



THE UNIVERSITY OF
**WESTERN
AUSTRALIA**



**Heart
Foundation**

HEART FOUNDATION WALK WISE HEALTHY ACTIVE AGEING

RAPID EVIDENCE REVIEW & CHECKLIST



Prepared by

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UWA Social Care and Social Ageing (SAGE) Living Lab

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Introducing the Heart Foundation's Healthy Active Ageing Module

The Heart Foundation is a leading Australian health charity committed to preventing heart disease and improving the heart health and quality of life of all Australians. The Heart Foundation delivers innovative, evidence-based programs to support and prevent heart disease in Australia.

As part of their ongoing commitment to support professionals in their efforts to help Australians to be more active and lead heart healthy lives, a new Healthy Active Ageing Module has been launched on their internationally acclaimed Healthy Active by Design website (www.healthyactivebydesign.com). The module, which can be accessed through the QR code below, brings together the latest evidence, health impacts, practical advice, case studies, and infographics, in order to inform the development of healthy, active neighbourhoods and communities.

This Rapid Evidence Review, prepared by Professor Loretta Baldassar and Dr Mariana Atkins of the University of Western Australia (UWA) Social Care and Social Ageing Living, has aided in informing the development of the Healthy Active Ageing module and the Healthy Active Ageing Checklist, presented in the Appendix of this report.

A key aim of the Healthy Active Ageing Module is to guide those who design and build our communities, by helping them to develop supportive built environments for older adults to maintain independence, be healthy and active, and lead a high quality of life. The module supports advocacy efforts by providing evidence, case studies and checklists to inform change that can benefit older adults. Cross sectoral engagement between government agencies, land developers, health workers, social workers and the community is encouraged and promoted within the module, as each stakeholder group has an important role to play in the delivery of healthy communities.

To access the Healthy Active Ageing module, please scan the QR code below:



This work, has been developed as part of the Heart Foundation's Walk Wise project, funded through Sport Australia's Move It AUS Better Ageing grant program. The program aims to prevent and reduce the impact of chronic disease and increase overall physical and mental health of older Australians. Sport Australia is the Australian Government body responsible for the delivery of funding and development of Australian sport.

HEART FOUNDATION WALK WISE

HEALTHY ACTIVE AGEING

Professor Loretta Baldassar & Dr Mariana Atkins
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Introduction	5
1. Healthy Active Ageing: Key principles and background.....	7
2. Healthy Active Ageing : A whole of life-course approach.....	11
3. Healthy Active Ageing : The critical importance of physical activity across the life course	13
4. Healthy Active Ageing : The role of social engagement and belonging.....	17
5. Healthy Active Ageing : Creating enabling environments.....	23
Conclusion	31
References	33
Healthy Active Ageing Checklist	41

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Healthy Active Ageing Rapid Evidence Review

*I*ntroduction

Healthy Active Ageing understands that ageing affects all ages across the life-course, and preparing for Australia's increasingly ageing population requires planning and a focus on health promotion and disease prevention across the life-course. Physical activity is critical to maintain people's physical, social, mental and quality of life as they age. Keeping people physically active as they age requires appropriate environmental and social support, including walkable communities and accessible outdoor spaces that facilitate social engagement.

The Healthy Active Ageing framework, presented in this Rapid Evidence Review, recognises that ageing is a process that affects all ages across the life-course, and highlights the critical importance of physical activity for the health and wellbeing of older people. It emphasises the importance of social engagement in providing the motivation to maintain healthy levels of physical activity and identifies the key design features needed to facilitate both the physical activity and social engagement required to support the highest possible quality of life for older people.

This Rapid Evidence Review was commissioned by the Heart Foundation to inform the development of the Healthy Active Ageing Module for the Healthy Active by Design website. This module contains a range of practical information and resources, to inform healthy active age-friendly policy and practice. The Healthy Active Ageing Checklist is included in this report within the Appendix as a practical resource to complement the evidence base within this report.

Scope of evidence

METHODOLOGY

The Rapid Literature Review followed a two-step process. Firstly, semi-structured interviews were held with key Heart Foundation staff during November and December 2019 to identify relevant documents and focus areas. Twelve interviews were conducted and recorded and key themes emerging from them informed the literature search and review.

Secondly, an extensive literature search and review was conducted comprising peer-reviewed and academic articles sourced from a broad range of databases, such as Web of Science, Scopus, PubMed, JSTOR, Google Scholar. Grey literature was sourced from a number of sites, such as: Australian Bureau of Statistics, Government websites and the Analysis and Policy Observatory. Both international and national literature were consulted.

The literature review and interview data, together with the authors' previous research and expertise, informed the development of the Healthy Active Ageing Framework presented in this report.

This review draws on the latest research and policy from the medical and social sciences, the World Health Organization (WHO), international case studies and interviews with Health Foundation staff. It includes a focus on Australian contexts, and Sport's Australia's aim to encourage Australians over the age of 65 to become more physically active.

1. Healthy Active Ageing : Key principles and background

1.1 Key principles

The key principles of Healthy Active Ageing presented in this Rapid Evidence Review draw on research and policy to:

1. Recognise that healthy active ageing is best supported across the life-course, involving all ages;
2. Highlight the critical importance of physical activity for the health and wellbeing of older people, in particular the role of regular walking;
3. Emphasise the importance of social engagement and belonging in providing the motivation for older people to maintain healthy levels of physical activity, including walking; and
4. Identify the key design features needed to facilitate both the physical activity and social engagement required to support the highest possible quality of life for older people, in particular walkability.

Figure 1 presents a visual representation of how these key principles relate to Healthy Active Ageing.

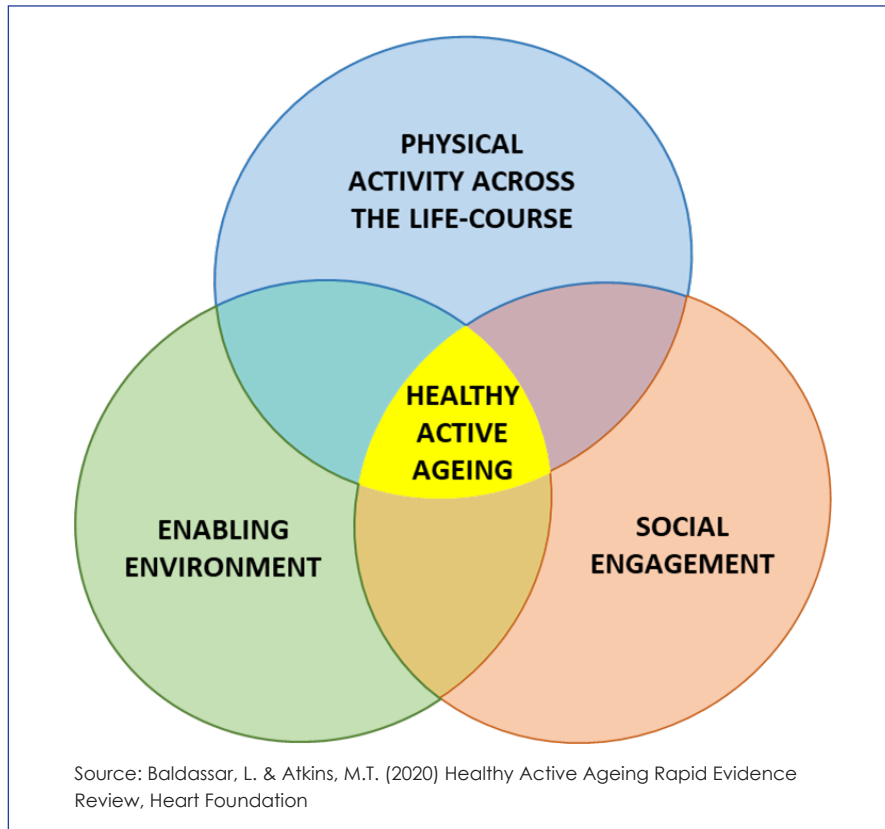


Figure 1: Conceptual diagram of Healthy Active Ageing addressed in this Rapid Evidence Review

1.2 Background

More people around the world are living longer and older people make up a growing proportion of the world's population (Bloom et al., 2015; Bloom, 2011). This is forcing societies and governments to rethink how ageing is viewed and addressed. On the one hand, this 'longevity revolution' is seen to bring additional years of life in which people can lead full, active and productive lives and offers the opportunity for self-actualisation not just for the lucky few, but for most people within society: '(n)ever before in the history of humankind has ageing been the privilege for most rather than the exception of the few' (Kalache 2013, p. 96). There is also a realisation that healthier, happier, more active and engaged older people also have a social and economic benefit for the whole of society (OECD, 2015; WHO, 2015). On the other hand, however, it is anticipated that population ageing will also have significant impacts on labour supply and economic output, and on the delivery of appropriate, affordable and accessible infrastructure and services (OECD, 2006).

Population ageing has therefore become a pressing challenge that demands action from international, national, regional and local policy makers. Preparing for an increasingly ageing population requires planning and a focus on health promotion and disease prevention across the life span. Healthy Active Ageing is an excellent approach to supporting the wellbeing of Australia's ageing population.

The term 'Healthy Active Ageing' draws on the following World Health Organisation (WHO) policy frameworks and definitions:

- **Active ageing:** *'the process of optimising opportunities for health, participation and security in order to enhance the quality of life as people age' (WHO, 2002).*
- **Healthy ageing:** *the process of developing and maintaining the functional ability that enables well-being in older age (WHO, 2015). This conceptualisation seeks to highlight the impact on ageing across the life course.*
- **Age-friendly cities and communities:** *An age-friendly city or community is a good place to grow old. Age-friendly cities and communities foster healthy and active ageing, and thus, enable well-being throughout life (WHO, 2015). This framework is used extensively by local governments across Australia (and the world).*
- **Ageing in Place:** *Alongside the Active Ageing framework, ageing in place highlights how Age-friendly environments play an important role in supporting people ageing at home (WHO 2015: 36). Ageing in place refers to supporting older people to live independently and remain in their own home for as long as possible (Pani-Harreman, 2020; Grimmer et al., 2015; Horner and Boldy, 2008, p. 356)*

Drawing on these key policy developments, Healthy Active Ageing offers a holistic framing covering healthy ageing wellbeing and whole of life course components of recent research. It incorporates a focus on increasing the physical activity of older adults, while recognising the importance of a whole of life span approach, and the broader social, cultural, environmental and contextual issues of quality of life and wellbeing.

1.3 Defining older age

There is no threshold age at which a society becomes 'old', although the proportion of the population aged over 65 is the most commonly used measure of population ageing (Moore & Pacey, 2004; Rogerson, 1996). However, chronological age is an imperfect determinant of older age because the older population is not a homogenous group; instead it is made up of people living within varying economic, social and cultural environments (Carstensen & Fried, 2012; Pandit, 1997). It is therefore important to consider cultural perspectives when defining older age. Taking into consideration indigenous and migrant community perspectives on ageing, 55 years may be a more appropriate age from which to define older age (Cotter et

al., 2012). Gerontologists also highlight the diversity within the older age group and distinguish subcategories with terms like 'young old', 'middle old' and 'oldest old' (Neugarten, 1974; Glick, 1979).

1.4 Terms

A range of terms are used to refer to ageing. For example, *Older Adults* is the term used by WHO and the preferred social science term; *Seniors* is commonly used in Australian public discourse, and *Elders* is the term often preferred by many cultural and indigenous groups. Asking for the preferred term used by the group you are working with is recommended.

1.5 Global population ageing: Why we need to address ageing

'Population ageing is unprecedented, without parallel in human history – and the twenty-first century will witness even more rapid ageing than did the century just past' (United Nations Department of Economic and Social Affairs, 2001)

Globally, the number of people over the age of 60 is growing faster than the numbers of people in other age groups and consequently the share of older people in the total population is increasing virtually everywhere (United Nations, 2015). Given this accelerated pace of population ageing, it is forecast that by 2050, 44 per cent of the world's population will live in relatively aged countries (where at least 20 per cent of the population is over 60 years) and 25 per cent will live in a country where more than 30 per cent of the population is older than 60 years (United Nations, 2015). By 2050 it is predicted that there will be 2.1 billion people over the age of 60, double the number in 2015 (Figure 2).

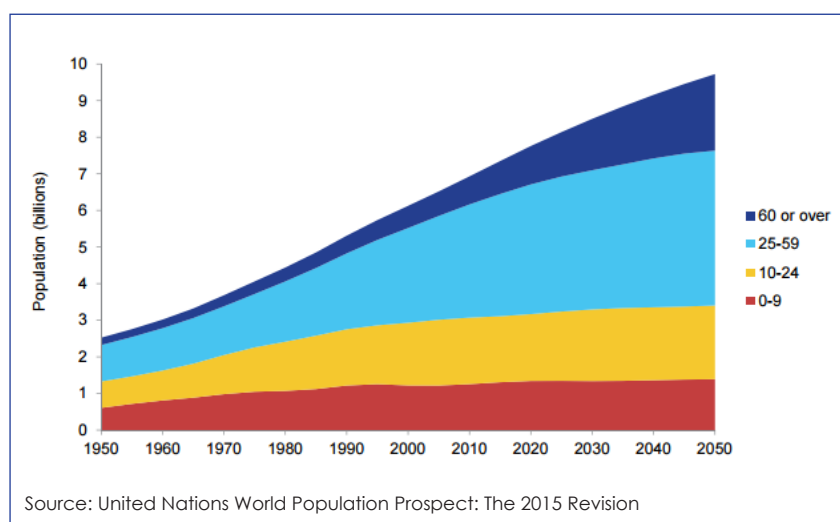


Figure 2. Global population by broad age group, 1950-2050

1.6 Australia's ageing population

Australia has a population of 24.5 million people and, like most developed countries, its population is ageing because of sustained low fertility and increasing life expectancy (Australian Bureau of Statistics [ABS], 2016). This has implications on the age structure which shows a decline in the proportion of the population aged under 15 years and a relative increase in the proportion of the population over 65 years (Figure 3). The ageing of the population is reflected in the increase in the median age, which is projected to rise from 37.3 years in 2012 to between 42.5 and 46 years in 2061 (ABS, 2013). The proportion of the population over the age of 65 is projected to increase rapidly over the next decades (ABS, 2016).

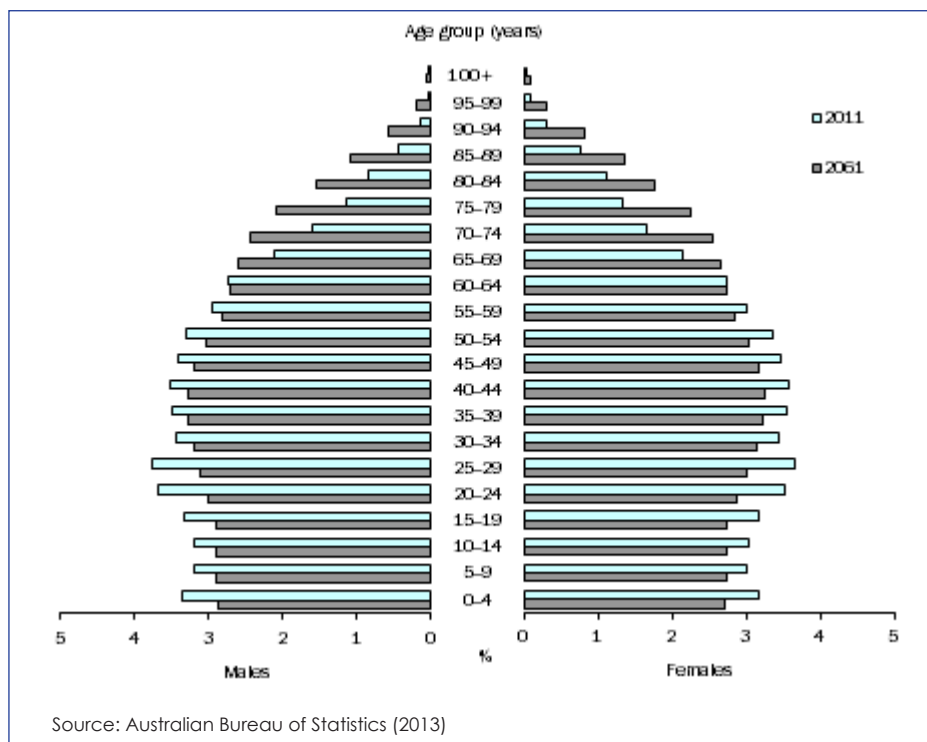


Figure 3. Australia population pyramid comparison 2011 and 2061 projections

1.7 Ageing and urbanisation

Alongside population ageing, the world is currently experiencing another major demographic transition: urbanization (Beard & Petitot, 2010). Over the past few centuries, the world has become increasingly urbanised. In 1800, two per cent of the global population lived in urban centres, today it is 54 per cent, and by 2050 it is forecast to be 65 per cent (representing 6.5 billion people living in cities worldwide) (United Nations Department of Economic and Social Affairs, 2014). Consistent with this trend, older populations are becoming more concentrated in urban areas.

At the global level, the older population is growing faster in urban areas than in rural areas and between 2000 and 2015 the number of people aged over 60 grew by 68 per cent in urban areas, compared to 25 per cent in rural areas (Martin, 2011). However, this is not taking place evenly in countries and regions around the world and in many developing countries rural areas remain disproportionately older than urban areas due to outmigration of the younger population to cities (Bloom, 2011). This is also occurring in developed countries, such as Australia, where movement of young people to urban areas is resulting in a 'greying of the countryside' (Wilson, 2015).

Based on the work by Atkins and Tonts (2016), a recent study of ageing across Australia shows that Australia's population continues to age across urban, regional and remote areas as the so-called 'Baby Boomer' generation reach retirement and beyond (Liu et al., 2020). However, ageing is not taking place evenly across cities and in many metropolitan areas ageing growth rates are greater in peripheral areas than in the centre (Atkins & Tonts, 2016; Atkins, 2017). This has significant implications for the quality of life of people ageing in sprawling, low density environments and on service delivery (Atkins, 2016; Atkins, 2019).

2. Healthy Active Ageing : A whole of life-course approach

While Healthy Active Ageing incorporates a focus on older adults, in keeping with the latest research and WHO policy, it also encompasses a whole of lifespan approach. This lifespan approach is critical to improving broader public awareness about the importance of physical activity at all ages to support healthy ageing. How we treat our bodies in our youth has an impact on how healthy we will be in older age.

2.1 Whole of life course approach and focus on Functional Ability

In the late 1990s, the WHO radically revised its approach to ageing from one that compartmentalised the health care of the elderly as a static age group set apart from the rest of the population, to one that approached ageing as a continuing part of the life course. This new Programme on Ageing and Health, headed by renowned gerontologist Dr Alexandre Kalache, resulted in the development of the 'Active Ageing' model, a blue print for policy interventions designed to help maintain wellness and independence for older people worldwide (WHO, 2002).

A key focus of this revised agenda was the recognition that an individual's functional capacity declines to varying degrees over the entire life course, but increasingly in older age. This decline in functional capacity can be reduced or arrested through a range of interventions to promote function and maintain mobility and independence, including maintaining optimum levels of physical activity (see Figure 4). The range of interventions include promoting long-term health awareness, adopting community-based approaches to healthy ageing, recognising cultural and gendered differences in how ageing is experienced, strengthening intergenerational links, and approaching ageing as relevant to the whole of the life course (WHO, 2002).

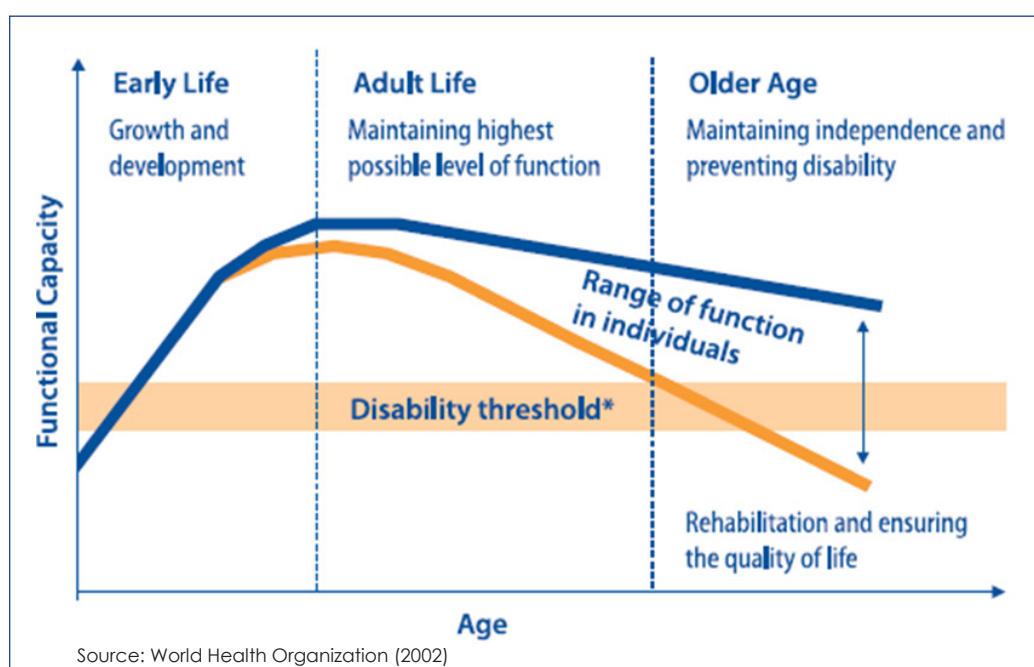


Figure 4: Maintaining functional capacity over the life-course

3. Healthy Active Ageing : The critical importance of physical activity across the life course

Physical activity is recognised as being critical to maintain people's physical, social, mental and quality of life as they age. Keeping people physically active as they age requires appropriate environmental and social support, including in particular, walkable communities and accessible outdoor spaces that facilitate social engagement.

*“Walking is a simple health behaviour that can reduce rates of chronic disease and ameliorate rising health care costs, with only a modest increase in the number of activity-related injuries”
(Lee & Buchner, 2008).*

3.1 Physical activity and older adults: Best practice and key support mechanisms

The WHO advocates that regular physical activity is proven to help prevent and treat non-communicable diseases (NCDs), and can improve mental health, quality of life and well-being (WHO, 2018). There is strong evidence that older adults who are physically active have better health outcomes in comparison to sedentary older adults (WHO, 2011):

- They have lower rates of all-causes of mortality, including, coronary heart disease, high blood pressure, stroke, type 2 diabetes, colon cancer and breast cancer, a higher level of cardiorespiratory and muscular fitness, healthier body mass and composition;
- They have a biomarker profile that is more favourable for the prevention of cardiovascular disease, type 2 diabetes and the enhancement of bone health; and
- They exhibit higher levels of functional health, a lower risk of falling, and better cognitive function; have reduced risk of moderate and severe functional limitations and role limitations.

In adults aged 65 years and above, physical activity includes leisure time physical activity (for example: walking, dancing, gardening, hiking, swimming), transportation (e.g. walking or cycling), occupational (if the individual is still engaged in work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

The WHO recommend the following physical activity guidelines for older adults:

1. At least 150 minutes of moderate-intensity aerobic physical activity (for example, walking) throughout the week or at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity.
2. Aerobic activity should be performed in bouts of at least 10 minutes duration.
3. For additional health benefits, older adults should increase their moderate-intensity aerobic physical activity (for example, walking) to 300 minutes per week, or engage in 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate- and vigorous-intensity activity.

4. Older adults, with poor mobility, should perform physical activity to enhance balance and prevent falls on three or more days per week.
5. Muscle-strengthening activities, involving major muscle groups, should be done on two or more days a week.
6. When older adults cannot do the recommended amounts of physical activity due to health conditions, they should be as physically active as their abilities and conditions allow.

Current understandings of best practice and support mechanisms for physical activity and ageing have developed out of WHO Active Ageing Policy (WHO, 2002). The Heart Foundation's *Blueprint for an Active Australia* (2019) recognises the critical role that physical activity plays on the health and wellbeing of older adults and makes recommendations regarding the built and social environment (The Heart Foundation, 2014).

3.2 WHO Active Ageing Policy overview

Defined by the WHO as 'the process of optimising opportunities for health, participation and security in order to enhance the quality of life as people age', the Active Ageing approach emphasises the need for a departure from notions of ageing in purely economic terms towards a more holistic view that includes quality of life, social participation and mental and physical well-being (Walker, 2002).

The word 'active' refers to continuing participation in social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labour force. Albeit, the importance of physical activity, including walking, cannot be underestimated. Older people who retire from work, are ill or live with disabilities can remain actively engaged with their families, peers, communities and nations. Active ageing aims to extend healthy life expectancy and quality of life for all people as they age. It recognises that ageing takes place within the context of networks of support, including friends, work associates, neighbours and family members. This is why interdependence as well as intergenerational solidarity, and awareness of cultural and gender dimensions, are important tenets of active ageing.

Under the Active Ageing framework, six key determinants underpin outcomes for individuals as they age. These determinants are:

- Health and social services systems
- Behavioural determinants
- Personal determinants
- Physical environment determinants
- Social environment determinant
- Economic determinants

Culture and gender are two further cross-cutting determinants within the framework for understanding active ageing. Cultural values and gender roles determine how a society views older people and how individuals experience the ageing process, see Figure 5.

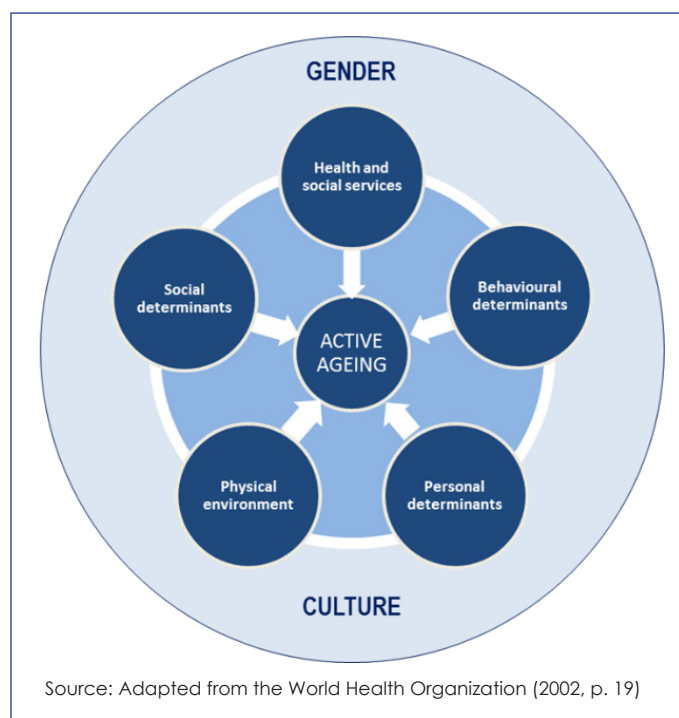


Figure 5: Determinants of active ageing

3.3 Active Ageing and Health: Resilience

Building on the Active Ageing approach, more recent policy debates have focused on the nexus between active ageing and health. The World Health Organization's World Report on Ageing and Health (2015) proposes a framework for action on ageing and health that draws on the concept to promote healthy ageing, which is defined as 'the process of developing and maintaining the functional ability that enables well-being in older age' (WHO, 2015, p. 28). Functional ability is understood to be dependent upon intrinsic capacity (the composite of all the physical and mental capacities of an individual) and the environment (all the factors in the extrinsic world that form the context of an individual's life). Additionally, it emphasises the critical importance of a life-course perspective, since it considers that in order to prevent some of the negative consequences associated with later life, it is essential to influence individual behaviour and its policy context at earlier stages in the life-course (Figure 6).

This recent conceptualisation of planning for an ageing world focuses on how different sectors (transport, housing and urban development, information and communication, and health and community services) can work together to help build and maintain functional ability for older people. For example, intrinsic capacity can be enhanced by encouraging healthy behaviour (such as physical activity) or by removing barriers to them (for example, introducing traffic-calming measures). Functional ability can likewise be enhanced by having enabling environments that support what people can do given their level of capacity (for example, by designing safer neighbourhoods or by providing accessible transport).

Being mobile is one of the key domains of functional ability and it refers to movement in all its forms including: walking for leisure; exercising; completing daily tasks; driving a car; and using public transport. It is recognised that mobility is necessary for all the main elements of daily living such as: doing things around the house; accessing shops, services and facilities in the community; and participating in social and cultural activities. Mobility is fundamental for healthy ageing. For example, using a walker or wheelchair can enable older people to be mobile within their home and neighbourhood; and access to public transport that is physically and financially accessible can enable older people to remain physically and socially connected, especially when they are no longer able to drive.

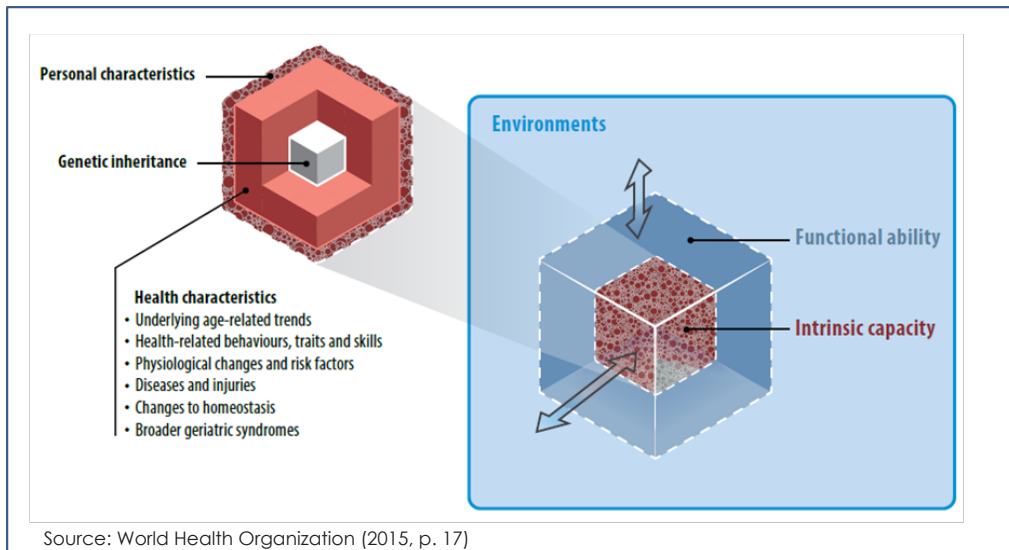


Figure 6: The process of Healthy Ageing.

The WHO (2015) recommends that policy makers create environments that enable older people to maintain mobility through physical activity by:

- Addressing barriers to activity and promoting changes that facilitate safe walking for recreation, transport and physical exercise;
- Creating community events to promote physical activity and raise awareness of the benefits;
- Providing exercise programmes to address cardiorespiratory fitness, muscle strength and balance, and resistance training programmes, particularly for the oldest old people and people recovering from acute health events;
- Promoting counselling interventions in clinical settings;
- Promoting positive attitudes towards physically active ageing and older people's participation in physical activity.

4. Healthy Active Ageing : The role of social engagement

While physical activity is a key component to healthy active ageing, it is imperative to recognise that older people's engagement in physical activity is shaped by the social, cultural, political and environmental contexts at the local, national and even global levels. Focusing solely on increasing physical activity without due regard to the broader contextual factors is likely to be less impactful in the long-term. While older people are likely to understand the benefits of increased physical activity, the motivation needed to commit to sustained regular exercise often depends on associated social-relational benefits, like making friends and feeling a sense of belonging to a community, as well having safe, appropriate and accessible environments to exercise in (Caperchione & Mummery, 2007; Courtin & Knapp, 2017; Coyle & Dugan, 2012; Estabrooks & Carron, 1999; Gerst-Emerson & Jayawardhana, 2015; Hawkey et al., 2009; Holt-Lunstad et al., 2015).

"People join walking groups for physical activity but they stay in them for social reasons" (interview).

"Communities benefit from Heart Foundation walking initiatives as seen in feedback from participants who frequently state the reason they keep going is because of the friendships they make" (interview).

Research indicates that older adults require adequate social and community support networks to ensure they have the necessary assistance to stay physically active, as well to maintain a healthy diet and even take their medicines correctly (Vassilev et al., 2014). The critical role of social support networks in healthy ageing increases as people become less independent (Vassilev et al., 2014; Deindl et al., 2016; Holt-Lunstad et al., 2010; Rafnsson et al., 2015; WHO, 2015). New research shows that measuring collective efficacy and self-efficacy provides important information for researchers and policymakers interested in capacity for self-management and social determinants of behaviour change to support older people to live independent active lives (Band et al., 2019).

4.1 Ageing and loneliness

International attention to global ageing has highlighted social isolation and loneliness as two of the most critical issues that negatively impact the health and wellbeing of older people (Pomeroy, 2019). This is supported by findings reported in the interim report, "Neglect", of the current Royal Commission into Aged Care in Australia (Interim Report, 2019; Johnson, 2019). Increasing attention is being given to loneliness and social isolation as risk factors for poor health, reduced well-being, mortality (e.g. Patterson & Veenstra, 2010; Steptoe et al., 2013; Valtorta et al., 2016), depression (Heikkinen & Kauppinen, 2004; Pinguart & Sorensen, 2001), cognitive decline (Wilson et al., 2007) and reduced physical activity (Hawkey et al., 2009). Some research suggests that the health risks from isolation and loneliness (both actual and perceived) are equivalent to the harmful effects of smoking and obesity (Holt-Lunstad et al., 2010) and result in early mortality (Holt-Lunstad et al., 2015). Social isolation and loneliness are particularly problematic in old age due to decreasing economic and social resources, functional limitations, the death of relatives and spouses, changes in family structures and mobility (Courtin & Knapp, 2017), and cultural barriers (Morgan, 2019).

"Loneliness is an epidemic that health experts are calling the next big public health crisis after smoking and obesity. Research says it can take years off your life (comment from Heart Foundation staff)."

Healthy Active Ageing responds to the impact of loneliness and isolation on rates of physical activity by facilitating environments that feature social engagement.

“Heart Foundation walking, as seen in feedback from participants who frequently state the reason they stay is because of the friendships they make” (interview).

Undertaking group physical activity with others from your social network, or joining a physical activity group with new members, has been reported to positively influence physical activity behaviours, while providing motivational and emotional support and addressing social isolation (Burgoyne et al., 2008; Caperchione et al., 2007).

4.2 Understanding the heterogeneity of ageing

Facilitating social engagement and belonging to combat loneliness and support physical activity for older people involves understanding the social, political, economic and cultural dimension of ageing. This includes understanding the specific context of ageing in Australia, in particular, the key dimensions of the heterogeneity of the older population. The older population is not a homogenous group and it is vitally important to appreciate the different realities of ageing in Australia, including life expectancy and understandings of what it means to be old. The diversity of Australia's ageing population raises a number of important issues, which must inform any discussion of healthy active ageing.

Older people from lower socio-economic status, along with older indigenous people and older female migrants, are among the poorest and most vulnerable members of our society (FECCA, 2015; Hayes & Hacker, 2017). Poverty in older ages results in poor health outcomes, increasing rates of homelessness, and decreased life expectancy among older adults (Kaleveld et al., 2019).

Significant differences also exist between urban, suburban, rural, regional and remote communities (Gardiner et al., 2018). Given that the vast majority of Australians live in urban centres characterised by urban sprawl, as well as the vast distances that separate regional, rural and remote centres, the challenges of social isolation and loneliness, as well as access to transport, are particularly critical issues relevant to healthy active ageing.

Sensitivity to the varying contexts and realities is needed to place a 'healthy active ageing' agenda in perspective. For example, the reality and experiences of some people and communities who are grappling with access to basic needs, and therefore have more pressing priorities, present particular challenges to a healthy, active ageing agenda. This said, physical activity is a basic need and health priority for these groups as well (UNESCO, 2015).

4.3 Cultural diversity and ageing

Australia has one of the most diverse older populations in the world, with one in three people over the age of 65 born overseas (ABS, 2017a). Figure 7 provides an overview of culturally and linguistically diverse (CaLD) ageing in contemporary Australia where Southern European migrant communities, the majority of whose members began arriving in the 1950s and 60s, are ageing at a faster rate than more recently arrived groups and the Australian born.

These demographic changes are of particular importance for accurate economic projections and informed strategic planning, including of Healthy Active Ageing.

Different cultural groups have diverse understandings of what it means to grow old, including the relevance and value of physical activity to health and wellbeing. O'Driscoll et al. (2014) report that CaLD migrants in Australia face significant health risks as they adapt to new cultures. These risks are exacerbated by their limited participation in preventative behaviours such as sports and physical activity (Jang et al., 2016; ABS, 2006; Rogerson, 2006; Dawson et al., 2005).

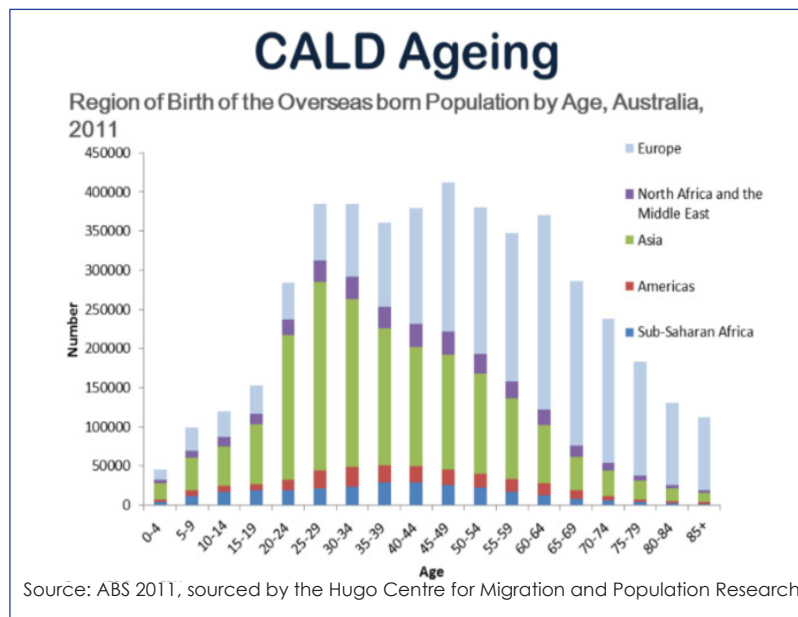


Figure 7: Overview of CaLD Ageing in Australia

Reflecting findings in the broader literature, the role of social engagement and belonging is especially relevant in both educating older CaLD adults about the importance of physical activity, as well as in helping them to maintain high levels of exercise. Lack of social support networks and isolation is a well-documented barrier among CaLD groups to accessing all types of services, including for health and wellbeing. For example, Caperchione et al. (2009) highlight the importance of developing a social network both within the same culture, and with those from other cultures (Estabrooks et al., 1999; Barnes & Almasy, 2005). More specifically, in a study examining factors affecting walking activity of older people from culturally diverse groups in Australia, Bird et al. (2004) state that the continued advocating of walking as a health promoting activity should be central to future campaigns to increase physical activity in this age group; “The provision of locations that are accessible, safe, aesthetically pleasing, and encourage social engagement are likely to facilitate older people’s participation in walking. For maximum effectiveness, however, strategies may benefit from being tailored to meet specific gender and cultural preferences” (p. 417).

Relatedly, perceptions of health and safety have also been found to strongly influence physical activity levels of older people from culturally-diverse communities in Australian (Bird et al., 2009). Gender practices and cultural understandings are also important. For example, in a study of physical activity behaviours of CaLD women living in Australia, Caperchione et al. (2011) found that while participants understood that being physically active was beneficial for health and wellbeing, they did not recognise it as an important daily necessity, but rather a luxury.

Belza et al. (2004) in a study of levels of physical activity among ethnically diverse minority older adults in America identified that walking was the exercise of choice across all ethnic groups involved, and that perceptions of health and personal safety were both a motivator and a barrier to physical activity, as were weather and transportation. The findings included a series of recommendations to enhance participation: fostering relationships among participants; providing culture-specific exercise; offering programs at residential sites; partnering with and offering classes prior to or after social service programs; educating families about the importance of physical activity for older adults and ways they could help; offering low- or no-cost classes; and involving older adults in program development.

4.4 Ageing and Aboriginal Australians

The heterogeneity of Indigenous Australians is often overlooked when presenting epidemiological data, for example, on life expectancy and rates of physical activity (Péloquin et al., 2017; Nelson et al., 2010).

For the Aboriginal and Torres Strait Islander population born in 2015–2017, life expectancy is estimated to be 8.6 years lower than that of the non-Indigenous population for males (71.6 years compared with 80.2) and 7.8 years for females (75.6 compared with 83.4) (ABS, 2018; AIHW, 2019).

Particular attention should be paid to geographic location (urban, regional, remote) and emphasis must be placed on locally-developed strategies (Mission Australia, 2012). In general, Indigenous populations are less healthy and have higher rates of chronic diseases compared to non-Indigenous Australians. There is a higher prevalence of chronic health problems including cardiovascular disease, circulatory diseases, diabetes and musculoskeletal conditions as well as higher rates of psychological distress, depression and anxiety (ABS, 2015).

Research shows that Indigenous Australians face more and unique social, cultural and financial barriers to engagement in physical activity, including lack of available, affordable and sustainable sporting facilities, and limited opportunities for engagement (Gray et al., 2016). Péroquin et al. (2017) suggest grouping these barriers into three common themes: (1) cost, (2) time management, and (3) environmental factors including feeling unsafe and unwelcome to walk in neighbourhoods.

Like some migrant groups, Indigenous Australians may not conceptualise physical activity as a distinct form of behaviour, but as activities incorporated into their overall lifestyle (Stronach et al 2015). Therefore, to encourage participation physical activity programs need to be in line with this holistic vision of life and health, otherwise they may be inappropriate for Indigenous people and limit their participation (Péroquin et al., 2017; Gray et al., 2016).

4.5 Gender and sexual orientation

Many LGBTQI older people experience increased social isolation due to a tendency for more traditional ideals to dominate among their age group, which also characterises services targeted to this age group (Shankle et al., 2003; Perone et al., 2019; Fish & Weis, 2019). Research emphasises the important need to eliminate discrimination and recognise the higher rates of depression, isolation, cardiovascular disease, and chronic pain among this group, but also to acknowledge the potential supportive role played by LGBTQI communities (Wardecker & Matsick, 2020; National LGBTI Health Alliance, 2019).

4.6 Dementia

Dementia is the term used to describe the symptoms of a large group of illnesses which cause a progressive decline in a person's functioning. It is a broad term used to describe a loss of memory, intellect, rationality, social skills and physical functioning. There are many types of dementia including Alzheimer's disease and vascular dementia. Dementia can happen to anybody, but it is more common after the age of 65 (Dementia Australia, 2020).

Dementia in Australia is a substantial and growing public health challenge. In 2020, there are an estimated 459,000 Australians living with dementia, and at present rates this is expected to increase to an estimated 590,000 by 2028, and 1,076,000 by 2058 (Dementia Australia, 2018). Dementia is currently the second leading cause of death, contributing to 5.8% of all deaths in men and 11.3% of all deaths in women each year (ABS, 2017b). It is projected that dementia will soon supplant heart disease as the leading cause of death in Australia (ibid.). In 2020, it is estimated that dementia costs Australia more than \$15 billion (NATSEM, 2016). This is projected to increase to \$18.7 billion in today's dollars by 2025, and to \$36.8 billion by 2056 (ibid.)

Dementia Australia reports that dementia is the greatest challenge for health and social care in Australia. One in ten 65 year olds in Australia live with dementia, and three in ten 85 year olds – with rates three to five times higher in Aboriginal and Torres Strait Islander Australians. It is the single greatest cause of disability in older Australians. Around 70% of people with dementia live in the community, and more than half of all people in residential aged care have dementia.

The WHO states that, while age is the strongest known risk factor for cognitive decline, dementia is not a natural or inevitable consequence of ageing and that several recent studies have shown a relationship

between the development of cognitive impairment and dementia with lifestyle related risk factors, such as physical inactivity (WHO, 2019). Promoting physical activity in older people is one of a number of interventions that can have significant returns on investment at both individual and population levels (Duggan et al., 2019). Supporting healthy active ageing can therefore help to address the incidence and prevalence of dementia within the community.

4.7 Addressing diversity and service delivery

Given the heterogeneity of ageing, dominant western medical models of service delivery, which characterise mainstream Australian policy and practice, need to be considered alongside Indigenous, 'eastern', 'global south' and other perspectives, including awareness about individual-oriented versus collectivist cultural approaches to ageing and aged care, which directly impact on older people's level of agency and access (Fan, 2015; Rees & McCallum, 2018). For example, in more collectivist cultures, it is important to work with families and communities to increase the physical activity of older members, in addition to targeting older adults directly (O'Driscoll 2014; Patel et al., 2012; Caperchione et al., 2013).

In their review of physical activity service provision to CaLD communities in Australia, Caperchione et al. (2013) identified a number of challenges. Most physical activity initiatives were offered in addition to other services, and were generally greatly limited by lack of resources. In addition, most services did not take into account cultural requirements, expectations or specific concerns, including addressing cultural safety and sensitivity.

5. Healthy Active Ageing : Creating enabling environments

“Environments are the contexts in which people live their lives. Environments that are age-friendly help to foster Healthy Ageing in two ways: by supporting the building and maintenance of intrinsic capacity across the life course, and by enabling greater functional ability so that people with varying levels of capacity can do the things they value” (WHO, 2017, p. 10).

Research shows that sustaining regular increased physical activity among older adults requires two key support mechanisms: (1) access to safe, affordable and appropriate spaces; and places and (2) social-relational factors, like sense of belonging and friendships. There is growing evidence that older people's participation in physical activity, in particular walking, is associated with the environment in which they live (Frank et al., 2005; Prohaska et al., 2006). Environmental characteristics can either promote or deter physical activity. Enabling environmental factors which encourage physical activity in older adults include having safe spaces for walking (for example parks and footpaths) and ensuring easy access to local facilities, goods and services. Social engagement is also an important in encouraging physical activity, for example seeing other older people exercising and exercising regularly with family and friends (Booth et al., 2000).

Much of the recent work of the WHO Programme on Ageing and Health, later Ageing and Life Course, has addressed the question of what constitutes an age-friendly environment that supports, amongst other things, physical activity and wellbeing in older adults. Making cities and communities age friendly has emerged as a policy response to the challenges of population ageing and increasing urbanisation. This section examines the age-friendly city approach and discusses key elements that help create enabling environments that support physical activity in older adults. The focus is primarily on physical elements shaping the environment.

5.1 The WHO Age-Friendly Cities Programme

The WHO Age friendly Cities and Communities approach (Kalache & Kickbush, 1997) is a globally recognised method for developing appropriate policy and practice responses to support healthy ageing in the community tailored to local conditions that are based on bottom-up participatory community consultation that supports ageing in place (IFA, 2014/15).

The age-friendly approach entails 'bottom-up' participatory consultation that can inform planning to deliver improved outcomes for older adults living in the community. Active ageing formed the basis for the WHO's 'Global Age-Friendly Cities' project launched in 2006. Understanding age-friendly communities to be inclusive and accessible urban environments that promote active ageing, the project offered a checklist of city features that influence the health and quality of life of older people in cities (WHO, 2007). These were grouped around eight key domains: outdoor spaces and buildings, transport, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, and community support and health services (Figure 8). Although much of this research is centred on cities and urban environments, it is important to note that many age-friendly planning principles are equally relevant to people living in rural and remote areas.

It is widely accepted that both the physical and social environments affect the well-being of older people and that good governance and comprehensive planning are critical for the development of age-friendly communities (Menec et al., 2011; Colangeli, 2010; Lui et al., 2009). The principal physical elements that

support age-friendly communities include spatial planning, transport, housing and outdoor spaces and buildings; whilst the main social attributes include social engagement, participation and employment, community support and health services, and communications and information

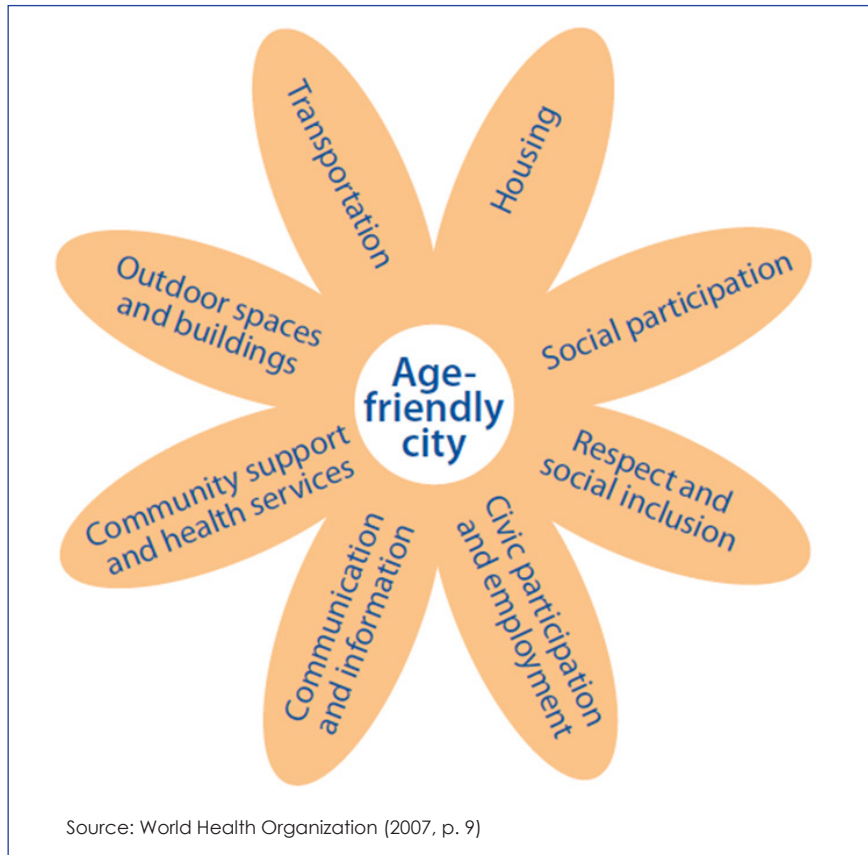


Figure 8: Determinants of Age-friendly Cities

In the Global Action Plan on Physical Activity 2018-2030 (WHO, 2018) a framework for action is proposed through the creation of active societies, environments, people and systems in order to increase physical activity and health across society and the life course. For example, the WHO Age-friendly Communities Approach is commonly used across Australia and provides a valuable guide to creating access to safe, accessible, affordable and appropriate spaces to facilitate physical activity.

5.2 Planning cities and communities for Healthy Active Ageing

Policy and practice can support the gap between what people can do given their levels of capacity and what they would do in an enabling environment (e.g. providing appropriate assistive technologies, accessible public transport, and safer neighbourhoods). Planning and design play a crucial role in creating environments that support older adults' physical activity and wellbeing (Sport England, 2015).

Healthy Active Ageing has to inform urban planning across scales, from metropolitan planning, which shapes the transport grid and urban land use mix, down to the local, which guides the design of neighbourhoods and houses. Likewise, cross-sectoral engagement is required since no sector alone can foster the functional ability of older people (WHO, 2017). For example, helping older people remain active and mobile is influenced directly by sectors responsible for transport, urban planning, housing, information, health and social welfare. Using an ageing lens in planning can help create age-friendly communities, not just for the elderly, but for the whole of the community (Kalache, 2013).

Urban planning plays an important part in shaping age-friendly environments and is a critical component of the age-friendly city approach. A comprehensive approach that integrates the natural, built and social

environments is essential for delivering this (Colangeli, 2010; Arup, 2019). In particular, spatial planning that counters sprawl and single-use urban form and delivers walkable areas, with mixed land uses, well-connected streets and good access to potential destinations, fosters age-friendly communities and supports increased physical activity (Golant, 2014). Research suggests that land use mix which provides shops and services within walking distance of housing can positively influence walkability in older adults and that the greater the variety of destinations the higher the likely of older adults walking (Berke et al., 2007).

As outlined in the Heart Foundation's *Does Density Matter?* report, density of urban developments is a matter of significance. Higher density underpins walkable neighbourhoods which promote physical activity across the lifecourse. Additionally, higher density can help to provide a range of housing sizes, styles, housing tenure and price options, and can include flexible and adaptable housing for all ages and stages of life (Udell et al., 2014). However, where higher density is linked with crime or with high levels of pedestrian and car traffic, it can make older adults feel unsafe and can impact their level of physical activity in a negative way (Michael et al., 2006). In a study in the Netherlands looking at land use and density on older adults' participation in walking and bicycling (for leisure and transportation), it was that different environments promoted different activities (Kemperman & Timmermans, 2009). People make more walking trips in more highly urbanised areas, and use their bicycles more in less-urbanised areas. Interestingly, they found that in highly urbanised neighbourhoods with a low percentage of recreational and green spaces, older adults were more physically inactive.

They concluded that in certain cases, compact high-density neighbourhoods have poor physical activity outcomes for older adults. 'Density done well', which takes into account a good mix of land uses, including recreational spaces and safety concerns, promote greater physical activity in older adults.

In a recent study on age-friendly planning in Australia, spatial planning and the interface between land use, housing and transport, were identified as the main leverage points to deliver age-friendly environments (Atkins, 2019). Creating a more compact urban form and consolidating age-friendly housing to capitalise on the existing services and facilities along transit corridors were seen as critical to creating age-friendly places. This calls for a paradigm shift in how the urban spaces are developed and directly challenges the business-as-usual approach to sprawl (Ball & Lawler, 2014; Hockey et al., 2013).

5.3 Participatory planning for Healthy Active Ageing

Both the WHO's active ageing principle and the age-friendly city approach are participative and empowering. They combine 'top-down' policy action to enable and motivate activity, with 'bottom-up' engagement of older people in developing their own forms of activity (Walker, 2002). This process not only engages older people, but it also seeks alliances across government and with key stakeholders across all sectors of society (Atkins, 2016). Given that the physical environment is of such importance in determining older people's physical activity and wellbeing, local governments have an important role to play in supporting the participation of older people. Additionally, older people should be supported to actively engage with improving the environment in which they live and shaping the conditions that favour the ageing process and improve their wellbeing (del Barrio et al., 2018). The participation of older adults plays an important part in the planning, implementation and evaluation process of age-friendly initiatives (Buffel et al., 2014; WHO, 2002). Participatory planning is critical for designing physical and social environments that support the physical activity of older people.

5.4 Transport and mobility

The ability to be mobile is fundamental for Healthy Active Ageing. Mobility refers to all forms of movement including walking (for leisure or completing daily tasks) as well as using public or private transport (Satariano et al., 2012). As people age and their abilities decline, adapting the environment to enhance functional capacity around mobility can have significant impacts on their wellbeing and independence (WHO, 2015). For example, assistive devices, such as wheelchairs, can help people move within their home and be mobile within the broader community (Rosso, Auchincloss and Michael 2011). Providing universally accessible movement networks that support pedestrians, scooters, mobility devices and bicycle movement can also help older people remain active, connected and independent (Yen et al., 2014). This also includes public transport that is affordable, frequent, safe and adaptive to older adults (Musselwhite et al., 2015; Lehning, 2012).

Access to transport and personal mobility are key physical determinants of age-friendly communities that impact older people's wellbeing and independence through social and civic participation and access to community and health services (Mackett, 2015; Schwanen et al., 2012). A variety of transport options (walking, cycling and public transport use) connecting key destinations, is seen as critical for the creation of age-friendly cities (O'Hern & Oxley, 2015; Rosenbloom, 2009). In places where the public transport service is inadequate, or when seniors have special mobility needs or can no longer drive, alternative transport options, such as on-demand buses or paratransit, help seniors remain active and connected within the community (Mercado et al., 2010). Helping older drivers to extend safe driving mobility by education, training and providing assistive technologies where necessary is also important, as is supporting older people to find alternative transport options when they can no longer drive safely (Marin-Lamellet & Hausteijn, 2015).

Older people's mobility and levels of physical activity are influenced by land-use patterns that determine accessibility and connectivity of the environment as well as aesthetics (Rosso et al., 2011). Perceptions of safety is a key factor that determines older people's decisions about mobility (Yen et al., 2014). Walkable communities support a Healthy Active Ageing population. For older adults, it is important that walkability issues such as the quality of footpaths, perceptions of safety, and adequate road crossings be addressed (Udell et al., 2014).

5.5 Outdoor spaces and public buildings

The outside environment and public buildings and infrastructure have a major impact on Healthy Active Ageing influencing people's mobility, quality of life and independence. Employing Universal Design principles, and dementia friendly principles where appropriate, in shaping outdoor spaces and buildings can increase their usability and safety and improve the health and social participation of the whole community, not just older people (WHO, 2015). This is achieved by ensuring that the design and operation of environments, products and systems are useable across the community without the need for adaptation or specialised design (Steinfeld & Maisel, 2012).

Having public buildings designed under Universal Design principles can support older people to be more active, enhance their sense of security and provide opportunities to socialise. Features such as ramps, elevators, railings on stairs and stairs that are not too high or steep can make buildings more accessible to older people. The building frontage is important in order to ensure clear wayfinding and easy access. Good lighting, signage and sufficient seating and accessible toilets all help to make public and civic buildings more inviting and thereby encourage greater physical activity and social engagement (WHO, 2007). Buildings should provide cycling stands (and storage where appropriate) facilities since the growth of e-bikes opens up cycling to people of older ages.

Countries such as Singapore, Japan, Norway and Ireland are committed to adopting the universal design process across several sectors in order to lower the cost of having to modify existing structures to make them accessible for older adults and people with disabilities (WHO, 2015).

Public safety is an important element relating to older people's decisions about mobility. Aspects of the built environment can make older people feel that they can reach their destinations, or use the resources

in the environment around them safely, and this positively influences mobility decisions (Yen et al., 2014). Likewise, aesthetics of the built environment and the surroundings can influence physical activity: an aesthetically pleasing environment is positively associated with increased mobility (Michael & Yen, 2014).

The WHO (2007) outline a number of design features that facilitate physical activity within the built environment:

- Environments that are aesthetically pleasing, clean, free from rubbish, noise pollution and harmful odours are positively associated with greater mobility by older adults (Michael et al., 2006). Presence of trees, gardens and plants are considered aesthetically pleasing and positively impact physical activity (Strath et al., 2007). Environments with signs of decay, such as litter and graffiti appear to influence older adults' perception of security and are associated with decreased mobility (Borst et al., 2008).
- Well-maintained and safe public open spaces with adequate shelter, toilet facilities and accessible seating are associated with greater physical activity in older adults (Kemperman & Timmermans, 2009).
- Pedestrian-friendly walkways, underpasses and overpasses that are accessible and free from obstructions facilitate physical activity in older adults.
- Outdoor seating that is available across the community, especially in parks, transport stops and public spaces including shopping precincts, promotes greater physical activity.
- Pavements that are well-maintained, smooth, level, non-slip and wide enough to accommodate mobility devices, such as wheelchairs, walkers and mobility scooters, support mobility.
- Environments that are pedestrian-friendly with frequent high-visibility pedestrian crossings, raised medians or pedestrian refuge islands, support walking. High traffic speeds and inadequate pedestrian infrastructure can make pedestrians feel unsafe and therefore limits their walking and physical activity (Michael et al., 2006).
- Pedestrian crossing lights that allow sufficient time for older people to cross and include both audio and visual signals, facilitate walking.
- Walkways and cycle paths are seen as key components for Healthy Active Ageing. Providing well-designed, smooth and wide facilities that are separated for cyclists and pedestrians is especially important for older peoples' sense of safety.
- Perceptions of public safety in outdoor spaces and public buildings are critical for older people and they directly affect their decisions to engage in physical activity. Good street lighting, police presence and design features, which minimise crime, are important to create safe spaces that encourage physical activity.
- Older people from marginal groups (Indigenous and Torres Strait Islanders; CaLD; LGBTQI; and those living with dementia) face more and unique social, cultural and financial barriers to engagement in physical activity, including feeling unsafe or unwelcome in neighbourhoods (Fish et al., 2019; Gray et al., 2016; Caperchione et al., 2009). For these groups, fostering relationships among participants; providing culture and gender appropriate exercise; partnering with and offering classes prior to or after social service programs; offering low- or no-cost classes; and involving older adults in program development are particularly important strategies to increase participation (Barnes et al., 2005; Bird et al., 2004; Estabrooks et al. 1999).

5.6 Housing and ageing in place

Housing is a key factor influencing people's experience of ageing (WHO, 2007). There is growing evidence that communities that offer housing choice with universal design features in compact neighbourhoods

provide better ageing environments (Ball, 2012). Additionally, such communities need less age-segregated, service-supported housing, such as nursing homes and assisted-living facilities (Fitzgerald & Caro, 2014).

Alongside the Active Ageing framework, ageing in place highlights how age-friendly environments play an important role in supporting people ageing at home (WHO, 2015). Ageing in place refers to supporting older people to live independently and remain in their own home for as long as possible rather than in residential care (Grimmer et al., 2015; Horner & Boldy, 2008; Pani-Harreman, 2020). Governments around the world are increasingly recognising the potential represented by ageing in place as a policy lever that contributes to sustainability in the context of anticipated increasing costs of aged care (e.g. Anttonen & Karsio, 2016). While not a one-size-fits-all approach, and not an alternative to more costly housing solutions where required, policies to support ageing in place can provide better wellness and financial outcomes for older people who prefer to stay in their own homes. Supporting people to age in place with access to the services they require provides dignity and choice for older people and empowers them to make decisions about how they live out their end years (email correspondence with Heart Foundation staff).

Age-friendly environments play an important role in supporting people ageing at home (WHO, 2015). This includes a shift away from providing elder care in state-supported residential institutions, towards efforts to maintain larger numbers of older people in their own homes and communities, with only the very frail being relocated into nursing homes and residential care. The success of this trend is evident in the fact that, by 2010, only 4% of people in OECD countries aged 65 years and over were receiving institutional care, while some 8% were receiving care at home (OECD, 2013). A range of new policies, technologies and services have been developed to support this shift towards what is perceived as more cost-effective independent living for older people in their own homes (e.g. Lai et al., 2016; Neville et al., 2016; Mackenzie et al., 2015; Beard & Petitot, 2010).

Research reveals that most people prefer to age-in-place within their community and not in residential aged-care accommodation (Hansen & Gottschalk, 2006; Kendig & Bridge, 2007). However, as people age, their long-standing home may become unsuitable for their needs and in some cases home adaptations and modifications are necessary to facilitate ageing-in-place (Burton et al., 2011; Hwang et al., 2011; Jones et al., 2008). Home modifications can have multiple benefits and can help people stay socially connected within their community and neighbourhood and remain physically active and safe, from falls for example (Tanner et al., 2008).

Ageing in the 'right' place, however, might mean the ability to live in the place with the closest fit with a person's needs and preferences, which may or may not be one's own home (WHO, 2015). Where older people need to relocate to more suitable accommodation, having diverse and innovative housing options within their existing community can enable people to remain socially connected (Pynoos et al., 2009). Creating communities of integration (physical and social), rather than segregation, is generally desirable and supports Healthy Active Ageing (Atkins, 2019). However, in some instances, culturally specific housing for people as they age is required and these should be provided to enable people to be better supported.

Housing developments which cater for all ages and take into account people's changing needs as they age, such as multi-age precincts and intergenerational cohousing, are seen as proactive solutions to ageing in place and in community (Atkins, 2019; Luscombe, 2015; Murray et al., 2014). Research suggests that future housing developments should proactively be designed to enable ageing in place through whole-of-life design that takes into account accessibility and visitability features (Pynoos et al., 2009). Policy should ensure the construction of dwellings to support age-friendly features, universal design and ageing in place rather than require costly retrofitting at a later stage.

Housing affordability and security of tenure are critical for seniors' well-being (Beer et al., 2007; Liu et al., 2017; Wood et al., 2014). Likewise, housing assistance for low-income seniors in the community has a significant impact on their ageing outcomes (Pynoos et al., 2009).

5.7 Access to information and technology

Information and communication is a key determinant of the Age friendly Cities framework, underlining its critical importance to understanding and accessing both knowledge about the principles of healthy active ageing, as well as access to relevant services and activities. Recent research highlights the importance of digital literacy, in particular eHealth literacy, to the health and wellbeing of older people (Millard et al., 2018; Watkins & Xie, 2014; Malta & Wilding, 2018). The digital citizenship and digital literacy needs of older people is now an integral part of our 'digital by default' world, where services and information are increasingly delivered online, including related to physical activity.

The Australian Government defines Digital Citizenship as the 'confident and positive engagement with digital technology. A digital citizen is a person with the skills and knowledge to effectively use digital technologies to participate in society, communicate with others and create and consume digital content' (eSafety Commissioner website). Digital literacy can be defined as the skills, knowledge and understanding required to use technology and new media (Hagel, 2015). The social and economic consequences of the relative disadvantage experienced by older Australians in using the Internet has led Age Discrimination Commissioner Susan Ryan to characterize this disadvantage as a form of age discrimination. In addition to helping maintain social connections for wellbeing, digital literacy has been identified as fundamental to a person's agency and ability to make informed decisions about health and their environment (UNESCO, n.d.).

Digital technology is also increasingly important to social connection and support. While social networks are now recognised as playing an important role in successful ageing in place, there remains a common assumption that such social networks must necessarily be comprised of people living in close proximity (Wilding & Baldassar, 2018). What is less commonly acknowledged is that information and communication technologies (ICTs) have transformed the nature of social networks and enhanced the capacity to participate in social groups and activities at a distance (Baldassar & Wilding, 2020). Online platforms now enable a diverse range of opportunities for social engagement and social interactions at a distance, supporting 'social networks of interpersonal ties that provide sociability, support, information, a sense of belonging and social identity' (Russell et al., 2008, p. 78; Millard et al., 2018), all of which are important to and can facilitate engagement in physical activity.

There is also a general lack of awareness of the role of distant and migrant support networks in the lives of older people, particularly those from CaLD backgrounds, who often have close family members living long distances away, but who remain important sources of emotional and moral support. A growing body of research has identified that transnational support networks of older migrants remain insufficiently recognized in migration, health and aged care policies (Baldassar & Wilding, 2020).

Given that the vast majority of Australians live in urban centres characterised by urban sprawl, as well as the vast distances that separate regional, rural and remote centres, the challenges of social isolation and loneliness, as well as access to transport, are particularly critical issues of relevance to healthy active ageing in Australia. The use of digital communication technologies to support social connection across distance, and opportunities to engage in guided physical activity online, are particularly important in contexts of social distancing (e.g., when infection outbreaks in residential care require lockdown).

Conclusion

This Rapid Evidence Review has drawn on key policy developments and recent research evidence to present the Healthy Active Ageing Framework. This framing is embedded in a whole-of-life approach and recognises that increasing the physical activity of older adults goes hand-in-hand with increasing their social engagement and networks of support. These physical and social dimensions of people's lives are in turn impacted by the broader social, cultural, environmental and contextual issues of quality of life and wellbeing. Healthy Active Ageing focuses on supporting physical activity across the life-course, promoting social engagement and creating enabling environments through age-friendly policy and practice.

The approach recognises that Healthy Active Ageing is best supported across the life-course, involving all ages, because how we treat our bodies in younger ages has an impact on health in older ages. It acknowledges the importance of physical activity, in particular walking, for health and wellbeing of older people and advocates a continuum of support and engagement across the life-course.

Social engagement and belonging are seen as critical to provide the social network support and motivation needed for older people to maintain healthy levels of physical activity, including walking, and for countering social isolation and mental health issues.

As Australia's older population becomes increasingly diverse, understanding the heterogeneity of ageing in Australia is critical for developing appropriate and effective policy responses. Planning and design play a crucial role in creating enabling environments that support older adults' physical activity and wellbeing. Planning through a Healthy Active Ageing lens is critical for designing places and spaces for intergenerational wellbeing. The Healthy Active Ageing Checklist in the Appendix, developed from this evidence base, is a useful resource to support this.

At the heart of this message is the belief that spaces that encourage and support older people to remain physically active and socially connected will be good places for everyone.

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Appendix Healthy Active Ageing : Checklist



Table of Contents

- What is this checklist for?03
- How to use this checklist03
- How does this checklist help?04
- Who is this checklist for - intended users05
- Transport.....07
- Outdoor Spaces and Buildings.....11
- Housing.....14
- Social Participation.....17
- Respect and Social Inclusion.....19
- Civic Participation and Employment21
- Communication and Information.....23
- Community Support and Health Services.....25
- How this checklist was developed?27
- Acknowledgment of funding support.....28
- Special thanks to.....28



What is this checklist for?

Using an ageing lens in planning and involving multiple sectors responsible for transport, urban planning, housing, information, health and social welfare can create age-friendly communities, not just for the elderly but for the all. This approach can help people to remain active and mobile across their life course and into old age.

This checklist offers practical advice for those who influence, or are concerned with, how our built environments are designed or changed to accommodate the needs of older people. By addressing the considerations in the checklist, we can create more walkable environments, which help older people to be more active. It is intended to help users observe and explore features of the built environment.

How to use this checklist?

Users are asked a range of questions. If the answer is "No", this highlights opportunities for improving the public realm. Cross sector collaboration and engagement are intended to determine the answer to some questions.

It is envisaged that the identification of these improvement areas will inform the inclusion of healthy active ageing strategies and their promotion in future policy, advocacy and action plans.

At the end of each section there are policy considerations that can be brainstormed and discussed.



How can this checklist help?

Using this checklist can help with:

- Informing development decisions relating to Healthy Active Ageing, inclusive of all stages in the planning framework:
 - strategic planning;
 - development controls;
 - development assessment;
 - authority design standards; and
 - the day-to-day operations of the authority.
- Designing new or adapting existing neighbourhoods, park systems, street networks, centres and places.
- Promoting community awareness as to the benefits of Healthy Active Ageing.
- Assisting community-based organisations to advocate for and establish Healthy Active Ageing environments.
- Guiding health professionals and service organisations that work alongside and service older Australians.
- Considering governance arrangements for the built environment and public spaces to enhance Healthy Active Ageing outcomes.
- Supporting elected officials to guide strategic planning and review development proposals.
- Providing evidence for sport and recreation officers to support strategic decisions regarding infrastructure development.

Who is this checklist for?

This checklist is aimed at practitioners and policy makers. This checklist can support the work of built environment, community and health professionals, as well as those who advocate for advancements to healthy active ageing and decision-makers. It is relevant to both strategic and operational levels, providing guidance across a range of domains relevant to the design of built environments to help identify opportunities to advance Healthy Active Ageing. A list of intended users and when they might apply Healthy Active Ageing is outlined in the following table:

Intended users of the Healthy Active Ageing checklist

Intended users	
Planners/urban designers/transport engineers	<ul style="list-style-type: none">• Informs design choices when creating and preparing design and development proposals.• Assists in assessing or evaluating applications and development proposals.• Provides a screening tool to evaluate proposals and inform town planning schemes and supporting policy. Guides strategic decisions and policy and assists in consultation and collaborative partnerships with stakeholders.
Health professionals and service organisations that service or work alongside older Australians	<ul style="list-style-type: none">• Identify benefits of a Healthy Active Ageing built environment.• Highlights design features of an age-friendly built environment.• Showcases how social interactions can enhance active health outcomes.
Community advocacy groups	<ul style="list-style-type: none">• Assists in understanding the international age-friendly policy framework and identifies ways it could be refined to be locally relevant.• Facilitates consultation at public meetings or other community forums where Healthy Active Ageing outcomes can be advocated.• Informs organisations on how best to engage with their community as it relates to the needs of older people.
Developers	<ul style="list-style-type: none">• Provides a list of questions developers and proponents can ask themselves across the development process, from concept to delivery.• Identifies considerations with regards to healthy community design and provides a screening tool to help assess the impact of the proposal on health and wellbeing.• Promotes the benefits of Healthy Active by Design with best practice case studies.

Intended users of the Healthy Active Ageing Checklist (cont.)

How to use	
Intended users Elected officials	<ul style="list-style-type: none">• A list of questions to be considered when assessing and making determinations on development and policy proposals.• Offers guidance in assessing the impact of a proposal on health and wellbeing of the community and funding priorities.• Provides a screening tool to evaluate proposals and inform town planning schemes and decisions.
Health professionals and advocates	<ul style="list-style-type: none">• Guides strategic decisions and policy including public health planning and assists in consultation with stakeholders.• Identifies considerations with regards to healthy community design and sets out a summary of evidence and related current research, both nationally and overseas.
Community development officers	<ul style="list-style-type: none">• Provides a screening tool to evaluate proposals and assists in the preparation and review of strategic community/corporate business plans.• Provides guidance that can assist in evaluating the impact of projects and policy initiatives on health and physical activity for older people.
Sport and recreation officers	<ul style="list-style-type: none">• Provides guidance on strategic decisions regarding infrastructure development and funding priorities and assists in consultation with stakeholders.
Community members	<ul style="list-style-type: none">• Informs discussion around community development and policy proposals out for public comment.• Informs the consultation process at public meetings or other community forums where proposals are under consideration for community infrastructure, land use planning and development.• Informs the public on the opportunities to be healthy and active in their community with best practice case studies.

Transport





Transport

Highly walkable communities support a Healthy Active Ageing population. Safe, accessible movement networks are essential to an age-friendly community. Universally accessible paths that support pedestrian, scooter, mobility device and bicycle movements allow the older population to remain engaged with their community. These measures also support an enhanced level of autonomy and independence. Public transport options should be convenient, affordable and safe and integrated into a universally accessible network of paths.



A Transport approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Movement Network feature.

Paths: universally accessible, well-connected paths provide an environment that enhances walking and healthy active aging. Optimal outcomes come from segregating pedestrian and cycle networks to enhance a sense of safety for older people.	Yes	No	N/A
Has the built environment been designed to provide well maintained, universally accessible paths on both sides of the street?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have paths been designed to facilitate direct movement between destinations, following desire lines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the paths safe, including lighting, contrasting colour, unobstructed sightlines and integrated CPTED design considerations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are paths sufficiently wide enough to enable two people walking arm in arm to pass those with scooters, a child's bicycle, wheelchairs, mobility devices, wheeled devices and protection from motor vehicles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Streetscapes: The quality of the streetscape influences levels of walking in older people.	Yes	No	N/A
Are streets lined with shady, mature trees to provide weather protection to pedestrians?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are streetscapes well maintained, attractive, clean, well-lit and safe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there frequent, sheltered, safe, universally accessible and well-maintained resting points? These might include seating, drinking fountains, public toilets, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there sufficient signage along movement routes to support wayfinding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are movement networks universally accessible and sufficiently linked to public transport stops?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are paths lined with attractions or destinations that encourage further movement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are streets separated with dedicated bicycle lanes (also be made available to electric scooters and electric skateboards)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do streetscapes have sufficient signage to support wayfinding between destinations and public transport, including healthcare centres, hospitals, community and recreational centres, shops, public offices, and other places that may be of interest to older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do pedestrian crossings co-located with destinations such as the above have lengthened timings for older people to cross safely?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do vehicles and bikes on neighborhood streets support pedestrian activity, or is there opportunity for speeds to be reduced?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are crossings designed to be free of obstructions, such as curbs, vegetation and parked cars to ensure there are sufficient sightlines between an access point and destination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Streetscapes (Continued)	Yes	No	N/A
Do streetscapes have sufficient signage to support wayfinding between destinations and public transport, including healthcare centres, community and recreational centres, shops, hospitals, public offices, etc., and places that are of interest to older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are pedestrian crossings with lengthened timing co-located with destinations such as health care services, schools, parks and other destinations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are crossings designed to be free of obstructions, such as curbs, vegetation and parked cars, to ensure there are sufficient sightlines between an access point and destination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Street network: Providing a network of interconnected streets with paths that enables older people to walk to desired destinations.	Yes	No	N/A
Does the design of the built environment provide a network of paths that ensures convenient access to destinations, including health care services and general practitioners, shops and public transport and on-demand hubs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are buses accessible for older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Activity centres: Convenient public and on-demand transport options and universally accessible paths are required to connect to and through activity centres and destinations of interest for older people.	Yes	No	N/A
Within activity centres, or at destinations, are traffic calming measures integrated into the streetscape to slow traffic and support the safe crossing of the street?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The average walking speed of an adult is some 4.8km/h. For people aged 65+ this average speed drops to 3.0km/h. For people aged 80+ it falls further to 2.0km/h: Has the design of movement networks and more walkable suburbs and town centres taken into consideration the slower walking speeds of older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open spaces: Public open spaces such as plazas and parks should be inviting, safe and accessible for older people to support walking and social activities.	Yes	No	N/A
Shared paths for walking and cycling may be problematic due to older/slower pedestrians and cyclists: have transport facilities been designed with all users in mind, while prioritising the needs of older pedestrians as much as possible by providing, lower speeds, lower curbs, safe places to cross, longer crossing lights, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the built environment support transport on demand, specifically for people wanting to access their local GP, fresh and healthy food options and other health services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are routes to parks and open spaces safe, well lit, overlooked, welcoming, well-maintained, durable and clearly signposted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transport System: Older people rely on a safe, respectful, convenient, and accessible public transport system to stay active and independent i.e. access to community gardens GP, basic food needs, places of work/volunteering are critical.	Yes	No	N/A
Are clear, real-time-information systems and audio assistance provided on public transport modes and pick up points?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the public transport system provide access to priority seating for older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has smart crossing technology for people with disabilities and older people been included in streetscape upgrades?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does public transport provide universal access to low floor buses, raised platforms for stops across all public transport modes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the street design support a public transport network that provides a highly accessible and frequent service in areas with high numbers of individuals aged 65 years and over?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the public transport system provide sufficient stops and stations to allow older people to access to essential services and places/people they want to visit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are crossings automated, to eliminate the need to touch the 'push buttons'?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – Transport

- How can the streetscape be managed to reduce the number of obstacles on paths, such as waste bins or trees?
- Has the local government considered how to develop walking tracks and trails to encourage locals and tourists to walk and get in touch with nature?
- Do public spaces specifically address ways to reduce the barriers to older adults walking by ameliorating the impacts of peak hour traffic, congested school drop-off and pick-up zones, main roads and busy intersections that are barriers that limit and deter people from walking?
- How has the public transport system been adapted and designed to respond to older people's needs; is their safety prioritised during on-boarding and disembarking to minimise falls?
- Does the public transport system provide a favourable fare structure, (or free subscription) coverage and distribution, frequency and operating hours to encourage the use of public transport by those in the community over 65 years of age?
- Is there a transport on demand subsidy at a governmental level to ensure that services remain affordable for financially disadvantaged seniors? Does this subsidy expand access to essential GP services, which can help reduce pipeline healthcare costs through early intervention?

Outdoor Spaces & Buildings





Outdoor Spaces & Buildings

Well-designed open spaces and buildings increase the mobility, independence and quality of life for older people; these create an age-friendly, pleasant, clean, secure and accessible built environment to support walkability and physical activity.



An Outdoor Spaces and Buildings approach that supports Healthy Active Ageing should be read in conjunction with Healthy Active by Design Public Open Space feature.



An Outdoor Spaces and Buildings approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Buildings feature.

Parks: Green, welcoming and accessible open spaces are key destinations to support older people to stay active, walk and be engaged in their community.

	Yes	No	N/A
Has the park been designed to create universally accessible, attractive and functional spaces for older people that are connected to accessible movement networks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there specifically targeted recreation provisions, such as exercise equipment designed for older people to support substantially improved muscle strength, balance, and physical function? These are all risk factors for falls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the senior's exercise equipment co-located with children's playgrounds and seating, drink fountains, toilets and shade?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the open space provide facilities, areas and opportunities for slower-paced activities? Activities may include walking, lawn bowls, walking football or aqua activities, or being able to observe the activities of others from a distance, which can encourage older people to be active.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there the co-location of senior's sports facilities alongside everyday destinations, such as health services to help raise awareness of opportunities for sport and physical activity and increase convenient access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parks been designed around mobility needs of people with disability, or different abilities, to support access to off-road public open space, like beaches, coastal lookouts and nature parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parks been co-located with activity centres that include destinations for older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the park provide space for locally grown food that supports the physical activity of managing an allotment and social benefits from the provision of community facilities that draw people together to meet and socialise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the park include sufficient and frequent shaded benches, universally accessible toilets and water fountains to extend the physical activity of older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Precincts: A diverse range of destinations within a highly accessible and connected precinct supports independence and higher rates of walking in older people	Yes	No	N/A
Do precincts provide for appropriately designed signage to improve wayfinding for older people, those that are differently abled and those living with dementia?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are buildings, public plazas and surrounding landscapes designed to meet universal design guideline principles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the built environment support areas for slower-paced activities, such as walking or low impact exercise, across the day, and night?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the precinct support a high diversity and mix of land uses, including aged care, medical centres, community centres, childcare centres, access to affordable, fresh healthy food, dementia friendly cafes, banks and other retail amenities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Buildings	Yes	No	N/A
Well-designed buildings can support older people to be more active, enhance their sense of security and provide opportunities to socialise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do public buildings, internally and externally, provide for appropriately designed signage to improve wayfinding for older people, those that are differently abled and those living with dementia?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do public areas internally and externally provide sufficient resting places and toilets that are accessible and regularly spaced throughout the precinct?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has the entrance to community buildings been designed to be visible, inviting, at a human scale and connected to universally accessible paths?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the design of buildings and public plazas provide bicycle stands, storage and end of trip facilities at the entrances to destinations to support the growth in e-bikes that are opening up cycling to older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community facilities and civic buildings	Yes	No	N/A
Enabling older people to share spaces with others is critical to social inclusion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the design of the building take into account the needs of older people regarding access, lighting, safety and services, lifts, seats and toilets, by integrating a universal design approach?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping centres	Yes	No	N/A
Shopping centres are popular destinations as they are generally climate controlled, universally accessible and have convenient access to amenities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the shopping centre support walking programs and dementia friendly cafés?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the design of the shopping centre provide for shaded walkways and breezeways connecting destinations to encourage greater levels of walking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – outdoor spaces and buildings

- Do these places adopt universal design guidelines, integrate dementia enabling guidelines and support the needs of older people, those living with dementia and those with reduced mobility?
- Is wayfinding and other signage inclusive; for example, is signage translated in multiple languages, braille, or have larger font sizes been considered?
- Are community facilities and civic buildings designed and programmed in a way to support a hub for physical and social engagement for older people to address the risk of social isolation and enhance intergenerational connections?

Housing





Housing

A range of affordable, flexible, well-designed and safe housing options with good connectivity to social services and the broader community supports increased levels of independence, enhanced walkability and healthy active ageing.



An inclusive Housing approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Housing Diversity feature.

Housing	Yes	No	N/A
Are community housing, retirement living, residential aged care and community care services co-located with other health and integrated facilities in one location?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has technology been used to support ageing in place? Does this include telecare and assistive devices to provide rapid reporting and increase response rates from health care providers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the design of the dwelling ensure that online food delivery, mobile greengrocers and other on-demand services can readily deliver food and products to older people with mobility challenges?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is intergenerational living and affordable shared housing provided to reduce the social isolation and support age-friendly community outcomes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does planning policy support a higher proportion of homes meeting Livable Housing Design Guidelines standards and universal design approach and encourage construction methods which allow dwellings to be easily and affordably adapted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the proposal integrate Crime Prevention Through Environmental Design (CPTED) principles to provide for safe and secure housing options for older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has the built environment been designed to provide liveable housing design near public transport nodes, services and amenities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – Housing

- How can precinct planning support older people from all socioeconomic groups to access a diverse range of housing options? The housing may include market-driven housing, social housing, assisted-living facilities, continuing-care communities (independent living, assisted living or care homes), shared living arrangements (including hostels and care homes), dual key and ancillary dwellings.
- How can planning processes support a 'bottom-up' participatory consultation that can inform planning to deliver improved outcomes for older adults living in the community?
- How can landlords be encouraged to understand the benefits of constructing accessible design and home modifications to support ageing in place?
- Does policy and practice support the opportunity for older renters to access longer-term leases for housing stability?

- Does the dwelling design make tasks easier for older people, reduce fall risks, provide better security, support the maintenance of independence over time and have a positive impact on social relationships and networks, resulting in continued engagement with society?
- Is the proposed housing (including aged care) culturally appropriate for Aboriginal and Torres Strait Islander peoples and other cultures? Is there sufficient housing to meet the demand of a culturally diverse community?



Participation Social



Social Participation

Provision of engaging, accessible and affordable events allow for older people to participate in leisure, social, cultural, community and spiritual activities. In turn, this helps them to stay engaged, informed and active. The result is enhanced walkability and healthy, active ageing.



A Social Participation approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Destinations feature.



A Social Participation approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Community Facilities feature.

Social Participation

	Yes	No	N/A
Are community events and groups specifically created for older people to promote physical activity and raise awareness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have initiatives such as seating been included in public spaces to encourage socialising?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are public open spaces designed to enable several different activities, such as dog off-leash areas, allotments and community gardens, exercise areas, playgrounds and access to toilets?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do health and other essential services work across sectors to facilitate support in ageing in place, particularly in rural areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does infrastructure provide connectivity to information technology (NBN, fixed wireless or satellite) to support ageing in place, particularly in rural areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do opportunities exist for interaction and engagement across generations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – Social Participation

- Are the members of the community provided access to community-based or in-house programs, specifically designed to support walkability in older people?



Respect & Social Inclusion



Respect and Social Inclusion

An inclusive society that encourages older people to participate in more of their city's social, civic and economic life is supportive of a healthy active ageing community.



A Respectful and Social Inclusive approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Destinations feature.



A Social Participation approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Community Facilities feature.

Respect and Social Inclusion

	Yes	No	N/A
Does the built environment provide spaces to support appropriate social activities that are universally accessible, convenient and safe for older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are public spaces and landscapes designed to develop connections to Aboriginal communities and to respect all cultures and traditions represented within communities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do programs support the development of gardens, allotments and verge gardens within the built environment? Do open spaces provide access to fresh, healthy food and a channel for older people to pass down their knowledge?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the design of aged care facilities include the ability for residents to grow healthy fresh food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When establishing programs for older people, have cultural brokers and 'champions' in culturally diverse communities been utilised to enhance connections?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do programs support the development of gardens, allotments and verge gardens within the built environment? Do open spaces provide access to fresh, healthy food and a channel for older people to pass down their knowledge?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the built environment provide spaces to support appropriate social activities that are universally accessible, convenient and safe for older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – Respect and Social Inclusion

- Are there programs, events and activities that are designed for older people to have face-to-face meetings and social support for those that are ageing in our community, with a particular focus on creating intergenerational connections?
- Do older people have access to organised social events? Do they offer a wide range of age-appropriate activities, including walking, scrapbooking, jewellery making, transport, outings, cultural excursions, story writing, workshops, and health forums to promote the participation of older people?
- When designing events for older people, has engagement been through existing local networks?

Civic Participation & Employment





Civic Participation & Employment

An age-friendly city and community provides opportunities for older people to do voluntary or paid employment. Work keeps older people engaged in the political process, encourages civic participation and the continuation of training/entrepreneurial opportunities.



A Respectful and Social Inclusive approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Destinations feature.



A Social Participation approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Community Facilities feature.



A Social Participation approach that supports Healthy Active Ageing should be read in conjunction with the Healthy Active by Design Healthy Food feature.

Civic Participation and Employment

Are public buildings designed to meet universal design guidelines and remove physical barriers to older people engaging in civic activities and employment?

Yes	No	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – Civic Participation and Employment

- Does the government provide incentives for older people to undertake voluntary or paid employment work, to remain engaged in the political process, to engage in civic participation and to continue training and/ or entrepreneurial opportunities?



Communication & Information



Communication & Information

An inclusive society allows older people to stay connected with events, news and activities, with timely and accessible information that enables the community to be both technologically and socially included. A Healthy Active Ageing approach to the design of the built environment can support an inclusive society.

Communication and Information	Yes	No	N/A
Are programs and initiatives targeted and promoted to older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have the needs of older people been considered in the design of walking programs that use information and gaming technology prizes and incentive schemes to motivate an increase in walking and socialising?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does technology support the use of digital wayfinding in public spaces?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has engagement with older people been tailored to local conditions and based on bottom-up participatory community consultation that supports ageing in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the built environment provide access to telecommunications and communication technologies which enhances the capacity to participate in social groups and activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is information up to date, trustworthy and from a reliable source?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is technology used to advance public safety i.e. CCTV and safety cameras?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the Local Council have a Community Safety Scheme?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – communication and information

- Ensure suitable active ageing data is accurately collected, stored in an accessible manner and mapped to inform decisions about the modification or redevelopment of the built environment. For example where are the footpaths, are they universally accessible?
- Are programs in place to educate older people how to use modern day technologies?



Community Support & Health Services



Community Support & Health Services

To keep older people healthy, independent and active there is a need to ensure accessible and affordable community health measures are provided to support an age-friendly community.

Community Support and Health Services	Yes	No	N/A
Have fall prevention programs been utilised to identify hazards in the home environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there exercise and walking programs specially designed for older people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are health care services provided at home, to support ageing in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there transnational support networks to help address the challenges of ageing in place of older migrants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there awareness programs to support dementia-friendly environments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have older people been included in the designing of health services via consultation and community participation, particularly of marginal communities? Has this consultation work been undertaken with older people, and not on their behalf?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the built environment provide access to new technologies that support ageing in place, particularly in regional areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Policy Considerations – Community Support and Health Services

- Are Commonwealth and State Government Programs promoted to older people? Older Australians can apply for a government-subsidised package of care and services designed to help age-in-place and live independently in their home, including funding for
 - Nutrition, hydration, meal preparation and diet
 - Mobility and dexterity
 - Transport and personal assistance
 - Nursing, allied health and other clinical services for those with higher care needs
- Is access provided to practical government programs that subsidise home modifications? Building modifications include:
 - Installation of ramps and rails
 - Widening doorways
 - Altering bathrooms and kitchens (e.g. lowering bench heights)
 - Relocating light switches and power points
 - Installing emergency alarms, monitoring systems and smart technology
- Are there services to highlight the many programs and initiatives available to older people to support a healthy active life, including increased walkability?

How this checklist was developed:

This Healthy Active Ageing Checklist has been developed from the World Health Organisation's (WHO) Age-friendly Communities framework. This framework includes eight age-friendly domains (blue headings) that can be advanced to better meet the needs of communities as we age. The Checklist also incorporates HAbD design features (other coloured icons) to connect likenesses in methodology.

The eight age-friendly domains include the following social and built environment principles:

- Transport - Provide universally accessible, well maintained footpaths that segregate pedestrians and cyclists and ensure slow movement networks within centres and surrounding the approach to destinations.
- Outdoor spaces and buildings - Ensure universally accessible toilets, frequent park benches and shade within public open spaces. Universally accessible public buildings to be connected by accessible paths and public transport.
- Housing - Deliver affordable, diverse, intergenerational and accessible housing typologies, within a mixed-use precinct.
- Social participation - Design initiatives with, rather than for, older people. Combine physical activity and social engagement for best possible outcomes.
- Respect and social inclusion - Actively include older people in engagement and acknowledge the diverse social and cultural needs of different members of the community.
- Civic participation and employment - Enhance civic participation through active engagement with older people and provide purpose via employment/volunteer opportunities.
- Communication and information - Ensure initiatives are appropriately communicated to meet the needs of older people.
- Community support and health services - Provide mixed-use precincts that include health services and community programs and ensure services and facilities are specifically designed for older people

These eight domains, along with the HAbD design features are reinforced by evidence and literature as supporting walkable, age-friendly environments.

A rapid evidence review in the space of Healthy Active Ageing and a number of engagement activities were conducted with the target audience (older Australians), along with built environment and health professionals. Findings and feedback generated from the engagement consultations was considered when developing this checklist. You can access a copy of the engagement summary report from the resources tab within the Healthy Active Ageing module on the Healthy Active by Design website <https://healthyactivebydesign.com.au>

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Sport Australia provided funding to the Heart Foundation to deliver the Walk Wise Project over a two-year period (2018-2020), through the Move it AUS, Better Ageing Grant Program. The Better Ageing Grant Program aims to increase levels of physical activity of Australians aged 65+, particularly those least active, to improve their overall health and wellbeing. The program aims to prevent and reduce the impact of chronic disease and increase overall physical and mental health of older Australians. Sport Australia is the Australian Government body responsible for the delivery of funding and development of Australian sport.

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**For heart health information and support, call our
Helpline on 13 11 12 or visit heartfoundation.org.au**

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Heart Foundation Walking

Heart Foundation Walking (www.walking.heartfoundation.org.au) is Australia's largest free walking program. Since 1995, the program has engaged over 145,000 Australians to start and stay walking. With more than 1,300 walking groups nationwide, participant and group numbers are consistently growing.

Heart Foundation Walking is a great way to increase levels of physical activity among older Australians. Walking groups are a community led initiative, aimed at improving public health and reducing the prevalence of heart disease among Australians by encouraging people to engage in physical activity with others, and in turn, enhancing social connections.

The walking groups connect individuals, building a community of walkers to support participants to improve their physical and mental health and enhancing their overall quality of life. For most people, irrespective of age, walking is an easy way to start and maintain an active lifestyle, since it is free and does not require special skills, instruction or equipment. Additionally, it is a low-impact activity with a low risk of injury. Community programs that are affordable and accessible, such as Heart Foundation Walking, are central to the ongoing sustainability of healthy active communities.

To find out more, or to search if there is a group near you, please scan the QR code below or visit the website: www.walking.heartfoundation.org.au

Heart Foundation Walking is supported by the Australian Government, the Queensland Government and SportAUS. For more information, please use the Sport AUS QR code below.

The Community Walkability Checklist

The revised Community Walkability Checklist is an easy way for people to assess how walkable their neighbourhood is. Walkability describes the factors within the environment that make it convenient, comfortable and safe to walk, which can either help or discourage walking. The Community Walkability Checklist guides users through each element of the environment, helping them to identify and understand what contributes to walkability. The Heart Foundation believes residents know and understand their neighbourhood better than anyone else, so it is intended the Checklist is used by community members. Completed checklists can then be returned to the Heart Foundation to help inform councils of local walkability priorities. The Checklist can be easily accessed using the QR code below.



