



Health and housing: building the evidence base

A Paper for Kent Surrey Sussex Academic Health Science Network by the Housing Learning and Improvement Network

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1. Introduction

This paper provides a review of the evidence base in relation to projects and pilot initiatives across the UK which bring together health and housing, with a particular focus on older people. Evidence has been included about projects which contribute to:

- Improving health outcomes
- Reducing demand/expenditure
- Improving patient/resident experience

At a time of considerable pressure on budgets and resultant system transformation and service reform across health and social care economies, the review will be used to inform Kent Surrey Sussex Academic Health Science Network's (KSS AHSN) planning for future service development and potential investment, particularly around hospital admissions and delayed discharge of care. This is part of the Network's strategic priority to promote 'Living Well For Longer' (LWFL).

The review involved a search of key websites and databases, including: the Housing Learning and Improvement Network (LIN), King's Fund, National Housing Federation, Age UK, Centre for Ageing Better, Institute of Public Care (IPC), Association of Directors of Adult Social Services (ADASS), Personal Social Services Research Unit (PSSRU), NHS Improvement and NICE, as well as telephone interviews with key stakeholders to provide a detailed understanding of effective health and housing initiatives.

The review provides a strategic overview of the policy context, followed by sections covering:

- Housing with care
- Housing advice and information
- Aids and adaptations
- Handyperson schemes
- Falls prevention
- Assistive technology and telecare
- Discharge services
- Design of the built environment
- Warm housing and fuel poverty
- Dementia related initiatives
- Other projects

Each section contains a brief introduction, a review of relevant research, and examples of current projects and initiatives. The conclusion summarises the evidence in terms of the three areas specified above, as well as setting out points for consideration.

2. The policy context – a strategic overview

Key issues:

- There is a strong policy drive for integrated approaches to preventing admission to hospital and expediting hospital discharge.
- Delayed transfers of care and system wide pressures, including the funding of adult social care, are affecting the ability of the NHS to cope
- The role of housing in helping to relieve these pressures and enable older people to live in their own homes is increasingly recognised both in policy and funding provision.

The role of housing as a determinant of health has been reflected in recent policy. The statutory guidance around the implementation of the Care Act 2014 asserts that:

“Housing is therefore a crucial health-related service which is to be integrated with care and support and health services to promote the wellbeing of adults and carers and improve the quality of services offered.”

Section 15.50, [Care and support statutory guidance](#)

Under the Care Act, 2014, there is a requirement for closer cooperation between services that support the health and wellbeing of those who may be in need of care and support in order to deliver more person-centred outcomes.

In October 2016, a national Clinical Commissioning Group (CCG) engagement programme was launched, supported by the Housing LIN¹, which focuses on three elements related to housing:

- How housing can help prevent people from being admitted to hospital;
- How housing can help people be discharged from hospital; and
- How housing can support people to remain independent in the community.²

And, as part of the drive for more integrated approaches, a pioneering [Health and Housing Memorandum of Understanding to support joint action on improving health through the home](#) (MoU) was agreed between government departments, agencies such as ADASS, NHS England, Public Health England, and the Homes and Communities Agency, and other housing and health sector organisations in 2014.

The MoU details areas of improvement, and the action plan aims to ensure that organisations work together to:

- Establish and support national and local dialogue, information exchange and decision-making across government, health, social care and housing sectors;
- Coordinate health, social care, and housing policy;
- Enable improved collaboration and integration of healthcare and housing in the planning, commissioning and delivery of homes and services;

1 Porteus J (2016) [Home is where the health is](#), Housing LIN

2 NHS England (2016) *Quick Guide: Health and Housing Transforming Urgent and Emergency Care Services in England*, NHS England/Public Health England/Department of Health.

- Promote the housing sector contribution to: addressing the wider determinants of health; health equity; improvements to patient experience and
- Develop the workforce across sectors so that they are confident and skilled in understanding the relationship between where people live and their health and wellbeing and are able to identify suitable solutions to improve outcomes.

To accelerate progress towards integration, 14 pioneer areas were set up in 2013 with the aim of bringing health and social care services closer together to provide better care and reducing the need for emergency care in hospital or care homes. An interim evaluation of the first year of the NHS Pioneers programme found that few Pioneers were involving services such as housing.

NHS England's [NHS Five Year Forward View](#) (FYFV) and their recently published [Next Steps on the NHS Five Year Forward View](#) both emphasize that new care models are needed to support and care for people. Key messages include: more attention to prevention and public health; greater control for patients of their own care; and greater integration.³ The FYFV noted that a key condition for transformation across local health economies is a strong primary and out-of-hospital care system, with well-developed planning about how to provide care in people's own homes, with a focus on prevention, promoting independence and support to stay well.

A vanguard programme was established to test out different care models. Three (of the seven) suggested models that are being prototyped have a potential link to housing:

- Multi-Speciality Community Providers (MCPs) which build out from groups of GP practices operating together and include nurses, therapists and community-based professionals '*to become the focal point for a range of care needed by their registered patients*'. They are expected to offer care in some '*fundamentally different ways*'.
- Integrated Primary and Acute Care Systems (PACs) which allow a single organisation to provide NHS list-based GP and hospital services, together with mental health and community care services. These new organisations are expected to reinforce out-of-hospital care, rather than providing a feeder for hospitals.
- Enhanced health in care homes to develop new models of 'in-reach' support to provide better tailored, active health and rehabilitation support for residents.

In the KSS region there are two Vanguard sites: [Encompass](#) (Whitstable, Faversham, Canterbury, Ash and Sandwich), an MCP which will include three health and social care hubs and community hospital beds, nursing home beds and extra care facilities; and Foundation Healthcare Group (Dartford and Gravesham), multi-provider hospital.

The Better Care Fund (BCF) also provides further support for integration with a pooled budget for Health and Well-being Boards, including in relation to housing funding for the Disabled Facilities Grant.

Whilst the 2016/17 Better Care Fund (BCF) Policy Framework does not set specific targets for use of Disabled Facilities Grant (DFG), home adaptations provision can contribute to meeting BCF conditions and targets, such as reducing delayed transfers of care (DTOCs), as well as helping to meet Public Health, NHS and Social Care Outcomes. Significant extra resources for DFG, alongside local flexibilities, provide an opportunity to innovate to integrate housing-

³ Ham C & Murray R (2015) [Implementing the NHS five year forward view: aligning policies](#), London: King's Fund.

related provision into local service planning and reduce DTOCs. In 2016-17 the national DFG allocation was £394m, up from £220m in 2015-16, an increase of about 80%. The [BCF revenue funding for DFGs](#) in the KSS area in 2016-17 was: Kent £13.1m, Surrey £6.9m, West Sussex £6.5m and East Sussex £5.6m.

The drive to reduce hospital attendance and admission is in response to growing pressures. The Government Select Committee on Health observed that Accident and Emergency departments in England are managing unprecedented levels of demand and commented that:

Achieving safe and timely performance in urgent and emergency care is an increasing challenge primarily as a result of growing and rapidly evolving demand as patients attend with more complex conditions but also as a result of system-wide pressures affecting the ability of the NHS and social care to cope. The declining level of performance in A&E is a marker of stress across the whole system of health and social care.⁴

This is reflected in a recent National Audit Office report:

There are currently far too many older people in hospitals who do not need to be there, at an estimated cost to the NHS of around £820 million.⁵

The NAO report found that the number of delayed transfers of care are *increasing at an alarming rate* and were probably an underestimate. In addition, unnecessary stays in hospital result in worse health outcomes for patients and can increase their long-term care needs.

A recent [ADASS budget survey](#) reported that Directors of Social Services see increased prevention and the integration of health and social care as the two most important ways in which savings can be made over the next three years. But, as budgets continue to reduce in real terms, it is becoming harder and harder for councils to manage the tension between prioritising statutory duties towards those with the greatest needs and investing in services that will prevent and reduce future needs. Councils will be spending 4% less on prevention in 2016-17 than last year.

The Department of Health's [Public Health Outcomes Framework](#) includes indicators concerned with older people, which may potentially be influenced by housing-related initiatives: health-related quality of life in older people; excess winter deaths; injuries due to falls in people aged 65 and over; and hip fractures in people aged 65 and over. Linked to this, NICE published guidance in 2015 on: [Excess winter deaths and morbidity and the health risks associated with cold home](#) which includes recommendations for a health and housing referral service – to identify people at risk of ill health from living in a cold home, and to provide tailored solutions accessed through a single point of contact. It places a requirement for the NHS to work with other bodies to address the problem of deaths caused by cold homes, and recommends integrated teams. It also contains provisions on discharging vulnerable people from health or social care settings to a warm home.

In March 2016, NHS England announced plans for ten new housing developments as part of the [Healthy New Towns programme](#) to shape the health of communities, and to rethink how health and care services can be delivered (including [Ebbsfleet Garden City Healthy New Town](#)). The programme offers an opportunity to rethink how to improve health through the built environment.

4 [Commons Select Committee on Health](#) (October 2016)

5 National Audit Office (2016) [Discharging older patients from hospital](#), HC 18, NAO.

The policy drive for housing-related initiatives and approaches to support good health outcomes in older people is not confined to central government. The Local Government Association argues that housing should be central to emerging models of integrated health and social care services, activities, and facilities⁶. In neighbouring Buckinghamshire, the Housing LIN has been working with the County Council Adult Social Care, district housing authorities, the CCG, and other statutory and non-statutory sector partners to help develop an integrated housing with care framework to procure 8 new extra care housing schemes, including a community hub model.

On an international scale, the World Health Organization (WHO) has promoted the concepts of age-friendly cities and lifetime neighbourhoods through its [Age-friendly Environments Programme](#). The WHO describes an age-friendly city as one that:

... is an inclusive and accessible urban environment that promotes active ageing ... An age-friendly city adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities.⁷

In making the case for age-friendly environments, the WHO notes that older people who live in an unsafe environment or areas with multiple physical barriers are less likely to get out, and are therefore more prone to isolation, depression, reduced fitness and increased mobility problems.

The majority of older people (90%) live independently in mainstream housing, and some will need help to maintain their health and independence in those homes for longer. For example, the number of older people with a mobility impairment in England is expected to increase by nearly 50% in the next 15 years.⁸ Handler⁹ cites a range of research evidence that highlights the relationship between housing, health and older people:

- Time spent at home indoors increases in older age: 80% of a day for those 65 and over; and 90% for those aged 85 and over.
- Older people are more likely than any other age group to live in homes that are in a poor state of repair, that lack reasonable bathroom and/or kitchen facilities, that are not sufficiently warm in winter, and that pose a significant risk to health.
- Risk of falls and winter deaths are closely related to poor housing.
- The majority of older people live in mainstream housing and would prefer to remain living independently in their own homes.
- In spite of declining space standards, there is a growing not lessening need for space ‘at home’ in older age.

The sections below review the evidence and examples of a range of approaches and projects which bring together housing-related activity to improve the health outcomes of older people.

6 LGA (2016) [Building our homes, communities and future: Preliminary findings from the LGA Housing Commission](#), LGA.

7 WHO (2007) Global age-friendly cities: a guide, Switzerland: WHO

8 Handler S (2014) [A research and evaluation framework for Age-Friendly Cities](#), UK Urban Ageing Consortium.

9 Handler S (2014) Op. cit.

3. Housing with care

Key issues:

- Extra care housing can delay admission to a care home and provide a cost-effective alternative to residential care.
- Residents of extra care housing have a better quality of life and are less lonely than similar people living at home.
- There is some evidence that extra care housing can reduce health costs.

There is a range of specialist housing for older people, from housing designed to be purchased by, or allocated to, older people but with no additional services; through housing schemes with some elements of additional support built in, such as alarm systems or a warden; to schemes which have 24 hour care and support available either on site or close by (such as, extra care housing, retirement communities, very sheltered housing).

Within the KSS region, there are approximately 84 schemes classified as housing with care or extra care housing (ECH).¹⁰ Some funding was provided within the KSS area for new ECH through the second round of the [Care and Support Specialised Housing Fund](#) (£1.9 million for a scheme in Ashford).

In 2014, the Kent Housing Group ran a workshop which looked at the barriers to delivering specialist housing for older people, specifically, housing with care to align with the delivery of the Kent Accommodation Strategy; and identified possible ways to enable the housing with care market to grow; as well as developing solutions to inform the Kent and Medway Housing Strategy.¹¹

Distinctive features of extra care housing ECH include:

- The provision of 24-hour care and support;
- Flexibility and responsiveness;
- The promotion of independence, including wheelchair accessible design;
- Holistic care which goes beyond the provision of care and support and considers the individual's holistic needs.¹²

An scoping review by Bligh et al (2015)¹³ found convincing evidence that ECH 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. Evidence that it can prevent admission to residential or nursing care altogether was less clear.

10 Elderly Accommodation Counsel [website](#).

11 Parr K (2015) [Strategic Housing Market Assessment: Housing with Care for Older People in Kent, Case Study 104](#), Housing LIN.

12 Housing LIN (2010) Technical Brief No 1: Care and Support in Extra Care Housing, Housing LIN.

13 Bligh J, Cairncross L, Porteus J (2015) *Housing and Adult Social Care – Scoping Review*, London: NIHR SSCR

However, Kneale (2011)¹⁴ found that after five years of residence, those living in ECH were less likely to enter long-term accommodation, compared to those living in the community in receipt of home care (10% aged 80 and above, compared with 19% living in the community in receipt of home care). Based on a small sample of residents in one ECH scheme, Kneale also identified health benefits, including a reduced likelihood of falling and a lower likelihood of admittance to hospital for an overnight stay compared to a matched sample living in the community.

The evidence on the cost-effectiveness of ECH has grown, although it remains inconclusive. The DH-funded evaluation of 19 ECH schemes by Netten et al. (2011)¹⁵ found considerable variability across schemes in the costs of health and social care. Their research found that higher costs were associated with higher levels of physical and cognitive impairment and with higher levels of well-being. However, when residents were matched with a group of equivalent people moving into residential care, costs were the same or lower in ECH. They cautiously concluded that the better outcomes, and similar or lower costs of ECH compared with residential care, indicated that ECH was a cost-effective alternative for people with the same characteristics who currently move into residential care.

Another detailed case study of a scheme in Bradford by Baumker and colleagues (2008 and 2010)¹⁶ for the Joseph Rowntree Foundation looked at the comparative costs before and six months after 22 residents moved into the scheme. Overall, the team found that costs increased as a result of moving into the scheme from £380 to £470 per week per person. However, these were associated with improved social care outcomes and reported quality of life.

A case study by East Sussex County Council which looked at the business case for ECH concluded that the cost of extra care housing was on average half the gross cost of the alternative placements, while the enabling design and accessible environment of extra care housing supported self-care and informal family care, and the on-site restaurant not only benefited residents' nutrition, but also acted as a social hub and springboard for social activities¹⁷.

Frontier Economics for the Homes and Community Agency identified the overall net impact of capital funding for specialist housing on the cost of wider public services. They estimated that the overall benefit per older person is £444 per year¹⁸.

A recent evaluation by Aston University¹⁹ measured the impact of an ExtraCare Well-being Service (an informal drop-in service for preventive health care and day-to-day chronic illness support) on 162 new ECH residents with a control group of people living in their own homes on the community. ExtraCare's Well-being Advisors (registered general nurses) enable residents

14 Kneale D (2011) *Establishing the extra in Extra Care Perspectives from three Extra Care Housing Providers*, ILC.

15 Netten A, Darton R, Bäumker T, Callaghan L (2011) *Improving Housing with Care Choices for Older People: An Evaluation of Extra Care Housing*, Personal Social Services Research Unit, University of Kent, Canterbury.

16 Bäumker T, Netten A, Darton R (2008) *Costs and outcomes of an extra-care housing scheme in Bradford*, Joseph Rowntree Foundation, York; Bäumker T, Netten A, 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, Netten A, Darton, R, Callaghan L (2011) Evaluating extra care housing for older people in England: a comparative cost and outcome analysis with residential care, *Journal of Service Science and Management*, 4, 4, 523–539.

17 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.

18 Frontier Economics (2010) *Financial benefits of investment in specialist housing for vulnerable and older people*. London: Frontier Economics.

19 Holland C et al (2016) *Collaborative Research between Aston Research Centre for Healthy Ageing (ARCHA) and the ExtraCare Charitable Trust – Final Report*, Aston University.

to make informed decisions about their lifestyle and health via well-being assessments. After 12 months, 19 per cent of the intervention group had reverted to a ‘resilient’ state from ‘pre-frail’ at baseline. Planned GP visits fell by 46 per cent among the intervention group versus no change among control participants; planned hospital admissions fell by 31 per cent versus no change among control participants. There was no difference in unplanned visits between the two groups. NHS costs for the intervention group reduced by 38 per cent compared to control participants over 12 months – a saving of £1,115 per person per year. The cost reduction was most significant for residents who were assessed as being frail – from £3,374 to £1,588 on average per person per year.

Residents express high levels of satisfaction with housing with care settings and improvements in their well-being.²⁰ An evaluation of a DH-funded ECH scheme in Dorset²¹ found that older residents’ quality of life vastly improved following a planned move into the newly opened scheme. Croucher et al (2006)²² found a considerable body of evidence that one of the main advantages and most valued aspects of housing with care is independence.

A survey of residents in retirement villages that offer extra care support found:

- Residents in the sample appeared to have a higher quality of life than a similar group living in the community.
- Strong evidence that the sample experienced a higher sense of control than those in community households.
- Lower loneliness than those in the community.²³

Most areas in the UK have some ECH for sale and/or rent. Across the South East, Oxfordshire has led the delivery of over 800 ECH units, including using its own land. The LGA estimates that each placement can save an average of £120 a week compared to a similar placement in a care home.²⁴

In Manchester, Trafford Housing Trust²⁵ has initiated a new ECH scheme for older people with GPs and other primary care professionals co-located with step up and step down beds, shared space, and a single point of contact for the scheme as part of a suite of innovations. The Shrewsbury Street project involves working in partnership with the Council, NHS England, the local CCG and St Brides Church. The social return on the investment was estimated at over £23 million including reduced health costs.

At Roseberry Mansions, One Housing Group has developed a reablement partnership with Camden and Islington NHS Trust. As well as care and support for the senior residents, there is also intensive short-term reablement support in a couple of flats, and therapies to enable people who have been hospitalised to return home, or to other appropriate long-term accommodation.

20 For example: Burns J (2014) *The benefits of extra care housing on the quality of life of residents: The impact of living in Campbell Place, Fleet*, Case Study 93, London: Housing LIN; Kneale, D (2013) *What role for extra care housing in a socially isolated landscape?* London: Housing LIN.

21 Goswell D, Macbeth S, Robertson G (2014) *Blazing a trail: Extra care housing in Blandford Forum, Dorset*, Housing LIN.

22 Croucher K, Hicks L, Jackson K (2006) *Housing with care for later life: A literature review*, Joseph Rowntree Foundation, York.

23 Beech B (2015) *Village Life: Independence, Loneliness, and Quality of Life in Retirement Villages with Extra Care*, International Longevity Centre.

24 LGA (2016) Op.cit.

25 LGA/SITRA (2015) *A home is much more than a house: Integrated approaches for the housing, health and care needs of vulnerable adults*, LGA.

4. Housing advice and information

Key issues:

- **Housing information and advice services can reduce health and social care costs, as well as achieve other positive outcomes.**
- **By providing tailored advice on housing and housing-related options, information and advice can support hospital discharge, raise incomes and reduce falls.**

There is strong demand for housing advice and information among older people, reflecting the importance of trusted, independent, impartial information and advice to enable them to make informed decisions. An evaluation in 2014 for the Department of Communities and Local Government (DCLG)²⁶, found that since the FirstStop information and advice service began in late 2009, it had provided information, advice and support to more than 800,000 people, mainly through the website.²⁷ The service offers free, independent, impartial and fully integrated information and advice on housing, care and related finance, for example, supporting people to plan ahead for housing and care in later life.

The evaluation concluded that a range of positive outcomes had been achieved through the casework element of the service, including continued independent living, higher incomes, reduced isolation, access to housing equity, and a better quality of life. In addition, the researcher reported outcomes for older people that generated financial savings to health and social care budgets. The researcher estimated 30% of casework clients in one year would have been at risk of a fall. These falls could have cost just over £440,000 in health care costs alone.

As well as improving health outcomes and reducing costs, there is also evidence that information and advice may contribute to improved resident experience, particularly for those receiving a benefits check. The average increase in income after a successful benefits check was £2,045, which people spent on heating their homes and improving their diet.

According to a more recent evaluation of FirstStop²⁸, the investment by DCLG of just under £500,000 in the information, advice and service brokerage delivered by First Stop local partners has delivered approximately £11.5 million annual savings arising from the avoidance of falls, unplanned hospital admissions and GP appointments. In addition, well-being was improved for 59% of older people and health outcomes for 43%. By identifying and securing aids, adaptations, assistive technology and improved heating, and where appropriate identifying alternative housing solutions, the service also contributed to supporting successful hospital discharges and reablement for people with complex health conditions.

Looking specifically at cost benefits and reducing demand on NHS services, analysis of the potential value for money to the public purse of a Housing Options Advice service in Lincolnshire calculated an approximate average net saving to the public purse of £3,989 per client. However, this was based on a sample of 15 cases.²⁹

26 Burgess G (2014) *First Stop Evaluation Summary to DCLG*, Cambridge: Cambridge Centre for Housing & Planning Research.

27 www.firststopcareadvice.org.uk/

28 Cooper K (2015) *First Stop Advice for Older People: An independent evaluation of local services*, Care & Repair England FirstStop.

29 Burgess, G. (2013) *Analysis of the potential value for money to the public purse of the Lincolnshire Home Improvement Agency Housing Options Advice service*. Cambridge Centre for Housing and Planning Research.

In Kent, a new social enterprise [Independent Living Advisers](#) (ILA), is offering an innovative service for older people, centred around a dedicated adviser who is a healthcare professional. The locally based adviser works with each client, and where appropriate the family, to develop a support plan tailored to the client's needs and preferences and covering all elements required for happy, healthy and safe independent living. The adviser then organises all elements of the plan, using their knowledge of how to navigate the system, and drawing in the best services from the public, charity and private sectors. The ILA offers 2 services:

- At Home – An holistic service aimed at older people with low-mid level needs focused on 'prevention better than cure' and supporting them to live full and enjoyable lives whilst reducing risks of a crisis;
- LifeLine – A focused service aimed at older people and families where a crisis has struck. ILA works intensively with the family, the individual and the NHS to support clients in getting back home into independent living and reducing the risks of a crisis or incident recurring.

Derby has developed a Healthy Housing Hub that offers help, advice, repairs and adaptations to reduce home accidents, falls and general health risk. People with a history of falls who received services from the Hub had 54 per cent fewer acute hospital stays. Utilising a range of low-cost health-focussed interventions, including:

- Advice and support
- 'Prescribed works' and 'Healthy Housing Assistance' (means tested)
- Handy-person service
- Partnership links
- Facilitating or delivering housing solutions, such as: repairs to boiler/gas fires, or install central heating in cold homes; removing trip hazards; making electrical installations safe; and help with fuel poverty.

A study in 2013/14 found that clients with a history of falls who received services from the Hub, saw a reduction of 40% in their use of A&E and 54% in acute hospital stays; 86% felt their health and wellbeing, levels of anxiety, peace of mind, security and confidence at home had benefited.³⁰

In 2015-16, at one year post intervention, proportionally fewer Hub clients were in need of health and care services. In the case of inpatient emergency care, 20% fewer Hub clients were admitted to hospital when compared to those originally admitted as a result of a fall 12 months earlier; and 91% of Hub clients were still in their own homes at 12 months, at less cost. There was a marked difference in contact with East Midlands Ambulance Service between the intervention and control groups in relation to conveyance to hospital; there was an average 51% and 74% greater use respectively in control groups of 111 and out-of-hours services.

Bolton's Public Health Department (Staying Well Project), jointly with Adult Social Services, Strategic Housing, NHS Bolton CCG and the Customer Services Department are currently testing an approach to systematically identify individuals (age 65 and over) at high risk of developing future health and social care needs and providing advice, support and assistance.

³⁰ Derby City Council & Southern Derbyshire CCG (2016) [Healthy Housing Hub Case Study](#), Southern Derbyshire CCG & Derby City Council.

The approach involves the systematic use of GP practice registers to proactively undertake a holistic Staying Well Check of issues facing this cohort of people; and identify ways of helping them to remain healthy, happy and independent at home for longer. Individuals are contacted and offered a home visit. Appointed Well-being Co-ordinators undertake a person centred home-based conversation with the identified cohort of individuals, then actively support them to find and take up appropriate services, information, advice and support. The approach is currently being tested in six GP practices across Bolton; emerging findings are encouraging both in terms of the feasibility of potential roll out and in achieving positive outcomes. Benefits for the project have included:

- More people able to maintain health and independence;
- Reduced GP visits;
- Reduced or delay in need for intensive health and social services including crisis intervention;
- More efficient targeting and use of resources;
- More holistic integrated care for individuals.³¹

The Healthy Homes programme was originally commissioned by Liverpool PCT, and the programme transferred with public health to Liverpool City Council in 2013. Healthy Homes Advocates visit properties in the areas with the greatest health and housing support needs and gather information about the occupants and their health needs, as well as the condition of their homes. Residents are then provided with free help and advice to remove or prevent hazards that can improve their health and wellbeing. Advice is given on:

- Health proofing the home (from excess cold, damp and mould).
- Home safety (to prevent falls on stairs, flat surfaces and hot surfaces and identifying any slip, trip or fall hazards).
- How to access services provided by various support agencies such as Age Concern or the Benefit Maximisation Service.
- Healthy eating.
- Fuel poverty and keeping the home warm enough through the winter.
- Maximising income.

One strand of the programme is ‘Healthy Homes on Prescription’ with around half of the city’s GP practices taking part. Advocates employed by the team also regularly visit 32 health centres to provide Healthy Home surgeries. Care & Repair England’s Silverlinks service provides localised home and housing information to older people to make informed decisions on their options. Older volunteers share their personal housing experience, offering one to one help as well as providing information and community advice. ‘Pass it on’ workshops spread knowledge about housing & care options through older people’s informal networks. There are Silverlinks projects in the West of England, Nottinghamshire, Cornwall, Wigan, Northumberland, West Cumbria and Preston.

31 Bolton Council & NHS Bolton (2016) *Staying well project brief*.

5. Aids and adaptations

Key issues:

- **There is good evidence of the cost effectiveness of aids and adaptations.**
- **Adaptations that reduce falls payback in five to six years.**
- **Home from Hospital services indicate reductions in bed days.**

Aids and adaptations (along with handyperson services) are frequently delivered by a local Care and Repair service. An adaptation is a modification to a dwelling that removes or reduces a disabling effect that the dwelling has on an older person. Adaptations can range from the addition of a grab rail through to the provision of ramps, stair-lifts, specially adapted bathrooms and kitchens. They can help both to prevent a hospital admission and to avoid delayed discharge. There are over 200 schemes providing aids and adaptations across the country.

There is good evidence on the cost-effectiveness of aids and adaptations, including Heywood and Turner's study³², which explored the research evidence on aids and adaptations. They reported that home adaptations improved quality of life for 90% of recipients.

A review of the Rapid Response Adaptations Programme (RRAP) in Wales, (which provides a fast small repairs and adaptation/repairs service to older and disabled owner-occupiers and private tenants identified by health and social care staff as at-risk of hospital admission or awaiting hospital discharge), estimated significant savings in home care costs.³³ Assuming 10% of repairs and adaptations led to a hospital discharge or avoided an accident and hospital admission, the total cost saving to health and social care was estimated at £15 million in one year. This was achieved by enabling people to return home from hospital and care, and in preventing admissions and re-admissions. The greatest savings were found where informal carers were enabled to manage without the need for night-time professional care workers.

Another evaluation for Care and Repair of a similar scheme concluded that Home from Hospital projects are a good way to ensure that older people can leave hospital safely and comfortably through the provision of short/long-term care, equipment and adaptations, and that a cross-sector partnership where housing help was integrated into the discharge system could achieve savings to social care and health providers.³⁴ The service targeted older people, their families and carers, and involved the provision of housing and care service information to patients, initially via a Going Home from Hospital pack combined with local Care and Repair (or similar voluntary sector service) staff undertaking regular 'ward rounds' to top up packs, talk to ward staff and take direct referrals of older people who wished to discuss their housing and care options and/or who needed practical housing related help in order to be discharged from hospital. Green concluded that integration of housing services worked best when hospitals allow housing information and advice service providers to become an integral part of the hospital setting with housing advisers visiting wards to meet staff and patients.

The British Health Care Trades Association suggests that an annual spend of around £270 million on Disabled Facilities Grants is worth up to £567 million in health and social care

32 Heywood F, Turner L (2007). *Better outcomes, lower costs. Implication for health and social care budgets of investment in housing adaptations, improvements and equipment: a review of the evidence*. Office for Disability Issues, London

33 Welsh Assembly Government (2005) *Review of housing adaptations including disabled facilities grant – Wales*, WAG

34 Green G (2012) *If only I had known...an evaluation of the local hospital linked pilot projects*, Care and Repair.

savings and quality of life gains.³⁵ The study quotes evidence of a range of practical low cost initiatives on adaptations and equipment that resulted in significant savings. One local authority estimated a reduction in care costs of £1.98 million over five years for a £110,000 investment in just 20 level access showers.

The Building Research Establishment (BRE) has modelled the impacts of preventive home adaptations to reduce NHS use and the need for reactive adaptation among those with long-term illness or disability.³⁶ The researchers estimated the annual cost to the NHS of not fitting preventive adaptations is £414 million, with an additional £115 million in avoided reactive adaptation. The estimated cost of fitting these adaptations is £6.4 billion, giving an overall payback time in terms of NHS cost reductions of 15.2 years. For some adaptations, the payback time is much quicker: adaptations that reduce falls pay back in five to six years, whereas the payback for tackling damp is much longer in terms of NHS costs.

Following the inclusion of Disabled Facilities Grants in the Better Care Fund (as referenced in section 2 above), Hampshire County Council worked with partner authorities to improve the delivery of adaptations across the county.³⁷ Specific objectives were:

- facilitating timely hospital discharge
- admissions to residential care homes
- the cost of providing domiciliary care
- contributing to the wider prevention agenda of housing, social care, and health authorities by facilitating improvements in individuals' well-being, and reducing hospital admissions

Target delivery times were agreed for the two most common adaptations requested. These are for a stair-lift, where the aim is to install 90 per cent within 90 days of referral, and level access showers, where the aim is to complete 90 per cent within 120 days of referral. All of this was brought together in a joint agreement signed off by the districts and the Health and Wellbeing Board.

A mini-evaluation of the West of England Home for Hospital service in 2014 concluded that the average cost per patient of the service to the statutory services was approximately £280 whilst the average amount of hospital bed days saved to the NHS were three per patient. The service provides practical housing related support, which complements the services of other organisations, to ensure rapid, well managed discharge from hospital, aid reablement and prevent admissions and re-admissions. The operational arrangements vary, for example at the Bristol Royal Infirmary, the caseworker is a member of the Integrated Discharge Hub which meets weekly with hospital managers to actively review cases. Help provided includes from fitting key safes, grab rails, electrical safety and heating repairs to replacing flooring and major house clearances.³⁸

Swan Housing Association has designed a homecare and support service which integrates falls prevention, Home from Hospital and Rapid Response services³⁹. Swan Care and Repair,

35 Snell T, Fernandez J-L, Forder J (2012) [Building a business case for investing in adaptive technologies in England](#), London School of Economics.

36 Garrett H, Roys M, Burris S and Nicol S (2016) *The cost-benefit to the NHS arising from preventative housing interventions*, BRE.

37 LGA / SITRA (2015) *A home is much more than a house Integrated approaches for the housing, health and care needs of vulnerable adults*, LGA/SITRA.

38 Care and Repair (2015) Case study *West of England Care & Repair Home from Hospital Casework Service*, Care and Repair.

39 Foundations (2016) *The collaborative home improvement agency*, Foundations.

in partnership with a care provider and North Essex CCG have designed the service to cut hospital admissions and bed blocking. When a doctor, nurse, social worker or emergency department calls the service about a patient, they are visited at home by a care worker and handyperson within four hours. A short-term care package is co-produced, which includes a home safety check, plus adaptations and personal care for up to six days. The service allows patients to move seamlessly between the different elements of the service, offering a flexible and personalised service to each service user.

Homecare and Support aims to:

- enable people to remain living and receiving care in their own homes
- avoid the need for more intensive interventions and to promote self-care as well as prevention
- ensure that unnecessary hospital and residential care admissions are avoided
- maintain and help the person regain maximum independence
- support carers when a crisis can threaten the stability of care and support arrangements.

Scheme staff are able to see 87% of people referred to it within four hours and 96% of people referred choose to use it rather than be hospitalised. Between October 2014 and March 2015, the scheme dealt with over 500 referrals in North East Essex. A social return on investment analysis demonstrated that for every £1 spent on the scheme so far, £8 was saved in additional hospital bed spaces and wider community budgets.

6. Handyperson schemes

Key issues:

- There is good evidence that handyperson schemes enable older people to live independently for longer with greater comfort and security.
- The greatest potential health savings are around falls prevention, for example, grab rails and trip hazard repair.

Handyperson services offer a range of support to older people including: small repairs and minor adaptations that reduce the risk of falls and enable independent living; home security measures to prevent burglaries; hospital discharge schemes (where they include hazard management and equipment installation); fire safety checks and installation of alarms and smoke detectors; and energy efficiency checks. Handyperson services (or Care and Repair or Staying Put) are often part of a range of services offered by a home improvement agency, for example, the as part of the home improvement service provided in West Kent by Family Mosaic Housing Association.

More generally, there is good evidence that handyperson schemes help a large number of older, disabled and vulnerable people to live independently in their own homes for longer with greater levels and of comfort and security. Croucher et al⁴⁰ concluded that:

[Handyperson schemes] enhance the effectiveness of health and social care provision through the delivery of often very simple and very low cost interventions....Handyperson services can and do support the preventive agenda. This evaluation has demonstrated that handyperson services provide value for money, and while this is the overriding message, the “value-added” aspects of services can only strengthen the case for supporting these services.

p.12 Croucher et al (2012)

In terms of value for money, the National Evaluation concluded that based on conservative modelling assumptions, the benefits achieved by the handyperson programme outweighed the costs of providing the programme by 13%. The biggest costs avoided by the delivery of a handyperson service were in social care.

A more recent evaluation of a pilot scheme in Northern Ireland found that the scheme was successful in terms of client satisfaction and that the interventions generated by the project indicated a return on investment of £1.34 for every £1.00 invested. According to the researchers, '*Remodelling the data to maximise costed-benefits shows a potential return on investment approaching £2.00 for every £1.00 invested*'⁴¹ based on reduced falls, reductions in fuel poverty, and savings to health, social care and the individual client. The greatest potential savings were around falls prevention.

Not all schemes offer the same service. For example, a scheme in Devon offers a combined Home Safety Assessment and Handyperson Service called 'Safe at Home'. Most referrals were either self-referrals or came through Health and Wellbeing Checks. In 2011, the scheme cost £96 per client. Uncosted benefits included improved well-being, a reduction in fuel poverty, falls prevention, improved confidence, and better access to other appropriate services.⁴²

40 Croucher K, Lowson K, & Fountain M (2012) *National Evaluation of the Handyperson Programme*, DCLG.

41 Astral Advisory (2014) [Evaluation of Handyperson Services](#), Astral Advisory

42 Evans S (2011) *Safe at Home: A preventive handyperson service in Devon*, Case Study 54, Housing LIN.

Horizon Housing Association carried out an evaluation of social added value for small repairs and handyperson service in North Lanarkshire. Part of the funding for the service came from NHS Lanarkshire (£25,202).⁴³ Overall, it was estimated that the service yielded a social return of £3.79 for every £1 invested, based on assumed benefits which included:

- reduced falls and accidents in the home;
- increased ability to remain living at home;
- improved home maintenance, avoiding home falling into further more significant disrepair;
- reduced levels of stress and anxiety;
- reduced time spent by both local authority care staff and community based NHS staff gaining access to clients' homes.

Somerset Handihelp is a preventive service that undertakes minor works needed to facilitate discharge such as installing grab rails, key safes, telecare services, moving beds and other furniture, assembling flat-pack furniture, repairing trip hazards, minor home improvements, and small adaptations. It is part of a partnership which includes Somerset CCG.

Middlesborough's home improvement agency includes a five person handyperson team - who all have disabilities themselves and have been trained as trusted assessors. They are able to organise the fitting of grab-rails, key safes, minor repairs, telecare installation, and actively look for trips and falls hazards. Staffordshire Housing Group has been running the Revival Home Improvement Agency for more than 20 years.⁴⁴ The agency offers a wide range of services:

- Low-cost handyperson
- Home from hospital
- Decorating and gardening
- Adaptations
- Repairs management
- Floating support (wellbeing and tenancy support in the home)
- Falls prevention checks and safety measures
- Fire prevention checks
- Befriending service.

The Agency points out that a fall at home leading to a hip fracture costs the state £28,665 on average – more than 100 times the cost of providing a grab rail or hand rails⁴⁵, while the cost of a fall requiring attendance at A&E is £2,000 and a delayed discharge from hospital costs £1,065.⁴⁶

43 Horizon Housing Association (2013) Social Return on Investment (SROI) Analysis An evaluation of social added value for Care and Repair North Lanarkshire, Horizon.

44 Buck D, Simpson M & Ross S (2016) *The Economics of Housing and Health: the role of housing associations*, London: King's Fund.

45 Heywood F & Turner A (2007) Op.cit.

46 Burgess G (2014) *FirstStop local partners: costs and potential savings to public budgets of client casework 2014*, Cambridge: Cambridge Centre for Housing & Planning Research.

7. Falls prevention

Key issues:

- The best paybacks to the NHS come from mitigating falls on the level, on stairs and in baths (5.2 to 6.5 years).
- Services targeted on those at greatest risk and delivered by an occupational therapist appear to be more effective than others.
- A falls response service for non-injured fallers has yielded promising results.

One in 3 people aged 85 or over has one or more falls every year, many of which are preventable. Tian et al (2014) estimate that falls costs the NHS around £2 billion a year.⁴⁷ The Building Research Establishment (BRE) estimated that repair work to remedy 'Category 1' hazards from falls on stairs and falls on the level would have a notable impact on estimated health expenditure savings. The average cost of repair work for these two hazards was estimated to be £982 and £792 respectively. Some work could, however, be relatively inexpensive (£200-£500) for example: providing additional lighting, repairing or installing handrails to reduce the risk of falls on stairs. Repairing floors and paths to reduce the risk of falls on level surfaces can also be undertaken at relatively low cost. Conversely, redesigning internal or communal staircases to flats or redesigning a large area of external pathway will be more expensive.⁴⁸ The best paybacks to the NHS come from mitigating falls on the level (5.2 years), falls on stairs (5.9 years), and falls in baths (6.5 years).⁴⁹

A Cochrane review of interventions for preventing falls in older people living in the community⁵⁰ found that home safety assessment and modification interventions were effective in reducing the rate of falls and risk of falling. The interventions were more effective in people at higher risk of falling, including those with severe visual impairment. The reviewers concluded that '*home safety interventions appear to be more effective when delivered by an occupational therapist*'. One of the trials that indicated cost savings for their interventions involved home safety assessment and modification in those with a previous fall.

Many of the initiatives delivered through handyperson schemes and aids and adaptations aim to support the aim of falls reduction. Several housing associations have developed the economic case for falls prevention and for support following a minor fall. Many more housing organisations offer falls prevention services to their residents and more widely. The King's Fund cites evidence indicating that housing initiatives to reduce falls among older people yield the quickest paybacks⁵¹. Using the Chartered Institute of Environmental Health methodology, Birmingham City Council's Housing Strategy and Partnerships Team calculated that falls on stairs and levels in private sector homes resulted in £6,968,300 per annum costs to the NHS, the result of 2,733 persons requiring medical attention each year. Minor interventions such as the installation of grab rails put the combined costs for addressing the effect of these hazards

47 Tian Y, Thompson J, Buck D (2014). 'The cost of falls: exploring the cost of the whole system pathway for older people in a rural community in England'. *Journal of Integrated Care*, 22, 4, 165–73.

48 Garrett H & Burris S (2015) *Homes and ageing in England; Briefing Paper*, BRE/PHE.

49 Garrett H, Roys M, Burris S, Nicol S (2016) *The cost-benefit to the NHS arising from preventative housing interventions*, Berkshire: BRE.

50 Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE (2012) *Interventions for preventing falls in older people living in the community*, Cochrane Database of Systematic Reviews, 2012, Issue 9.

51 Buck D et al (2016) Op. cit.

at £1,006,132 with an average length of time to payback these costs at 0.15 years.⁵² Garrett et al⁵³ calculated a slower payback of five to seven years. A falls response service for non-injured fallers provided by Herefordshire Housing Group was estimated to have saved the NHS more than £300,000 through prevented ambulance call-outs, A&E attendances and admissions, and GP attendances based on 865 call-outs.⁵⁴

Another housing based approach to falls reduction is illustrated by an example from Amber Valley Housing which launched a Health Trainer Programme to tackle the highest rate of falls in Derbyshire.⁵⁵ In partnership with Derbyshire County NHS and Three Valleys Housing, nine Neighbourhood Support Co-ordinators were trained to signpost residents to specialist health agencies. Amber Valley Housing also employed two level three health trainers to take on the referrals and provide one-to-one support. The programme offered older residents:

- Falls clinics to reduce the risk of falls.
- Chair-based exercise classes to improve flexibility and reduce isolation.
- Otago – an exercise programme involving monitoring of progress across a year.
- The Be Active and WaistWise programmes combining exercise with dietary advice
- Smoking cessation support and advice.

The programme was focused on working with residents living within the housing association's sheltered housing schemes, but was also offered and promoted more widely in the community.

The Gateshead Housing and Falling Prevention project identified housing that was increasing the risk of falls and provided remediation. Simple repairs or adaptations to dwellings were found to reduce the risk of falls in the home, and improve the quality of life for older residents.⁵⁶

52 Birmingham City Council's Housing Strategy and Partnerships Team (2011) *Housing and public health: towards a health impact assessment* [online]. Available at: www.apho.org.uk/resource/item.aspx?RID=104769

53 Garrett H, Roys M, Burris S, Nicol S (2016) Op. cit.

54 Buck D et al (2016) Op. cit.

55 National Housing Federation (2010) *Invest in Housing, Invest in Health: How housing associations have a role to play in reducing the inequalities in health*, London: NHF.

56 JB Consultancy (2012) *Gateshead Housing and Falls Prevention Project Evaluation*, Gateshead Falls Prevention Team.

8. Assistive technology and telecare

Key issues:

- Evidence on the effectiveness of assistive technology and telecare in reducing demand and improving health outcomes is inconclusive.
- New research funded by the NIHR is seeking to determine the telecare ‘dividend’
- There is some evidence that with the right equipment, telecare can enable people to get out and reduce family tensions about care.

Assistive technology (AT) is an umbrella term for any device or system that allows an individual to perform a task they would otherwise be unable to do or increases the ease and safety with which the task can be performed⁵⁷, while telecare involves the use of electronic sensors and aids that make the home environment safer, manage risk thereby enabling people to live at home, independently, for longer. Sensors can automatically raise alarms through call centres, wardens or friends and family.⁵⁸ There is a continuum of services that begins with basic dispersed alarm systems, and extends into more advanced technologies.

In 2012, Lloyd⁵⁹ reported that 375,000 people used personal alarms and 715,000 used alerting devices in England in 2007-08 among those aged 50 and above. While the national evaluation was inconclusive, much of the evidence on telecare based on local studies is more positive (e.g. [Housing LIN case studies](#)). One researcher commented that the key to success in high quality assessments which match need in the home environment to the right technology.⁶⁰

The national evaluation of the Whole Systems Demonstrator project (Kent County Council was one of the three ‘demonstrator’ sites), comparing telecare with usual care in a cluster randomised trial, concluded that telecare as implemented in the trial did not lead to significant reductions in service use, at least in terms of results assessed over 12 months.⁶¹ Cost per additional QALY was £297,000. Cost-effectiveness acceptability curves indicated that the probability of cost-effectiveness at a willingness-to-pay of £30,000 per QALY gained was only 16%. Sensitivity analyses combining variations in equipment price and support cost parameters yielded a cost-effectiveness ratio of £161,000 per QALY.⁶²

A University of York review in 2009 reported evidence that the National Telecare Development Programme had reduced unplanned hospital admissions and reduced the need for residential care. However, the review also reported that data collection was in need of development and obtaining robust data had been problematic.⁶³ The researchers estimated that the programme had reduced care home admissions by 518 and unplanned hospital admissions by 1,220, reducing expenditure by some £6.8 million.

A review of the national Telecare Development Programme (TDP) in Scotland estimated that during the period 2006–2010 a very significant gross financial benefit of some £48 million had

57 Cm 4192-I (1999) *With Respect to Old Age: Long Term Care - Rights and Responsibilities: A Report by The Royal Commission on Long Term Care*, The Stationery Office, London.

58 Department of Health (2009) *Telecare*, The Stationery Office, London.

59 Lloyd J (2012) *The Future of Who Uses Telecare?*, Strategic Society Centre.

60 Interview with John Woolham, King's College, London.

61 Steventon A, Bardsley M, Billings J, Dixon J, Doll H, Beynon M, Hirani S, Cartwright M, Rixon L, Knapp M, Henderson C, Rogers A, Hendy J, Fitzpatrick R, Newman S (2013) Effect of telecare on use of health and social care services: findings from the Whole Systems Demonstrator cluster randomised trial, *Age and Ageing*, 0, 1–8.

62 Henderson C, Knapp M, Fernández JL, Beecham J, Hirani SP, Beynon M, Cartwright M, Rixon L, Doll H, Bower P, Steventon A, Rogers A, Fitzpatrick R, Barlow J, Bardsley M and Newman SP (2014) Cost-effectiveness of telecare for people with social care needs: the Whole Systems Demonstrator cluster randomised trial, *Age and Ageing*, 2014, 0, 1–7.

63 Beale S, Sanderson D, Kruger J (2009) *Evaluation of the Telecare Development Programme*, JIT, Edinburgh.

resulted from an investment in telecare of some £12.6 million nationally (including match-funding). The collective impacts of telecare were estimated as having included: avoidance of 6,600 unplanned hospital admissions; avoidance of 2,650 residential care and nursing home admissions; and avoidance of 411,000 home check visits to monitor the well-being of older people and other groups.⁶⁴ An early study by Bowes et al in West Lothian reported cost savings of £85,837 as a result of reduced bed days.⁶⁵ Evaluators linked the reduction to the Rapid Response service, which was integrated with the West Lothian smart technology programme.

There is limited evidence about the extent to which telecare users themselves feel that they have been enabled to live independently. A survey of 461 telecare users in Scotland found that 70% felt more independent, about one-third felt they needed less help from their family, and 27% reported that their health had improved since they received telecare services.⁶⁶ The AKTIVE project explored the way telecare can be developed to help older people live a full and independent life with a particular focus on people who are prone to falls and memory problems. It also looked at how telecare may support care staff and informal carers. Key messages from the research were that when the right equipment was available, telecare was successful, not only in keeping people safe at home, but also in helping them to get out, increasing their vitality and reducing family and personal tensions about care.⁶⁷ Much of the research emphasises the complementary role of telecare as just one component of a response to an older person with high support needs, rather than being a substitute for services.⁶⁸ The NIHR School for Social Care Research is currently funding further research on assistive technology and telecare.

There are a wide range of housing based and other telecare services. For example, Herefordshire Housing Limited (part of Herefordshire Housing Group) is jointly funding a falls response service with Herefordshire CCG and Hereford Council provided by Herefordshire Careline to 4,000 Herefordshire residents. The service is on-call and provides rapid mobile response to non-injured fallers in the adult population. The service does not provide clinical assistance, but information at the scene is forwarded to clinical teams and, with consent, the responders refer to the NHS Falls Prevention Service and GP. Most callers are in their 70s. Notification letters are sent to GPs on every attendance. Herefordshire Housing estimated savings for 865 attendances in a year to include the following:

Prevented ambulance call-outs (at £184): £132,112.

Prevented A&E attendances (at £87): £37,498.

Prevented A&E admissions (at £914 per night): £149,896.

Prevented GP attendance (at £114): £9,918.

Prevented police attendance (at £59.65): £10,260.

Overall, the service produces savings of £339,684.⁶⁹

Trafford Housing Trust set up a lifting service using the local Telecare and Tele-health service. The service which provides a rapid response to help people after falls, avoiding the need for lengthy ambulance waits, has not been evaluated.⁷⁰

64 Newhaven Research (2010) *An Assessment of the Development of Telecare in Scotland 2006–2010*, Edinburgh: Scottish Government.

65 Bowes,A.,McColgan,G.andBell,D. (2006) *Smart Technology and Community Care for Older People: Innovation in West Lothian*, Edinburgh: Age Concern Scotland.

66 Beale et al. (2009) Op.cit.

67 Technology Strategy Board (2014) *AKTIVE: Advancing Knowledge of Telecare for Independence and Vitality in Later Life - A report of the AKTIVE Conference, University of Leeds, 8 – 9 April 2014*.

68 Brownsell S, Aldred H, Hawley M (2007) The role of telecare in supporting the needs of elderly people, *Journal of Telemedicine and Telecare*, 13, 6, 293–297.

69 Buck et al (2016) Op. cit.

70 LGA / SITRA (2015) *A home is much more than a house Integrated approaches for the housing, health and care needs of vulnerable adults*, LGA/SITRA.

9. Discharge services

Key issues:

- There are wide range of housing-related services aimed to support early discharge.
- Limited evaluations of schemes such as the ASSIST scheme in Mansfield, the Keiro service pathway in Middlesborough, and the Sheffield Frailty Unit indicate that significant savings can be achieved.

In August 2016, there were just over 400 patients with a delayed transfer of care across the KSS area (Kent 152, Surrey 69, East Sussex 99 and West Sussex 83).⁷¹ Avoiding admission and unnecessary time in hospital improves outcomes for patients by reducing length of stay in hospital beds where older patients can become clinically decompensated and those with cognitive impairments can see their confusion increase.

There is frequently overlap between the services in this section and those concerned with aids and adaptations, handyperson and falls prevention services. This is clearly illustrated by the Lightbulb project in Leicestershire.

The project aimed to improve the way people are supported in their homes, to avoid unnecessary hospital admissions and to improve people's health and wellbeing. Light Bulb brought together services across the eight local authorities in Leicestershire in a single service with one point of contact for a wide range of housing support services:

- assistance in adapting the home (this could be advice and/or finance assistance)
- assistive technology which helps people around the home e.g. lifeline
- keeping people warmer - with energy-saving advice and home improvements
- handyperson service – to improve safety and help avoid accidents in the home

All eight local authorities and health and care authorities committed to deliver the service across Leicestershire. The pilot and service redesign was co-produced with staff, service users and providers. Systems transformation funding was available for implementation and the county and public health in Leicestershire, as well as district councils, are resourcing the project.⁷²

Windsor, Ascot and Maidenhead CCG is working with sheltered accommodation providers to identify common problems and work towards incremental solutions to reduce hospital readmissions, as well as service improvements in the delivery of care following a hospital admission.⁷³ This has resulted in initiatives such as better information about ways to use the ambulance and fire service for residents; and coffee mornings combined with health surgeries including flu jab clinics and falls prevention information.

Several housing associations are providing discharge services to assist hospitals. For example, Midland Heart provides a re-ablement service for older people in Birmingham. The housing association took over and refurbished a ward at the Good Hope Hospital in Sutton Coldfield

71 www.england.nhs.uk/statistics/statistical-work-areas/delayed-transfers-of-care/2016-17-data/

72 Foundations (2016) *The collaborative home improvement agency*, Foundations.

73 Yeoman C (2016) [Sheltered housing in Windsor, Maidenhead and Ascot: A case study of a joint project led by WAM CCG](#), Case Study 118, Housing LIN.

consisting of 29 private bedrooms to support older people who are assessed as medically fit for discharge, but are not yet ready to go back to their own home. It provides a comfortable setting for structured after care and support in a hotel style environment for a period of up to a fortnight. Research for Midland Heart indicates that cost efficiencies have been achieved through a reduction in bed days compared with a control group, along with positive outcomes for older people.⁷⁴

Home Group provide supported housing as an alternative to hospital admission. The service features:

- Accommodation-based including shared / communal space
- Brief to short-term support
- On-site support to up 24 hours
- One-to-one, group and peer support
- Transitions, reablement and recovery
- Short-term day care and respite care.

The cost of a service offering 12 beds with 24-hour support is £103 per unit per night, compared to the average daily cost of the excess of £275 (NHS Reference Cost 2013-14), representing a potential annual saving of over £750,000. The savings generated would pay for the annual cost of the service within just seven months of operating. It gives patients whose needs are too great to enable them to stay in their own home, but not so critical that they would require in-patient hospital care, a safe space to live along with appropriate support.

Pennine Acute Hospitals NHS Trust, in partnership with Manchester City Council and North, Central and South Manchester CCGs provides a citywide ‘Home from Hospital’ (HfH) discharge support service, working alongside integrated hospital teams in each of the three Manchester hospitals.

The service focuses on early intervention by supporting customers with moderate needs outside the criteria for statutory support services. All older people over 60 are contacted who: have been discharged from accident and emergency, the medical emergencies ward and other wards, and are not receiving reablement or social care support. The service works with community rehabilitation services, primarily reablement and intermediate care and with key partner agencies, including the handyperson service and the local Home Improvement Agency.

In 2013-2014, 8,000 people were successfully contacted and assessed. Help with small repairs and adaptations in the form of a handyperson service helped two-thirds of Home from Hospital service users to make changes to their home environment, and half of all service users received additional advice and information provided by a generic caseworker. They were enabled to maximise income, increase confidence in dealing with long-term conditions, and access additional community services.

The CCG noted a significant reduction in the number of people aged over 60 in north and central Manchester being re-admitted to hospital within 30 days. By providing interventions to make their home safer, warm and habitable, the CCG considers the service has helped people to maintain independence and reduced risks to their physical health.

74 LGA / SITRA (2015) Op. cit.

At the North Manchester General Hospital, an additional, assisted discharge service provides transport and practical help to patients to warm the home, make necessary adjustments such as repairs and adaptations, prepare beds and a simple meal, shop for immediate essentials, and re-connect with services, relatives or friends. This is followed up by staff and volunteers with regular telephone and direct contact as necessary for a period of up to six weeks.

Wyre Council has regular meetings with its local CCG to review neighbourhood based unscheduled care, looking at data on A&E attendances, hospital admissions and hospital discharge. The meeting looks at individual cases with input from housing, health and social care. Housing's contribution includes housing options assessments, emergency heating system repairs and other cold home related interventions and home health safety checks addressing falls etc. This work has expanded to provide housing based support for patients with care plans due to long term conditions such as COPD. Other collaborative work between the CCG and the council includes the building of a new Extra Care facility and investment from the CCG to clear a backlog of priority Disabled Facilities Grants.⁷⁵

The Academic Health Science Network for the North East and North Cumbria commissioned York Health Economics Consortium to conduct an independent review to assess the costs and benefits of the Keiro service model and to assess the impact that the service could have if introduced in other parts of the country. Keiro is Japanese for 'Pathway' or 'Journey'. The company seeks to provide an integrated 'pathway' of support and rehabilitation services from hospital to home to support clients towards independence.

Following over 10 years of incremental developments, partnerships and innovation to deliver an integrated rehabilitation service pathway, Keiro opened 'The Gateway', a 40 bed neurological rehabilitation centre in Middlesbrough centre, in January 2014 that provides:

- Specialist nursing care by medical consultants and nurses;
- Rehabilitation programmes for inpatients and outpatients, delivered by the medical team and augmented by physiotherapists, occupational therapists, personal assistants and gym trainers;
- A Wellbeing Hub offering a range of therapy, leisure, rehabilitation and fitness opportunities;
- Access to on-site transitional housing from a Public Sector partner.
- Access to an array of long term housing and support options from Public and third Sector partners (this aspect of Keiro is not formally incorporated in this analysis).
- A Knowledge Centre used by staff, community groups and statutory services offering counselling and support on issues such as employment, alternatives to work, legal advice, welfare benefits, self-management and adult learning courses for people with neurological conditions, their family and carers.

While having reservations about the quality of some of the evidence, the researchers found:

- Substantial financial savings: assuming a new cohort of 40 patients replaces each previous cohort at discharge, then over the 10 year time horizon, it was estimated that Keiro produces savings of £156 million, with costs of £108 million, compared to £267 million if patients are managed in standard care;

75 LGA / SITRA (2015) Op. cit.

- The model improves the patient's outcomes and their overall experience;
- The cost reductions afforded by the model are applicable beyond the neuro-rehabilitation patient cohort to a range of other patient groups with complex and varied rehabilitation needs.⁷⁶

In Wigan, £2 million was provided through joint funding from Wigan Council and Wigan Borough CCG to pilot a new, non-means-tested, Home Adaptations Grant in order to reduce unplanned hospital admissions. The service delivers major adaptations in private sector homes using the DFG. The focus is on providing showers, stair-lifts and facilitating access to the home using modular ramps with an average cost of around £5,500.

The early discharge scheme (ASSIST) in Mansfield aims to: expedite discharges from the Kings Mill Hospital, and from residential care and in Mansfield; and to reduce or prevent avoidable or elongated admissions to Hospital or residential care. The ASSIST team works with Sherwood Forest Hospitals NHS Foundation Trust (SFHNHST), the Adult Social Care and Health team at Nottinghamshire CC, and the Mansfield and Ashfield and Newark and Sherwood NHS Clinical Commissioning teams, well as wider stakeholders. It does this through the early identification and assessment of patients potentially needing housing services who have presented for treatment at Kings Mill Hospital through either A&E or through elective care on a specialist or generalist ward.

On establishing a future potential need for a housing service, the full range of housing services and advice that the housing authority can provide, are expedited to facilitate early discharge and the freeing up of bed spaces at the hospital. Housing services include: re-housing of clients in more appropriate accommodation, or major or minor adaptations to the patients' current home (or proposed accommodation), or advice guidance on benefits and other services. An evaluation of the ASSIST scheme concluded that: there was clear evidence that the scheme benefits the efficiency of hospital discharge and reduces the burden on hospital and social services staff; and

From the limited scope of the current scheme current savings in terms of bed days amount to approximately £664,000, rising potentially to a realistic potential number of interventions of 60 per month resulting in approximate savings of £1,328,000. The costs of providing this service produces net savings related to the gross figures identified above of £379,800 and £1,024,700 respectively.⁷⁷

In Sheffield, frail patients were spending on average 4 times longer in hospital than initially estimated by geriatric medicine consultants involved in their care. An analysis of 23 patients found an additional cost of £470,000 to the hospital from these delays. Causes of delay included services involved in discharge being unable to respond quickly enough and transfers across the hospital whereby vital information was lost.

The Sheffield Frailty Unit consequently changed its practices and moved the assessment of intermediate and social care needs into the patients' home. As a result there has been a 37% increase in patients who can be discharged on their day of admission or the following day. It has also led to improvements in bed occupancy moving from a mean of 312 in January 2012

76 Green W & Craig J (2015) *Identifying the Economic Value of the Keiro Service Pathway*, North East & Cumbria Academic Health Science Network, York Health Economics Consortium.

77 Murphy P & Harradine D (2015) *Evaluation of the early discharge project of the 'ASSIST' team at Mansfield District Council*, Nottingham Trent University.

to 246 in September. The Trust was then able to close 2 wards, totalling 68 beds. A pilot in South Gloucestershire using the same approach, reported evidence of success over a three month period with 74 patients transferred through this pathway, leading to 621 bed days saved (which would have had an indicative cost to NBT of £153,000).

In Carlisle, Hospital at Home creates a ‘virtual ward’ by providing care in a patient’s home in order to avoid unnecessary admissions to hospital. The service is supported by community services and initiatives like ‘community neighbours’, a volunteer befriending scheme run by the local home improvement agency, Homelife Carlisle. Hospital at Home enables people to make the choice to remain at home, keeping contact with friends, neighbours and family, while receiving care that would normally be provided in hospital.

Age UK Norfolk provide an advice and information service, including housing and care options at Norfolk and Norwich University Hospital to help with timely discharge and independence at home. The service is provided by an assistant manager supported by trained volunteers. According to Care and Repair, the service has speeded up hospital discharges and reduced readmissions, although there is no estimate of cost effectiveness.

The Housing LIN has produced a [Hospital to Home resource pack](#) which provides case studies and checklists for those considering older patients’ housing situations in hospital discharge and transfer of care and for improving integration of housing and support into the process for discharging older people.

10. Design of the built environment

Key issues:

- There are a range of evidence based design standards and guidelines which aim to enable older people to live in their own homes, such as Lifetime Home Standards, HAPPI, Evolve, I'DGO and Wel_hops.
- The planning system and the Healthy New Towns initiative provide opportunities to plan for the needs of older people in new developments.

The built environment plays a key part in enabling or disabling people with mobility and/or cognitive impairments, and there are a number of qualitative studies which indicate the role of the built environment in either facilitating or hindering independent living.

Design standards, such as the 16 design criteria of Lifetime Home Standards, (minimum door widths for doorways or bathroom walls strong enough to support adaptations such as grab rails etc.), help to ensure the accessibility and adaptability of the home environment over time. The design and adaptability of housing specifically for older people is covered in the first Housing our Ageing Population: Panel for Innovation (HAPPI) report which made ten key design recommendations for designing housing for older people.⁷⁸ A follow-up report in 2012 provided further recommendations for delivery.⁷⁹ A third report was published in 2016.⁸⁰

The [EVOLVE toolkit](#) is a tool for evaluating the design of housing for older people. It is used to assess how well a building contributes to both physical support of older people and their personal well-being. Between 2005 and 2007, European-level initiatives to develop guidelines for the design of housing for older people led Brighton and Hove City Council to provide a good practice guide for older people's housing design, as part of a European project: [Welfare Housing Policies for Senior Citizens](#) (Wel_hops).

Age-friendly design of the built environment may also involve ensuring that designs are sensitive to changing needs over time (for example, ensuring adequate daylight in ECH, in the context of growing incidence of sight loss in older age) or the need to ensure that designs are energy efficient (in the context of older people's vulnerability to fuel poverty and cold related winter deaths).

The built environment and well-designed outdoor spaces can enhance the long-term health and wellbeing of those who use them regularly, reduce the risk of falls, promote physical activity and reduce social isolation. Evidence from the I'DGO research programme⁸¹ showed that older people who live in environments where it is easy and enjoyable to go outdoors, are more likely to be physically active and satisfied with life, and twice as likely to achieve recommended levels of healthy walking. Barnes *et al.*⁸² identified two over-arching themes for residents of ECH: how the building supports the lifestyle, and how the building design affects usability. Good housing design can also do much to help lessen the danger of falls for

78 Homes and Communities Agency (2009) [Housing our Ageing Population: Plan for Innovation \(HAPPI\)](#), London: HCA.

79 All Party Parliamentary Group on Housing and Care for Older People (2012) [Housing our Ageing Population: Plan for Implementation \(HAPPi2\)](#), APPG.

80 All Party Parliamentary Group on Housing and Care for Older People (2016) [Housing our Ageing Population: Positive Ideas \(HAPPi3\)](#), APPG.

81 Inclusive Design for Getting Outdoors – www.idgo.ac.uk/pdf/Intro-leaflet-2012-FINAL-MC.pdf

82 Barnes S *et al.* (2012) Does the design of extra-care housing meet the needs of the residents? A focus group study, *Ageing and Society*, 32, 7.

people with poor vision as the RNIB and The Thomas Pocklington Trust report.⁸³ However, robust evidence on reducing expenditure as a result of the design of, or changes to, the built environment does not appear to be available.

The [DWELL](#) (Designing for Well-being in Environments for Later Life) project is an architectural design research project at the University of Sheffield. The researchers are working with Sheffield City Council to examine current policy and practice relating to the planning, commissioning and management of housing for an ageing population. In collaboration with stakeholder organisations, the team aim to develop ideas and methods to improve working practices and outcomes.

The LGA's commission on housing calls for partners to come together to understand how to shape healthy places and what older people want from the local housing offer, and strategically plan for the mix of housing that responds to demographic change and creates inclusive communities. Health and Wellbeing Boards have a role to play in bringing together planners, environment, housing, health and social care partners to provide a shared understanding of where there are opportunities and gaps in provision that can be reflected in local planning policy.⁸⁴

In London, planning guidance emphasises the importance of engagement with older people.⁸⁵ The guidance provides advice to local authorities and other stakeholders on implementing inclusive design principles effectively and on creating an accessible environment in London, with particular emphasis on the access needs of disabled and older people. In Swindon, the Borough Council is working to design health into a major new development at Wichelstowe which has planning permission for 4,500 new homes. Barking Riverside (one of the ten Healthy New Towns demonstrator sites) is applying the latest learning on 'age-friendly' built environments and public spaces to the development of 10,800 new homes planned over the next 15 years; and [Ebbsfleet Garden City Healthy New Town](#) project will result in up to 15,000 new homes.

83 Thomas Pocklington Trust and RNIB (2010) *Making the most of your sight*.

84 LGA (2016) *Building our homes, communities and future*, LGA.

85 GLA (2014) Shaping Neighbourhoods Accessible London: Achieving an inclusive environment – Supplementary Planning Guidance.

11. Warm housing and reducing fuel poverty

Key issues:

- **Older people are at particular risk of excess cold due to fuel poverty.**
- **Targeted services for older people to reduce the risk of excess cold can improve well-being, improve physical health and generate savings to the NHS.**

Over one-fifth of all older household groups (21-22%) lived in a home that failed to meet the Decent Homes standard in 2012; and 780,000 households aged 55 years and over were in fuel poverty. The English Housing Survey assesses Housing Health and Safety Rating System (HHSRS) excess cold using modelled energy efficiency data. Excess cold is categorised as a home where the Government's Standard Assessment Procedure (SAP) is lower than 33.59. The most vulnerable people at risk from excess cold are aged 65 year or over; and it is one of the most common Category 1 hazards found in older people's homes. Around 8% of households aged 80 years or over (106,000) lived in a home with a risk from excess cold.⁸⁶

In the KSS area, the most recent available [data](#) indicate that 13.5% of all households in Kent were living in fuel poverty, compared with 10.6% in Surrey, 14.0% in East Sussex and 12.6% in West Sussex.

Some older people may have a cold home because of the expense of heating, but fuel poverty is closely related to the energy efficiency of a house, as well as to income and fuel prices. According to the BRE, undertaking all the work to reduce the risks of excess cold is almost £3 billion, and comprises 70% of the total repair costs to address all of the poorest housing. Nonetheless, mitigating the risks of excess cold would also result in NHS savings of £440 million, around 70% of the total estimated savings from tackling poor housing, and the work would pay for itself in around seven years.⁸⁷ There are potentially additional savings resulting from such a preventative approach, including savings to social care and benefits to individuals, such as a reduction in risk of harm and a likely improvement in the quality of life.⁸⁸

The relationship between indoor heating and excess winter deaths has been well studied. Wilkinson and colleagues⁸⁹ concluded there is a 23% excess of deaths from heart attacks and strokes compared to non-winter months. The authors found that there is '*a credible chain of causation which links poor housing and poverty to low indoor temperatures and cold related deaths*'.

A systematic review concluded that housing investment which improves thermal comfort in the home can lead to health improvements, especially where the improvements are targeted at those with inadequate warmth and those with chronic respiratory disease. The reviewers found that the available evidence indicates that housing which is an appropriate size for the householders and is affordable to heat is linked to improved health and may promote improved social relationships within and beyond the household.⁹⁰

86 Garrett H & Burris S (2015) *Homes and ageing in England; Briefing Paper*, BRE/PHE

87 Garrett H & Burris S (2015) Op.cit.

88 Garrett H, Roys M, Burris S, Nicol S (2016) Op. cit.

89 Wilkinson P, Landon M, Armstrong B, Stevenson S, Pattenden S, McKee M and Fletcher T (2001) *Cold comfort: The social and environmental determinants of excess winter deaths in England, 1986–96*, The Policy Press, Bristol for JRF.

90 Thomson H, Thomas S, Sellström E, & Petticrew M (2013) *Housing Improvements for Health and Associated Socio-Economic Outcomes: A Systematic Review*, Campbell Systematic Reviews, Campbell Collaboration.

In Birmingham, the housing strategy and partnerships team estimated that excess cold hazards in private sector homes cost the NHS £16.8 million per annum. The age groups most affected by these hazards are people aged 65 and over. The costs associated with remedying defective properties were estimated to be £4.9 million and it was assumed the remedy would remain effective for 10 years. The average length of time to payback these costs in years was therefore 0.29 years.⁹¹

The Healthy Homes Dorset project which was led by Public Health Dorset used a population based approach to target those aged 75 and over who privately rented or owned their own home with a view to insulating a target of 300 homes across Dorset. An interim evaluation concluded that targeting individuals would be a more effective approach.⁹²

Warm Homes Oldham is led by a group of eight local social landlords with an initial upfront investment from Oldham Council and the CCG. It is delivered by Keepmoat, in partnership with the Citizens Advice Bureau. The service offers a range of support to help households out of fuel poverty. To be eligible for the service, at least one person in the household must be either: under 16 or over 50 years old, pregnant, suffering from a physical disability or mental illness, or presenting symptoms of an illness or disability exacerbated by cold.

During the first year, the scheme worked with 586 households, mostly owner-occupiers, and brought 439 households (properties) out of fuel poverty, (in total 1,074 people). A follow-up survey demonstrated that: 60% of respondents with a physical health problem said that their health had improved; 80% reported a positive impact on their general health and wellbeing; and 84% now spent less on heating. The scheme also demonstrated wider health benefits: behaviour change in relation to energy use, improving health and wellbeing.⁹³

91 Birmingham City Council's Housing Strategy and Partnerships Team (2011) [Housing and public health: towards a health impact assessment](#), Birmingham CC.

92 Pearce R & Lemon D (2016) *Healthy Homes Interim Report - Phase 1*, Public Health Dorset.

93 SITRA (2014) *Study into the Impact of the Housing Workforce on Health Outcomes*, SITRA.

12. Dementia related

Key issues:

- A number of housing providers are providing housing-based initiatives for residents with dementia.
- These have not yet been evaluated in terms of health outcomes, expenditure or resident experience, apart from a small ECH scheme for people with dementia.

Recorded prevalence of dementia among people aged 65 and over in the KSS area was 4.0% in Kent, 4.3% in Surrey, 4.2% in East Sussex and 4.4% in West Sussex, compared with the prevalence for England of 4.3% in 2015.⁹⁴

A number of housing providers are developing initiatives aimed to support and enable people living with dementia and their carers. These include harnessing local volunteers and building new peer support mechanisms to help people adjust to living with dementia. There has been little evaluation of these relatively recent initiatives.

Gentoo, a Sunderland-based housing association, is piloting a new software package it has developed called 'Healthwise'. With funding from the North East Dementia Alliance, the system records concerns, monitoring individuals who might be at risk of losing their independence or experiencing age-related memory loss. Gentoo is working with a local council, a GP practice and its CCG, to pilot a new initiative for early interventions when physical health and/or age-related memory loss becomes a cause for concern.

Under an agreement with the council, GPs are able to prescribe boilers for people living in cold homes which are then fitted by Gentoo. The association has also been contracted to help with repairs and maintenance of 'right to buy' properties which are 'pepper-potted' within the social housing estate they manage. The Healthwise system pulls intelligence, gained by frontline staff into the current housing management system and can then proactively flag up that '*something's not right*'.

Concerns recorded on the Healthwise system trigger a referral to the in-house Well-being Team which will make a home visit where appropriate. The team completes a holistic needs assessment and arranges appropriate follow-up action if necessary. All frontline staff have received dementia awareness training to help them identify problems and members of the Well-being Team have received training in memory screening and dementia awareness from a local GP practice, with support from the Clinical Commissioning Group. If there is cause for concern, Gentoo will – with consent – refer people to their GP and or local Memory Service for further assessment.⁹⁵

Notting Hill Housing Trust has established the Penfold Community Hub. This provides access to a wide range of services and information for anyone over 50 who lives in Westminster, with an emphasis on those who are isolated, vulnerable or frail. The Hub receives funding from the City of Westminster and Central London CCG. Services include:

94 [Public Health England Dementia Profile](#)

95 National Housing Federation/HACT (2015) *Transforming care pathways for people with dementia Linking housing, health and social care*, London: NHF.

- Regular information sessions, provided by staff from the Dementia Centre, at different locations in the community. These are open to all older people and carers and focus on issues or concerns around dementia.
- A programme of activities to meet their needs, provided both by the Hub and other local agencies.
- Referrals of individuals and family members to the Dementia Adviser when there are concerns about possible symptoms.
- A Dementia Café to promote the Hub to people with dementia and their carers, including sessions at Lord's Cricket Ground and Westbourne Park.

Notting Hill Housing Trust's model includes a shared strategic approach across multiple strands of activity aimed at improving dementia care, including: extra care services, day services, community service hubs, sheltered housing, housing support services, and estate management.⁹⁶

The design of the home is important for people living with dementia. The top ten housing adaptations have been outlined by the Dementia Services Development Centre.⁹⁷ Irwell Valley Housing Association in collaboration with Manchester City Council developed an extra care housing scheme with six apartments and four bungalows, for older people with dementia and other memory loss conditions. It contains features which are designed to assist clients with day-to-day living, including: building design that minimises confusion; a culture of dignity; gas monitors that cut off the gas supply if a cooker is left on; door sensors that alert the night care worker if a tenant has opened a door; colour coding and personalisation (shelves/cubby holes with personal items) at the entrances to each flat to help each tenant identify their door; glass-fronted kitchen units so tenants can see which cupboards items are kept in; a single secure entrance and exit to ensure the safety of residents, both in stopping unwanted visitors coming in and by reducing the risk of tenants wandering.

A report for the Department of Health Care Services Efficiency Delivery programme in 2009 concluded that the scheme gave people with dementia more choice and control over their lives and the support they receive, meaning that more than 50% of its high need clients were able to live independently until the end of their life. The scheme offered good value for money and had reduced demand for NHS services from people with severe dementia through a marked reduction in visits to A&E, hospital admissions and ambulance and police call-outs (in relation to less incidents of wandering).⁹⁸

South Norfolk Council working with South Norfolk CCG and Norfolk County Council established a dementia home improvements grant scheme in 2015. Referrals are taken from a variety of partner agencies involved in supporting people with dementia and from carers. There is a short simple application process, following which applicants are assessed by an independent living team and allocated to a Handy Person service. Handyperson contractors have been trained to identify further measures needed.

In Norwich, Cotman Housing Association offers a grant of up to £2,500 for minor adaptations to help the individual, and their carers better cope with the challenges of living with the

⁹⁶ National Housing Federation/HACT (2015) Op. cit.

⁹⁷ Dementia Services Development Centre (2010) *10 Helpful Hints for dementia design at home*, DSDC.

⁹⁸ Andrews J & Molyneux P (2013) *Dementia: Finding housing solutions*, London: National Housing Federation, the Dementia Services Development Centre, the Housing Learning and Improvement Network and Foundations.

dementia. The grant covers many different types of adaptations which can enable people to better manage their environments, for example:

- Replacing floor coverings that cause confusion or safety issues
- Replacing tiling or bathroom fittings to improve visual perception
- Installing noise reduction measures
- Changing lighting schemes to improve visibility around the home

The service is carried out by the Norwich Home Improvement Team.

The Guinness Partnership carried out an audit to establish how dementia friendly it was in 2015. Following this, the Partnership decided to: test how it can adapt its service offer for customers living with dementia in a pilot area; raise staff awareness and improve the advice and support available to them to help customers living with dementia; and identify where to integrate dementia friendly measures into the Partnership's systems, processes and training programmes.⁹⁹

99 The Guinness Partnership (2015) *Becoming a dementia friendly organisation*, TGP.

13. Other

Key issues:

- **Other housing based initiatives include: a health and well-being project, a healthy living project in Hyde, and a social prescribing service in Doncaster.**

Family Mosaic is involved in research to test the most effective way of delivering a new health-based service to tenants who are aged 50 and over. The long-term aims of the service are twofold: to improve the health of some older social housing residents and to save the NHS money in the process. Following a three year pilot health and well-being service which resulted in residents reducing their NHS usage, particularly planned hospital appointments; and had a positive impact on the health of participants, especially the most vulnerable, the housing association is now developing a service focused on general needs tenants aged over 50, tailored according to need.

Participants will be randomly assigned to either the intervention group or control group. Each participant will be assessed at 0, 3 and 10-12 months using the PAM. Those in high need (levels 1-2) will be assigned a health navigator, who will work with them for three months on an intensive health coaching programme. They will be coached on how to be more active in managing their health, while simultaneously being signposted and connected with the relevant health, housing and community services they need. Those in medium need (level 3) will receive support from volunteers with specialist health knowledge. An online coaching package will be provided to those in low need (level 4) to continue self-managing their health. They will also be encouraged to coach those in the high need group (levels 1 and 2). Health navigators will identify home improvements and make referrals for aids and adaptations, and provide advice and signposting on housing issues and health management.¹⁰⁰

Gedling Homes in partnership with Nottingham North and East CCG set up a Care4Me project with the aim of improving the health and wellbeing of carers and those for whom they care. Carers are offered health and well-being support, home modifications, social inclusion, practical support and access support. The project is currently being evaluated.

In a joint investment between Tameside and Glossop CCG and New Charter Homes, the Healthy Living Project has worked with GPs in Hyde to help patients aged 75 and over to maintain good health and avoid the range of situations and circumstances that can lead to non-elective hospital admission. Using social accounting methods, the following benefits have been reported:

- Value and benefits for primary care and acute health services, and health benefits for customers, worth £225,056.
- The overall value of social and health benefits and service impact delivered was £2.81 for every £1 spent (around 37 per cent of this in terms of averted NHS costs).¹⁰¹

Doncaster Social Prescribing Service is a partnership funded project, to which Doncaster CCG is a commissioning and contracting partner. People with long term conditions are referred to the service by their GP and are then linked in with local, non-clinical services. In 2015/16,

100 Family Mosaic (2016) *Health begins at home: final report*, Family Mosaic.

101 Buck D et al (2016) Op.cit.

the service engaged with 588 clients, with a 68% reduction of repeat GP appointments and improvements in customer resilience.¹⁰²

Community hubs in Gloucestershire County Council 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 conducted on 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%.¹⁰³

102 NHS England (2016) Op.cit.

103 NHS England (2016) Op.cit.

14. Conclusion

Housing and housing-related services can make a significant contribution to emerging models of integrated health and social care services, activities, and facilities. Such services can both help to avoid admission to hospital, facilitate discharge, and maintain the independence of older people. This review illustrates that there is a wide range of initiatives and approaches available, many of which overlap. Thus, discharge services may combine advice and information with aids and adaptations, handyperson services, falls prevention and warm home services.

There does not appear to be one single model, as the approach will need to be context specific and there may be scope to build on existing programmes in the local area. However, in many of the examples, there is a focus on joining up services around the individual patient or resident to simplify potentially complex service pathways, and to developing partnerships between health, public health, social care and voluntary sector organisations.

Evidence of the role of housing and housing-related services in improving health outcomes, reducing expenditure and improving resident or patient experience underlines the importance of involving housing in NHS plans for strategic transformation, budget-setting and integration. The pressures on the NHS to develop a more integrated approach provide an impetus to look for new ways in which housing and health can work together to achieve their objectives. This could include looking at how to use NHS land for extra care housing, or bringing housing information and advice into hospital discharge teams.

Points for further consideration

Some of the points which KSS AHSN may wish to consider further to this review are:

- Would a local Health and Housing Memorandum of Understanding similar to the national one help to provide a framework for future developments?
- How does housing fit into local health and wellbeing strategies and/or local NHS Sustainability and Transformation Plans?
- Is there a need for locally agreed protocols on delayed transfers of care between local housing providers and the Acute Trusts?
- What steps are being taken to build partnerships between the local NHS and local housing providers? Does this include Ambulance services and local GPs?
- How does housing advice and information fit with local user involvement or patient activation initiatives?
- Could vacant NHS estate be used to provide housing with care?
- Do local NHS commissioners look at planned developments from the perspective of their health impact?

The following page provides a summary of the review in terms of the three areas identified as the focus of this review.

Summary of evidence

	Housing with care	Advice and information	Aids and adaptations	Handy-person	Falls prevention	AT and telecare	Discharge services	Design of built envt.	Warm homes	Dementia related
Improving health outcomes	Yes	Yes	Yes	Yes	Yes	?	Yes	?	Yes	?
Reducing expenditure	Yes	Yes	Yes	Yes	Yes	?	Yes	?	Yes	?
Improving patient/resident experience	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	?

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- provide intelligence on latest funding, research, policy and practice developments, and
- raise the profile of specialist housing with developers, commissioners and providers to plan, design and deliver aspirational housing for an ageing population

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