 2017 PSSRU Unit Costs of Health and Social Care calculations<sup>64</sup>, a brief (9.22 minutes) consultation with a GP costs £38. A 65+-year-old visiting a GP 7.05 times per annum costs  $38 \times 7.05 = £267.90$ . A 65+-year-old visiting a GP 3.85 times per annum costs  $38 \times 3.85 = £146.30$ . This would be a saving of £121.60 per annum on average per extra care housing resident.

Polisson<sup>65</sup> reported an increase in the number of annual visits to the GP over the period 1974-2004 of between 1 and 1.5% per year (for older men and older women respectively). If the average number of visits increased at this rate (average +1.25%/yr over 14 years) this would change the average number of GP visits in 2018 to 8.39 (general average) vs 4.58 (average extra care housing resident) or an updated average saving of  $(38 \times 8.39) - (38 \times 4.58) = £144.78$  in savings per person in housing with care per year. This is, of course, assuming that the average rate of increase stays the same as over the 1974-2004 period.

**Community nurse visit savings:** Bäumker *et al.*<sup>66</sup> studied an extra care housing scheme and calculated the health and social care expenditure for before and after the residents moved into the scheme. They found a mean decrease in the expenditure on nurse visits at home of £37 per resident per week (-51.25%). The proportion of residents who were visited by a nurse at home increased (32%)

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<sup>&</sup>lt;sup>61</sup> Polisson, M. (2011). Do waiting times matter in primary care? GP visits and list sizes in England.

<sup>&</sup>lt;sup>62</sup> Holland *et al.* (2015). Collaborative Research between Aston Research Centre for Healthy Ageing (ARCHA) and the ExtraCare Charitable Trust: Final Report.

<sup>&</sup>lt;sup>63</sup> Polisson, M. (2011). Do waiting times matter in primary care? GP visits and list sizes in England.

<sup>&</sup>lt;sup>64</sup> Curtis, L. & Burns, A. (2017) Unit Costs of Health and Social Care 2017, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>&</sup>lt;sup>65</sup> Polisson, M. (2011). Do waiting times matter in primary care? GP visits and list sizes in England.

<sup>&</sup>lt;sup>66</sup> Bäumker, T., Netten, A. & Darton, R. (2008) Costs and Outcomes of an Extra care Housing Scheme in Bradford. Joseph Rowntree Foundation.

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vs 73%) but the mean number of consultations per resident decreased from approximately 22 to 11 visits in 6 months.

Extrapolating the 51.25% savings from Bäumker *et al.*'s analysis, nurse visit expenditure would be reduced by £1924 per ECH resident per year on average. However, this seems unlikely and relies on a myriad of factors remaining constant across all schemes and situations. The 2015 PSSRU<sup>67</sup> given cost for a community nurse visit (the most recent available) is £31.25. 11 visits would cost £343.75 (a saving of £343.75 compared to 22 visits). This would be worth approximately **£362.55** in 2017, adjusting for inflation.

**Reduced number of non-elective admissions to hospital:** Kneale<sup>68</sup> posits the mechanism that those in extra care housing are only admitted overnight to hospital for serious conditions and may be treated as outpatients for less serious conditions, whereas those in the community may be more likely to be admitted overnight and not discharged for minor procedures. Kneale uses PSSRU costings to calculate that residents aged 65+ in extra care schemes save £512 in hospital attendances each compared to someone aged 65+ living in the community. £512 in 2010 adjusted for inflation at 2.9% per year to 2017 = £624.11 per resident per year. This is assuming that the cost hasn't also changed after adjusting from inflation.

## Reduction in duration of hospital stays and delayed transfer of care days

Delayed hospital discharges cost the NHS in England £820 million annually<sup>69</sup>. Over the 12 months from November 2017 to November 2018 there were 1,744,457 delayed bed days in England<sup>70</sup>. £820 million/1,744,457 bed days = £470 per delayed day. In the Aston University study<sup>71</sup>, the duration of unplanned hospital stays reduced from a median of 5-7 days at baseline, to 1-2 days after moving into extra care. Assuming a stay duration reduction from 6 to 1.5 days (based on the Aston University study), this translates to a reduction per annum of £2,820 - £705 = £2,115. In the Aston University study, the mean unplanned admission rate was 0.22/yr. £2,115 x 0.22 admissions per resident per year equates to a saving of £465.30 per person per year.

**Savings by reducing number of falls:** James Lloyd of the Strategic Society calculates<sup>72</sup>: People aged 65+ have a 33% probability (0.33) of experiencing a fall each year, but this is reduced to between 1.5

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<sup>&</sup>lt;sup>67</sup> Curtis, L, Burns, A. (2015). Unit Costs of Health and Social Care. Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>&</sup>lt;sup>68</sup> Kneale D. (2011) Establishing the extra in Extra Care: Perspectives from three Extra Care Housing Providers. ILCUK.

<sup>&</sup>lt;sup>69</sup> Buck, D., Simpson, M., Ross, S. (2016). The economics of housing and health: The role of housing associations. Kings Fund.

<sup>&</sup>lt;sup>70</sup> NHS England (2018). Delayed Transfer of Care, NHS Organisations, England. NHS England Data Collection – MsitDT.

<sup>&</sup>lt;sup>71</sup> Holland, C. *et al.* (2015). Collaborative Research between Aston Research Centre for Healthy Ageing (ARCHA) and the ExtraCare Charitable Trust: Final Report.

<sup>&</sup>lt;sup>72</sup> Lloyd, J. (2016). Valuing Retirement Housing: Exploring the economic effects of specialist housing for older people. Strategic Society Centre, London.

and 2.8 (2.15) times less likely in specialist retirement housing. By multiplying the probability of a fall each year by the average cost of a fall to the NHS (£2,108) by 10 years, Lloyd calculates that the average expected lifetime cost of falls in mainstream housing over 10 years is around £7,000 but only £3,200 in specialist retirement housing. This represents a potential saving of around £3,800 over 10 years. Assuming the number can be applied on a single year basis, this would be a saving of £380 per person per year.

**Reduction in the number of hours in domiciliary care packages over a year:** The Aston University study<sup>73</sup> estimated savings in domiciliary care directly. Aston University Study: extra care housing costs an average of **£427.98** less per person per annum than comparative local authority social care expenditure in the community for domiciliary care. This difference is greater at higher levels of care, and savings for the more expensive levels of care are increasing over time.

In 2014-15, the average cost per adult aged 65+ supported in long-term residential care and nursing care was £535 per week for local authorities. An average person aged 65+ will use an average of 9 months of residential care in their lifetime. This care will cost £535 per week or £2,300 per month. Multiplying 9 months by £2,300 per month, we can estimate: Average expected lifetime cost of residential care for a person in mainstream housing is £20,700. If we then assume that an older person living in a specialist retirement housing unit is 0.75% as likely to move into residential care as someone in mainstream housing  $^{75}$  – i.e. half of the reduced probability achieved through extra care accommodation - we can estimate that: Average expected lifetime cost of residential care for a person in specialist retirement housing is £15,500 (after rounding). This represents a saving of around £5,000 per person. The PSSRU  $^{76}$  estimated lifetime saving of £5000 would translate to 11.68 years at £427.98 per year. These figures seem reasonable and are reconcilable with each other, although only the per person per year figure is needed for calculations.

**Savings due to reduced loneliness:** Research by Beach for the ILC<sup>77</sup> found that the average person in a retirement village experienced half the amount of loneliness of those in wider community. The report also found that a retirement village resident experiences half the amount of loneliness (12.17%) than those in the community (22.83%), so we can reasonably assume that tenants in sheltered housing are also similarly less lonely. Research shows that lonely people use health services more frequently. They are: 1.8 times more likely to visit the GP; 1.6 times more likely to visit A&E and

<sup>&</sup>lt;sup>73</sup> Holland *et al.* (2015). Collaborative Research between Aston Research Centre for Healthy Ageing (ARCHA) and the ExtraCare Charitable Trust: Final Report.

<sup>&</sup>lt;sup>74</sup> Curtis, L. & Burns, A. (2015) Unit Costs of Health and Social Care 2015, Personal Social Services Research Unit, University of Kent, Canterbury.

<sup>&</sup>lt;sup>75</sup> ibid.

<sup>&</sup>lt;sup>76</sup> ibid.

<sup>&</sup>lt;sup>77</sup> Beach, B., (2015). Village Life: Independence, Loneliness, and Quality of Life in Retirement Villages with Extra Care. ILC, London.

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1.3 times more likely to experience an emergency admission<sup>78</sup>. Demos<sup>79</sup> methodology: NAO statistics put the average cost of a GP consultation at £21, A&E attendance at £124, and an emergency admission at £2358.50. Combining these figures with the increased likelihood of lonely people using NHS services, we can estimate that the annual total cost of loneliness to the NHS is £714m per year, or £398.10 per person for the over 65s. If we use the estimate that older people are 50% less likely to feel lonely in sheltered housing and apply it to the half a million older people currently living in sheltered housing, then we can estimate that sheltered housing currently saves the NHS £17.8m annually in reduced health service use (£36.30 per person) by tackling loneliness.

**Reduced number of ambulance call outs:** The only evidence of reduced ambulance callouts is in relation to falls, as there is no 'before and after moving in' study in this respect. However, a fall is the most common reason for a callout among elderly people<sup>80</sup>. The Demos report 'The Value of Sheltered Housing'<sup>81</sup> estimates that 600,000 older people attend A&E following a fall each year (about 17% of all falls). If we assume 91,940 falls are prevented by people living in sheltered housing, then this has prevented 15,629 A&E attendances. The PSSRU<sup>82</sup> puts an ambulance callout at £119. 15,629 fewer ambulance callouts would save £1,859,851 a year. We do not know if there are fewer callouts to housing with care scheme residents concerning non-fall-related incidents.

It is difficult to apply this saving figure to a different scale e.g. per person due to a lack of information and inherent complexities such as the same resident having multiple falls and callouts.

<sup>&</sup>lt;sup>78</sup> ibid.

<sup>&</sup>lt;sup>79</sup> Wood, C. (2017). The Social Value of Sheltered Housing: Demos Briefing Paper. Available at: <a href="https://www.demos.co.uk/wp-content/uploads/2017/06/Sheltered-Housing-paper-June-2017.pdf">https://www.demos.co.uk/wp-content/uploads/2017/06/Sheltered-Housing-paper-June-2017.pdf</a>

<sup>&</sup>lt;sup>80</sup> Buswell, M. *et al.* (2016). Using ambulance service PCRs to understand 999 call-outs to older people with dementia. *Journal of Paramedic Practice*. 8(5), 246-251.

<sup>&</sup>lt;sup>81</sup> Wood, C. (2017). The Social Value of Sheltered Housing: Demos Briefing Paper. Available at: <a href="https://www.demos.co.uk/wp-content/uploads/2017/06/Sheltered-Housing-paper-June-2017.pdf">https://www.demos.co.uk/wp-content/uploads/2017/06/Sheltered-Housing-paper-June-2017.pdf</a>

<sup>&</sup>lt;sup>82</sup> Curtis, L. & Burns, A. (2017) Unit Costs of Health and Social Care 2017, Personal Social Services Research Unit, University of Kent, Canterbury.