



Active Ageing and the Built Environment

This briefing is for people working in housing, public health, care and support. Recognising a gap in information on this topic, Public Health England commissioned the Housing LIN (Learning and Improvement Network), the leading voice of expert advice and support in the field of housing, care and support services, to produce this briefing.

Drawing on the Housing LIN's knowledge of the sector and with input from its network members, it looks at active ageing and the different aspects of the built environment that can promote and sustain it, with examples of good and emerging practice and resources for further information. It is intended for those working in social housing, local government, and the care and support sectors to understand their roles in developing and maintaining a built environment that contributes to active ageing.

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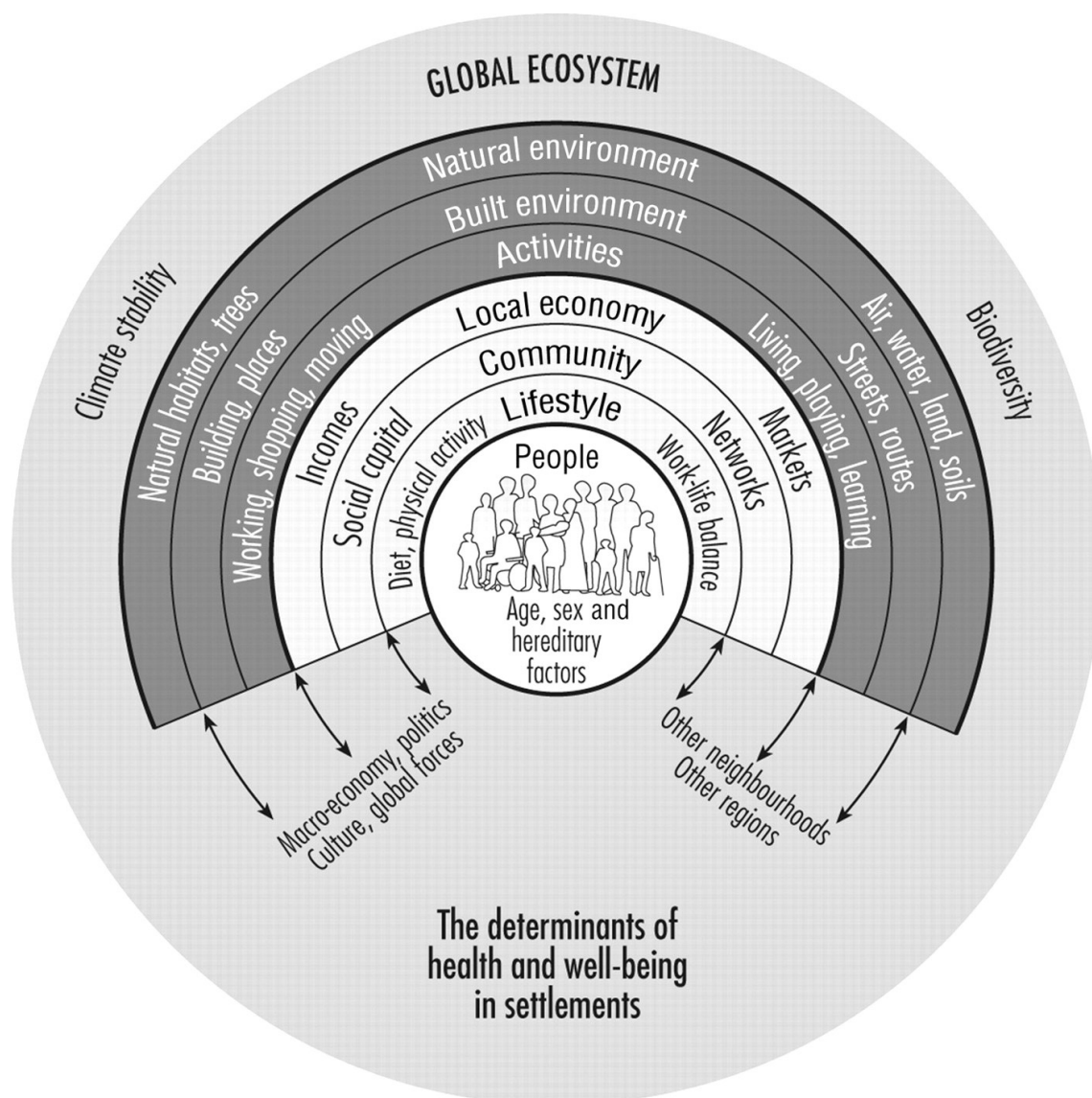
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Introduction

A model of the wider determinants of health developed by Dahlgren and Whitehead⁽¹⁾ was adapted by Barton and Grant⁽²⁾ to focus on neighbourhoods and planning. It emphasises the role of place and the built environment in contributing to health and well-being.

Figure 1: Barton and Grant's Health Map ⁽²⁾



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 programme⁽³⁾ shows 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.

Less user-friendly environments are often perceived by older people as posing an increased risk of falling, especially by those with vision, mobility or other impairments. Such environments can heighten fears about crime, nuisance and traffic, and make going outdoors less enticing; reinforcing feelings of loneliness or entrenching the challenges of socioeconomic deprivation.

Active ageing is *'the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age'*.⁽⁴⁾ There is a strong case for promoting active ageing through the design of the built environment in order to promote physical activity, and preserve and maintain older people's health and well-being.

Active ageing and the built environment

The concept of active ageing encompasses both physical activity and wider social and community participation. Much of the available evidence and innovation is focused on the role of the built environment in removing barriers to, or supporting, physical activity; although it is also important to consider how it might promote social and community participation.

Physical activity

Older adults are the fastest growing age group in the population in England, but are the least physically active. Their activity levels tend to decline progressively with increasing age.⁽⁵⁾ In one survey, less than 30% of 65–74 year-olds, and less than 15% of adults aged 75 and over, reported doing any sport or exercise lasting at least 10 minutes in the previous four weeks.⁽⁶⁾ In terms of inequality: being female, lower education, and lower household income are all strongly associated with inactivity in older people.^(7, 8)

Physical activity provides many physical, social and mental health benefits for older adults, and is a recognized component in the management of many chronic diseases associated with ageing in older people. For example, physical activity appears to reduce the risk of mental disorders common in older age including depression, cognitive decline, and dementia.⁽⁹⁾

Decreases in physical activity and the increases in body weight that often accompany ageing are linked with the deterioration of a range of physiological systems that are often critical to maintaining mobility, independent living, and overall quality of life.⁽¹⁰⁾

The built environment

The built environment encompasses the objective and perceived characteristics of the physical context in which people spend their time, including: the home, urban design, parks and amenities, crime and safety.

A well-designed built environment can enable older adults to carry out the activities of daily living and facilitate both physical and social activity. Equally, the built environment can create barriers and hazards which may deter or prevent older people from engaging actively at home or in their community.⁽¹¹⁾

The World Health Organisation (WHO) has promoted the concepts of age-friendly cities and lifetime neighbourhoods through its Age-friendly Environments Programme. 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.

And a lifetime neighbourhood:

... is a place where a person's age doesn't affect their chances of having a good quality of life. The people living there are happy to bring up children and to grow older – because the services, infrastructure, housing, and public spaces are designed to meet everyone's needs, regardless of how old they are.⁽¹²⁾

WHO Age-friendly Environments Programme

The WHO's Age-friendly Environments Programme aims to address the environmental and social factors that contribute to active and healthy ageing. The Programme aims to promote the production both of inclusive urban environments and the design of objects in those environments (eg, benches, drop kerbs etc.). The Programme helps cities and communities become more supportive of older people by addressing their needs across eight dimensions:

- the built environment
- transport
- housing
- social participation
- respect and social inclusion
- civic participation and employment
- communication, and
- community support and health services.

As part of the programme, WHO has created a global database of age-friendly practices and a guide to creating age-friendly cities.

Weblink: http://apps.who.int/iris/bitstream/10665/43755/1/9789241547307_eng.pdf

The role of housing and housing with care providers

Most people in England and Wales aged 65 and over live in their own homes. Around 5% of older people live in sheltered or supported housing. The proportion of older people in care homes rises from less than 1% of those aged 65 to 74, to 14% of those aged 85 and over.⁽¹³⁾

Providers of housing and housing with care have an important contribution in relation to active ageing within the home environment. There are a number of studies on the Housing LIN online 'design hub' and elsewhere which indicate the role of the built environment in either facilitating or hindering independent living, (as well as a range of design manuals and case studies by architects and designers). Independent living in housing with care schemes can be compromised by building elements that do not take account of reduced physical ability and make movement difficult around the schemes.

Key actions to promote active ageing within the home or housing with care include the following:

- ✓ Recognising the need to plan and build housing which is appropriate and adaptable to the needs of older people by building to the 16 criteria in the Lifetime Homes standards⁽¹³⁾ or the 10 design principles set out in HAPPI⁽¹⁵⁾
- ✓ Ensuring that home adaptations and Disabled Facilities Grants are delivered efficiently and without delay⁽¹⁶⁾
- ✓ Supporting the development of extra care housing with its emphasis on inclusive design and independent living

- ✓ Encouraging care homes to provide all residents with access to gardens and assistance to enjoy them
- ✓ Ensuring that regeneration programmes consider the impact on older people in terms of active ageing
- ✓ Landscaping and ongoing maintenance of external space to encourage older people to be active outdoors
- ✓ Developing partnerships and alliances with other local stakeholders to promote active ageing in the community.

(Adapted from Making our Communities Ready for Ageing, Sinclair and Watson, 2014)

Case study – the ExtraCare Charitable Trust Well-being Service

The ExtraCare Charitable Trust has developed a Well-being Service which aims to empower residents to make informed decisions about their lifestyle and health via well-being assessments. Aston Research Centre for Healthy Ageing (ARCHA) is evaluating the impact of the service on the longer term well-being of residents and the associated care costs.

Weblink: www.extracare.org.uk/care-services/our-well-being-service

Resource – Active by Design

This report by the Design Council CABI encourages health professionals to think about whether they could give more thought to the impact of buildings and places on the health and well-being of people; and suggests they work more closely with other professionals e.g. the architects of health facilities, planning departments or meal providers, to influence policy and improve the overall well-being of people.

Weblink:

www.designcouncil.org.uk/sites/default/files/asset/document/Active_By_Design_Brochure_web_LATEST.pdf

The role of local authorities

Local authorities and their partners, such as social housing providers, have an important part to play in promoting and sustaining the role of the built environment in active ageing. Engagement with older people is essential to develop a vision and priorities for how local communities can become age-friendly, using the WHO Age-friendly Cities framework to structure the conversation.

Case study - Old Moat in an age-friendly Manchester

Manchester City Council has been an active member of WHO's Global Network of Age-friendly Cities, setting out a programme of activities in the strategy document, ['Manchester: A Great Place to Grow Older 2010-2020'](#).

As part of a pilot, Southway Housing Trust adopted an age-friendly Strategy in 2011 which set out a number of intended actions with partners, to meet the needs and improve the quality of life of their older tenants in terms of the WHO's Age-friendly principles.

Southway Housing Trust commissioned a project to explore the environmental and social factors that contribute to active and healthy ageing in communities such as the Old Moat Estate in Manchester. The project involved: assessing the physical environment, collecting spatial data, conducting focus groups within the Old Moat neighbourhood, carrying out a community audit, and constructing a research and evaluation toolkit. There was a strong emphasis on participation by older people themselves: contributing to the design of the research, assisting in data collection (through the community audit) and providing feedback on the results.

The findings included: the commitment of residents to improving the area; concerns about the deterioration in the physical environment – especially in respect of pavements, seating, and the lack of public toilets; the perceived decline in a local shopping area (with the increase in 'take-away' outlets and charity shops); the positive attitudes to public transport and its importance in helping to maintain social networks; the contrast (and occasional tensions) between a highly mobile young population (students and recent graduates) and an older population of long-term (in some cases lifetime) residents; and the perceived lack of community spaces and the geographical isolation of those that do exist. This led to the development of an Action Plan for Old Moat.

Weblink:

www.designcouncil.org.uk/sites/default/files/asset/document/Active_By_Design_Brochure_web_LATEST.pdf

Plans and policies relating to the built environment, green space and transport need to take older people's needs into account. Existing tools, such as Equality Impact Assessment⁽¹⁷⁾ or WHO Health Impact Assessment⁽¹⁸⁾, provide an opportunity to assess the impact of a plan or policy on older people with reference to active ageing. Many of the Public Health Outcomes Framework⁽¹⁹⁾ indicators are relevant to active ageing and built environment.

Environmental factors

A range of environmental factors potentially influence older adults' physical activity. Five themes are particularly relevant to active ageing and the built environment: pedestrian infrastructure, safety, access to amenities and services such as parks, aesthetics, and environmental conditions.⁽²⁰⁾

Pedestrian infrastructure

The characteristics of pavements may facilitate or hinder walking, such as: the presence and continuity of a pavement; steep slopes and high curbs especially if there is no handrail;

temporary obstacles on pavements; and the quality and maintenance of pavements. A survey commissioned by Help the Aged⁽¹⁹⁾ found that nearly one in ten people over 65 trip or fall every year because of damaged or uneven pavements.

Working with highways departments, the cost of maintaining pavements and providing public benches needs to be related to indicators in the Public Health Outcomes Framework, such as falls reduction in the over 65s and reducing social isolation.

Emerging practice - Going Outdoors: Falls, Ageing and Resilience (Go Far)

This multi-disciplinary research project at the University of Salford is exploring the relationship between older people, outdoor falls and the design of the public realm. The researchers are developing an audit tool for the outdoor environment that will identify options for falls prevention; and a pilot protocol for the use of a combination of engineering tools in the real world to assess the surface condition and properties of different built environment materials.

Weblink:

www.salford.ac.uk/built-environment/research/research-centres/surface/research/going-outdoors-falls,-ageing-and-resilience-go-far

Crime and safety

Crime and fear of crime can be major barriers to older people's willingness to spend time in outdoor space in the community. Older people who report fear of crime on the street go out of the home less frequently to visit friends and relatives.⁽²⁰⁾ Fear of crime is higher in the absence of street lighting and where the environment is neglected eg, vacant houses, vandalism, graffiti, littering and sabotage of benches.

The indicator in the [Public Health Outcomes Framework](#) (1.19i, ii and iii) on older people's perception of community safety provides a focus for work with police, highways and refuse departments, and housing providers, to reduce crime and fear of crime among older people in their communities.

Older people walk more slowly, making it more difficult to cross roads safely. This can be exacerbated by inadequate traffic signal times for crossing roads and reckless drivers. The risk of a fatality crossing the road increases more rapidly with age from the early 60s, and very rapidly from age 70. Older pedestrians express particular concern about fast traffic, busy roads, and crossing where several roads meet.⁽²³⁾

Actions to improve traffic-related safety for older people include:

- Lower speed limits
- Appropriate signal timings for pedestrians and cars
- Signal-controlled crossings and central pedestrian refuges
- People-detectors on crossings that adjust the length of the pedestrian phase to match the walking speed of the pedestrians.⁽²¹⁾

Case study – Designing Safer Places in Havering

The London Borough of Havering has introduced local development framework policies and a supplementary planning document aimed at creating safe and accessible environments, where crime and disorder, or the fear of crime, do not undermine quality of life. The Council has worked with the police, using the approach developed by Secured by Design which focuses on crime prevention at the design, layout and construction stages of homes and commercial premises and promotes the use of security standards for a wide range of applications and products.

Weblink: www.havering.gov.uk/Pages/Services/Designing-safer-places.aspx

Access to amenities and services

The provision of a wide variety of local amenities and services (including post offices, newsagents and food stores) are associated with increased rates of walking among older people.⁽⁵⁾ The role of transport as a means to access services and amenities and taking part in leisure activities is crucial, and the ability to travel is a key factor in preventing social exclusion and fostering social connectedness amongst older people.⁽²⁴⁾ Older people use public transport more than any other age group.⁽²⁵⁾ The loss of local services, such as local shops and post offices, means older people need to travel further to access amenities.

Public health has a role supporting public and community transport schemes that facilitate travel for older people, especially those with reduced mobility.

l'DGO Design Guidance identifies four features which support accessibility and a feeling of safety on buses:

- Short distances between bus stops
- Sheltered bus stops
- Good signage
- Seating in well-maintained areas.

Access to rest areas, including public toilets and benches, has also been identified as an environmental factor which may influence older people's physical activity. l'DGO Design Guidance identifies the aspects of public seating which affect older pedestrians as: the provision and positioning of seating; and the design of the seat itself.

A Help the Aged survey⁽²⁶⁾ in 2007 found that: 52 per cent of older people agreed that the lack of public toilets in their area stopped them from going out as often as they would like. It may not always be possible to maintain and keep open public toilets, but another approach is for local authorities to incentivise businesses to open up their toilet facilities as a public resource.

Case study – Community Toilet Scheme, London Borough of Richmond

Richmond's Community Toilet Scheme (CTS) is now the model many other local authorities follow. Partnership working lies at the heart of the CTS: the Council encourages businesses to open their private toilets for public use. The businesses referred to are mainly shops, restaurants and cafés in high street, or otherwise prominent, locations. Under the scheme, the public can enter the business premises and use the toilets without buying anything. Member businesses display stickers in the window with a symbol and the words "Community Toilet Scheme". Around 100 businesses have joined the scheme and the toilets are open during the businesses' operating hours. About 33% of the toilets are wheelchair accessible, and 25% have facilities for changing babies.

Weblink: https://www.richmond.gov.uk/community_toilet_scheme

Access to exercise opportunities suitable for older people, affordable and accessible, age appropriate provision in indoor gyms and pools, and green open space are also factors which may influence older people's physical activity.⁽²⁰⁾ Participants in the I'DGO study who lived within 10 minutes' walk of an open space were twice as likely to achieve the recommended levels of healthy walking as those whose nearest open space was not local.⁽³⁾ Green spaces support social contacts in a neighbourhood and strengthen communities for the ageing population.

Natural England developed an Accessible Natural Greenspace Standard (ANGSt) and accompanying guidance⁽²⁷⁾ which recommends that everyone should have accessible natural greenspace, no more than 300 metres from their home. Public health professionals need to work with planners to ensure new developments meet this standard. However, safety and maintenance of green space is also important to support older people's physical activity.⁽²⁸⁾

Case study – Well-being for Life Strategy, Newcastle

Newcastle is committed to the WHO Age-friendly Cities programme. The first version of the Wellbeing for Life Strategy was agreed by the Wellbeing for Life Board in 2013, and subsequently endorsed by Newcastle City Council, and approved by the Joint Governing Bodies of Newcastle's two Clinical Commissioning Groups. It involves a partnership across the city of local authority, health and third sector organisations.

Using the WHO Global Age Friendly Cities Guide as the framework for drawing together the expertise and resources of partners, the strategy made a number of initial commitments to shared change including:

- Plan housing options in a way that recognises the needs of an ageing population and those whose wellbeing and health is at risk
- Take opportunities to create active, inclusive travel routes and work with partners to improve accessibility of public transport
- Explore ways in which we can co-locate services in our community based buildings – benefiting not only from better use of our estates but also from the integration that colocation enables.

Weblink: www.wellbeingforlife.org.uk/our-strategy

Aesthetics – attractive streetscapes and well-kept areas, presence of trees and water

The look of the built and natural environment plays a part in supporting physical activity.⁽¹⁸⁾ If neighbourhoods look run down and are poorly maintained, this can fuel negative perceptions about nuisance and traffic. Landscaping, good urban design and ongoing maintenance are important ways to provide an environment that fosters older people's ability and confidence to go outside.⁽²⁹⁾ Planners and other built environment professionals have a key role here.

Toolkit - Inclusive Design

The concept of inclusive design has been explored by the I'DGO research programme (Inclusive Design for Getting Outdoors). The researchers found that older people went outdoors very frequently to socialise, exercise, get fresh air and experience nature. If they lived in a supportive environment – one that made it easy and enjoyable for them to get outdoors – they were more likely to be physically active, healthy and satisfied with life.

I'DGO have produced a number of design guides as part of the Design of Streets with Older People in Mind toolkit, including: Design Guide 001 Seating; Design Guide 002 Bus stops; and design findings on parks and open spaces.

Weblink: www.idgo.ac.uk/design_guidance/streets.htm

Resource: Neighbourhoods Green

Neighbourhoods Green is a partnership initiative which highlights the importance of open space for residents of social housing and works with social landlords to raise the quality of their design, management and safe use. It provides a wide range of resources providing guidance and tips for making the most of green space on social housing estates.

Weblink: www.neighbourhoodsgreen.org.uk/home

Environmental conditions – air pollution and noise

Environmental conditions, such as air pollution and noise levels also influence older people's level of physical activity. Environmental health services need to focus on cleanliness, traffic noise, and air pollution as features that make places less suitable for older people to walk in.⁽⁵⁾ Over time, air pollution will contribute to, and exacerbate respiratory conditions such as asthma and COPD among older people, and the population at large.

National and local policy drivers

Government planning policy is contained in the National Planning Policy Framework.⁽³⁰⁾ The Framework states that:

It is important to plan positively for the achievement of high quality and inclusive design for all development, including individual buildings, public and private spaces and wider area development schemes.

The launch in 2014 of the [National Planning Practice Guidance](#) (NPPG) as a web-based resource brings together planning guidance on various topics into one place. The guidance emphasises the importance of good design that creates 'places, buildings, or spaces that work well for everyone, look good, last well, and will adapt to the needs of future generations' and enables ease of movement for all users whatever their mobility.

At the time of writing the government is consulting on a housing and planning bill which aims to promote increased housebuilding. It proposes giving local authorities discretion to build to a new accessibility standard that is similar to the Lifetime Homes standard.

The Health and Social Care Act, 2012 transferred responsibility for public health to local authorities and established joint health and wellbeing boards underpinned by Joint Strategic Needs Assessments. This provides local authorities with an important opportunity to identify the housing and health needs of their older residents in a wider public health perspective looking at how the built environment and good housing can support people to maintain their health and live independently in their own homes.

The 2012 [Public Services \(Social Value\) Act](#) also requires people who commission public services to consider how they can also secure wider social, economic and environmental benefits. Potentially, this could include older people. Public Health England and UCL have produced a [practice resource](#) on how the Act can be used to reduce health inequalities. In addition, following changes to the Disability Discrimination Act (1995) in 2004, service providers must consider making changes to the physical features of their premises so that there are no physical barriers which prevent disabled people from using their services, or make it unreasonably difficult for anyone to do so. This will ensure that those services are reasonably accessible to disabled people, many of whom will be older people.

There has been some national and other policy guidance which relate to active ageing and the built environment as part of the push for lifetime neighbourhoods and lifetime homes.⁽³¹⁾

Practice: Healthy New Towns programme

NHS England invited local authorities, housing associations and the construction sector to identify development projects where they would like NHS support in creating health-promoting new towns and neighbourhoods in England. Five long-term partnerships have been selected from across the country, covering housing developments of different sizes, from smaller projects up to those over 10,000 units. Each site will benefit from a programme of support including global expertise in spatial and urban design, national sponsorship and increased local flexibilities.

Weblink: <https://www.england.nhs.uk/ourwork/innovation/healthy-new-towns>

In London, guidance emphasises the importance of engagement with older people.⁽³²⁾ 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. Although, it does not introduce new policy or add any additional burdens on developers, it should be taken into account as a further material consideration when considering planning applications so has weight as a formal supplement to the London Plan.

And finally, some things to think about

The different factors that support or promote activity in older people highlight the need for partnerships to promote active ageing in the built environment across the public, private and community sector. The built environment, including its quality and maintenance, is important to active ageing with a vital role in connecting older people to services, activities, and other people. Ultimately, successful use of the built environment to promote and sustain active ageing will benefit everybody.

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Further useful resources and websites

The list below highlights some of the key resources providing guidance, case studies and examples of good practice in relation to active ageing and the built environment, in addition to the [Housing LIN](#) website:

- [Housing and health resource](#) – led by the Chartered Institute of Environmental Health and supported by Public Health England
- [A Research & Evaluation Framework for Age-friendly Cities](#)
- [Active by Design - Designing places for healthy lives: a short guide](#)
- [Age Action Alliance](#) - page on Public Health & Active Lifestyles
- [BESIDE \(The Built Environment for Social inclusion through the Digital Economy\)](#)
- [EVOLVE Tool - Evaluation of Older People's Living Environments](#)
- [Homes for our Old Age: Independent Living by Design](#)
- [Housing our Ageing Population: Panel for Innovation](#)
- [Pride of Place: How councillors can improve neighbourhoods for older people](#)
- [Lifetime Neighbourhoods](#)
- [Making our Communities Ready for Ageing: A call to action](#)

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About Public Health England

Public Health England (PHE) exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

About the Housing LIN

The Housing LIN is the leading 'learning lab' for a growing network of housing, health and social care professionals in England and Wales involved in planning, commissioning, designing, funding, building and managing housing, care and support services for older people and vulnerable adults with long term conditions.

Previously responsible for managing the Department of Health's Extra Care Housing Fund, the Housing LIN is called upon by a wide range of statutory and other organisations to provide expert advice and support regarding the implementation of policy and good practice in the field of housing, care and support services. Along with PHE, the Housing LIN is a signatory of the Health & Housing Memorandum of Understanding:

www.housinglin.org.uk/_library/Resources/Housing/Support_materials/Other_reports_and_guidance/A_Memorandum_of_Understanding_MoU_to_support_joint_action_on_improving_health_through_the_home.pdf

Further information about the Housing LIN's comprehensive list of resources on ageing and the built environment can be found on the online 'design hub' at:

www.housinglin.org.uk/Topics/browse/Design_building

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