Healthy Ageing

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Introduction

Increased longevity because of advances in public health, medical science, and economic prosperity have improved life expectancy and reduced mortality. Population ageing is a global trend and the proportion of people aged over 60 is increasing faster than any other age group (United Nations, 2015).

A crucial factor influencing the capacity of older people to reap the benefits of their longevity is their health and well-being. If old age is dominated by poor physical and mental health, the implications for both the individual and community will be negative (Beard et al., 2016).

In 2011, chronic diseases including cancer, cardiovascular diseases and musculoskeletal disorders accounted for the majority of disease burden in Australia (Australian Institute of Health and Welfare, 2016b). Chronic diseases are also a great cost to the local economy, with loss of productivity and increased health care expenditure related to the management of chronic diseases. Therefore, there is an urgent need to focus on healthy ageing to reduce the burden and cost of chronic disease.

A focus on healthy ageing can reduce the prevalence of chronic disease, improve health outcomes, and reduce pressures on the health care system, as well as maximise the many contributions older people make to their communities and increase the social capital of the community. This may include increased participation in society including longer workforce engagement, volunteering, and caring for others (World Health Organization, 2015).
Healthy Ageing

For the purpose of this report, chronological age is used to define ageing and people aged 60 and above are classified as older people. This definition aligns with global definitions. In Australia, to access aged care services under My Aged Care, eligibility age is defined as 65 years (50 for Aboriginal and Torres Strait Islanders).

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Healthy ageing is ‘the process of developing and maintaining the functional ability that enables wellbeing in older age’ (World Health Organization, 2015)

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In this definition, functional ability comprises:

- intrinsic capacity (physical and mental capacity of the individual),
- environments (the external factors that form the context in which the individual lives),
- and the interactions between these two (World Health Organization, 2015).

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Figure 1 Healthy ageing framework (WHO, 2015)
Theoretical Frameworks

The current WHO definition of healthy ageing has historical roots in successful ageing (Rowe & Kahn, 1997) and productive ageing (Burr, Caro, & Moorhead, 2002; Caro, Bass, & Chen, 1993). However, both successful and productive ageing have been criticised for over-emphasizing the role of the older person in maintaining economic productivity, and downplaying systemic factors outside the individual’s control such as race, gender, sexual orientation, and socioeconomic status (Holmes, 2006; Moulaert & Biggs, 2013; Rowe & Kahn, 2015; Sadana, Blas, Budhwani, Koller, & Paraje, 2016).

In response to these criticisms, the WHO developed the Active Ageing Framework (World Health Organization, 2002) and the Guide for Age-Friendly Cities (World Health Organization, 2007a). The Active Ageing Framework (WHO, 2002) identifies participation, health, and security as the three pillars for intervention to promote active or healthy ageing. The framework also emphasizes the importance of adopting a life-course perspective, creating supportive environments, and fostering healthy lifestyles particularly to reduce the risk of chronic diseases in later life (Buys & Miller, 2006; World Health Organization, 2002).

The Global Age-Friendly City Guide (WHO, 2007) (discussed later in this paper) was developed using a bottom-up participatory approach to give voice to the needs of older people themselves. The resultant guide provides a starting point for community development to optimize physical and social environments conducive to active ageing across the life-span. In summary, the guide identifies a number of key aspects relating to civic layout, communication and information, and availability of supports and services to facilitate the development of an age-friendly city.

Both of these approaches have been influential in re-shaping the dominant discourse about older people from one of decline in functional ability and economic participation to a more positive one of active participation, optimal health, and independence (Stephens, 2017). Furthermore, their emphasis on a life-course approach recognises that entry points for interventions to promote healthy ageing may be identified at any age across the life-course, and at different levels and sectors (United Nations, 2015; World Health Organization, 2002, 2016).
Strategic and Legislative Context

International Policy and Human Rights
Prioritising healthy ageing is an investment in a shared future. The Universal Declaration on Human Rights (UN General Assembly, 1948) stipulates that “all human beings are born free and equal in dignity and rights”. Human rights span political, social, economic and cultural rights, and the right to health, security and housing (World Health Organization, 2015). These rights do not change with ageing, but older women and men may be considered less valuable members of society and as such may experience ageism, barriers to participation, and difficulties realising their autonomy (Global Alliance for the Rights of Older People, 2017). The WHO advocates that the rights of older people be enshrined in laws, policies and actions to support healthy ageing (World Health Organization, 2015).

National Policy and Legislation
Current Commonwealth government policy is strongly focussed on provision of health and social services to support an ageing population.

In April 2012, the Commonwealth Government launched a package of reforms to the aged care system that are progressively being rolled out. The reform package aims to create a more flexible model of care and moves towards consumer directed care. Commonwealth services and programs are underpinned by the concepts of wellness, re-ablement, and restorative care to optimise and improve functional ability, independence, and quality of life using a person-centred approach to assessment and service delivery (Commonwealth of Australia, 2015).

These reforms include My Aged Care, a central hub consisting of a website and a contact centre where older people, their families, and carers can obtain information and services relevant to their support and care needs. This includes the Commonwealth Home Support Programme (est. 2015), for low-level in-home support (replacing Home and Community Care (HACC) Programs) and Home Care Packages for higher levels of in-home support.
Victorian State Government Policy and Legislation

In response to the Commissioner for Senior Victorians’ 2016 report – *Ageing is everyone’s business: A report on isolation and loneliness among senior Victorians* – which showed that 10 per cent of older Victorians (if not more) were experiencing loneliness at any one time, the Victorian government has developed *Age-Friendly Victoria*. This initiative aims to build age-friendly communities that ‘encourage active ageing and optimise opportunities for good health, social and economic participation and personal security’ (Victorian Government, 2016). The Age-friendly Victoria initiative includes the *Age-Friendly Victoria Declaration* signed by the Municipal Association of Victoria and a number of Councils in the Eastern Region of Melbourne. There are also other grants and resources for older people, including a focus on older pedestrians in the *Active Transport Victoria* initiative (Commissioner for Senior Victorians, 2016b).

The *Victorian public health and wellbeing plan 2015–2019* adopts a life-course approach to population health, focusing on prevention, health promotion and health protection. The objective of the plan is to establish ‘a Victoria free of the avoidable burden of disease and injury, so that all Victorians can enjoy the highest attainable standards of health, wellbeing and participation at every age.’

The Victorian *Department of Health and Human Services* promotes healthy ageing through a number of initiatives including the *HAnet, Victorian Active Ageing Partnership (VAAP)* and Active *Healthy Ageing Advisers* with the aim to promote, build and support the health and wellbeing of older people, including high-risk groups such as socially isolated people.

Local Government Policy

Responding to the growing number of older people in the community, local government is also taking a lead in developing and implementing age friendly policies and plans in their local areas to promote and foster healthy ageing. Some councils have stand-alone plans while others incorporate healthy ageing into a whole-of-council approach in their Municipal Public Health and Wellbeing, Council, or Community Plans. Other relevant plans include: Healthy Ageing, Positive Ageing, Disability Action Plans, and Heatwave and Emergency Management plans. Many Councils have Healthy Ageing Officers to support implementation of these plans. Local Government also provide numerous services to older residents through the *Commonwealth Home Support Program*, and
deliver programs to facilitate the social inclusion of older people (e.g. activities during Seniors Week and supporting seniors groups).

The Municipal Association of Victoria (MAV) participated in the development of the WHO global age-friendly cities framework (World Health Organization, 2007a). The MAV also worked with councils on positive ageing through networking, research, information sharing and leadership. Current local government positive ageing plans can be accessed from the MAV website or local government websites.
Factors influencing Healthy Ageing

Healthy ageing is underpinned by a wide range of intersecting factors ranging from the intrinsic mental and physical capacity of the individual to the wider environmental and societal influences, which shape the broader context for the individual’s life (World Health Organization, 2015). Intrinsic capacity is shaped by genetic heritage, personal factors such as gender and ethnicity, health factors such as illness status, lifestyle factors such as the use of alcohol and medications, and psychological factors such as motivation and self-efficacy. These factors in turn, are strongly influenced by the physical, social, and economic environments in which people are born, live, and work. The health and wellbeing of individuals and populations is shaped by the social determinants that influence individual behaviours and lifestyles (Australian Institute of Health and Welfare, 2012; Brooks-Wilson, 2013; Moayyeri et al., 2016). The environment in which people operate has significant impact on the choices that individuals can make throughout their life and can create life circumstances that may limit opportunities for healthy lifestyles and exacerbate health inequalities.

One societal barrier universally acknowledged to impede healthy ageing is ageism. Ageism refers to the negative stereotypes and beliefs related to ageing that are ingrained in discourses at all levels of society (Officer et al., 2016). Similar to sexism and racism, ageism is manifested through negative stereotypes and beliefs, in this case about older people being frail, cognitively slow, helpless, or weak, and a burden on society or the economy. Such beliefs may significantly affect older people who may be prevented from actively participating in everyday life in their communities (World Health Organization, 2012). Ageism may negatively influence employment practices, the way institutions and practitioners plan and implement services, and how services are prioritized and delivered (Nelson, 2016; World Health Organization, 2016). Ageism permeates all aspects of society, and represents a major form of institutionalized prejudice (Nelson, 2016). Though difficult to identify, it is pivotal to address ageism at all levels of society; from the way we talk about older people to how older people’s capabilities are perceived in current institutional policies and practice.
Ageism has also been linked to elder abuse (B. Dow & Joosten, 2012). Abuse of older people can take many forms including financial, psychological, physical, social, sexual, as well as neglect (Joosten, Dow, & Blakey, 2015). Older people who experience abuse are more likely to have higher levels of loneliness, poor mental health, and poor economic wellbeing; all factors contributing to lower satisfaction in life (Yeung, Cooper, & Dale, 2015). However, elder abuse is rarely reported and is frequently under-recognized by professionals: some studies suggest that only around 1 per cent of cases are detected and reported by medical practitioners (Kurrle, Sadler, Lockwood, & Cameron, 1997). Moreover, while awareness about elder abuse is on the rise, research shows that less than half of the health care workforce has received any formal training to facilitate screening and detection of elder abuse (B. Dow et al., 2013).

Gender has also been identified as a social determinant that shapes belief systems, social norms, and the determinants of health across the life-course health (Cruikshank, 2013; Foster & Walker, 2013; Marmot, Friel, Bell, Houweling, & Taylor, 2008; Women’s Health Victoria, 2009; World Health Organization, 2002, 2008, 2015). Gender can also be non-binary, and it is important to recognise that gender-fluidity can affect access to healthcare and health services, particularly due to stigmatisation (Department of Health, 2014).

Gender biases, implicit in the structures of sociocultural norms and society, represent a significant barrier to achieving health equity for women across the life-course (COTA Victoria, 2016; Women's Health East, 2014). Highlighting gender inequities in the Australian context, as many as 34.2% single women over the age of 60 are living in permanent poverty (Wilkins, 2014), and women are also over-represented as the victims of elder abuse (Joosten, Vrantsidis, & Dow, 2017).
the link between gender and health inequity, the National Women’s Health Policy (Department of Health and Ageing, 2010) states:

*Gender can contribute to differences between and among women and men in financial security, paid and unpaid caring work and experiences of violence resulting in different and sometimes inequitable patterns of exposure to health risk, in unequal access to and use of health information, care and services, different help-seeking behaviour and, ultimately, different health outcomes.*

**Culture** has also been identified by the WHO as a broad determinant to healthy ageing. Differences in cultural values and traditions can affect to a large extent how cultural groups view older people and the ageing process (World Health Organization, 2002). In turn, this can influence healthy ageing. In Australia, the lack of culturally appropriate services and information in other languages have been identified as cultural barriers to healthy ageing in CALD and indigenous groups (Department of Health, 2009; D. V. Rao, Warburton, & Bartlett, 2006).

Cultural barriers lead to poorer health outcomes. Older people from CALD backgrounds in Australia often have a delayed diagnosis of dementia as compared to Anglo-Australians due to cultural taboos and barriers of diagnosis, and access to culturally appropriate services (S. M. Lee et al., 2011; Vrantsidis, LoGiudice, et al., 2014). Cultural barriers to accessing indigenous healthcare play a role in the lower life expectancy for Aboriginal and Torres Strait Islanders, and the higher burden of disease amongst the population (Australian Institute of Health and Welfare, 2016a).

**Socio-Economic disadvantage** is one of the primary social determinants of health and is a strong determinant of healthy ageing. Those living with the least socio-economic disadvantage experience better health relative to others with greater socio-economic disadvantage (McLachlan, Gilfillan, & Gordon, 2013; Rahman, Khan, & Hafford-Letchfield, 2015). Older people from lower socio-economic backgrounds have been shown to have significantly worse health outcomes and shorter life expectancies relative to those from higher socio-economic backgrounds (Rahman et al., 2015).

As people age, the risk of experiencing socio-economic disadvantage may also increase, which has broad implications for health and well-being. In Australia, people aged 65 plus (especially those living alone and women) are far more likely to be experiencing poverty (DiGiacomo & Davidson,
While older Australians are increasingly represented in the workforce, underemployment and or unemployment is common in this age group (Australian Institute of Health and Welfare, 2017f); an issue closely linked to age discrimination (Australian Human Rights Commission, 2013). Additionally, around 70% of older Australians either fully or partly rely on the old age pension, and many older Australians have either insufficient or no superannuation (Australian Institute of Health and Welfare, 2017f).

Socio-economic disadvantage has also been linked to social exclusion. Social exclusion is defined as the “deprivation and the lack of access to social networks, activities, and services that results in a poor quality of life” (United Kingdom Social Exclusion Unit, 2006). While social exclusion can impact people across the life course, it may be particularly problematic for older people as social isolation may increase social exclusion and negatively influence a person’s health (Australian Medical Association, 2007; C. W. Lui, Warburton, Winterton, & Bartlett, 2011).

Ameliorating ageism, racism, sexism, and socioeconomic disadvantage may be effective in improving healthy ageing, however, such interventions require the backing of government policies and may even require fundamental societal changes (Frieden, 2010). For example, as highlighted in a recent report (Per Capita, 2016), comprehensive systemic changes to reduce socio-economic disadvantage and improve the current living standards for the poorest Australian pensioners would include measures such as the establishment of an independent tribunal to assess age pension rates, changes to rental assistance, utility rebates, and free dental services.

**Environments** that are age-friendly benefit people from all stages of life (World Health Organization, 2007a). Changes to the climate have significant impacts on the health and well-being of the population, and especially children and the elderly are vulnerable to extreme weather events and environmental hazards (Carnes, Staats, & Willcox, 2014). According to the WHO, age-friendly environments act as a conduit to encourage active and healthy ageing by optimising the opportunities for health, participation and security for older people (World Health Organization, 2007a). Such environments are inclusive of different spaces including the built environment (e.g. age-friendly infrastructure), social environments (the connections between people in social networks), services, political systems and policies.
Healthy ageing depends on the interaction between an individual’s personal characteristics and behaviours and the environment in which they live. Many different terms have been used to describe these environments, such as age-friendly environments, age-friendly cities, age-friendly communities, healthy cities, liveable communities, and lifetime neighbourhoods. In this report, the term ‘age-friendly environments’ is used.

The Global Age-Friendly City Guide was developed using a bottom-up participatory approach to give voice to the needs of older people themselves. The resultant guide provides a starting point for community development to optimize physical and social environments conducive to active ageing across the life-span. The age-friendly city guide identified eight key factors that interact and overlap to create cities and spaces that enable participation, social engagement, and health and safety for all ages (World Health Organization, 2007a). These factors are:

1. Outdoor spaces and buildings
2. Transportation
3. Housing
4. Social participation
5. Respect and social inclusion
6. Civic participation and employment
7. Communication and information
8. Community support and health services.

Over the past few years, many programs have been developed under WHO’s framework of Age-Friendly Cities or Age-Friendly Communities. These programs vary from small, local projects funded by regional groups to major national programs coordinated by national committees under the direction of federal governments. WHO’s Global Network of Age-friendly Cities and Communities was established in 2010 to connect cities, communities and organisations across the world with the common vision of making their community age friendly (World Health Organization 2014b). The network also provides a global platform for information exchange, mutual learning and support. One particular focus of the network is action at the local level that fosters the full participation of older people in community life and promotes healthy and active ageing. Currently, the network includes 541 cities and communities in 37 countries, covering over 179 million people worldwide.
Reviews (C. Lui, Everingham, Warburton, Cuthill, & Bartlett, 2009; O’Hehir, 2014; Steels, 2015) examining these interventions have identified a number of key features of successful strategies to create age-friendly environments, including:

- A collaborative approach that engages multiple stakeholders
- Empowering older people and engaging them in the whole process
- Addressing local needs and using multiple interventions
- Ensuring interventions are theory and evidence-based.

The age-friendly guide has been used by international, national, state and local governments in guiding visions, planning and implementation of age-friendly city initiatives (Victorian Government, 2016; World Health Organization, 2017). The Cities of Maroondah, Monash and Boroondara in the Eastern region are all recognised by the WHO as Age Friendly Cities. As an extension of the age-friendly city guide, communities across the globe are also implementing dementia friendly community initiatives. “A dementia-friendly community is a place where people living with dementia are supported to live a high quality of life with meaning, purpose and value” (Dementia Australia, 2018). This is supported in Victoria by the Victorian Department of Health and Human Services as well as a national resource hub established by Dementia Australia. Current dementia friendly community work is being undertaken in the Eastern Region by Boroondara, Manningham and Whitehorse Councils.
Impact

Aligning with global population estimates, by 2031 Australians aged 65 plus will comprise nearly 20% of the total population (5.7-5.8 million) and about 25% of the total population (9-11 million) by 2064 (Australian Bureau of Statistics, 2013).

The Inner East Primary Care Partnership report on the “Health and Wellbeing Needs of Older People Living in the Eastern Region of Melbourne” has shown that in the Eastern Metropolitan Region (EMR) of Melbourne, the number of people aged 65 plus is higher than the Victorian average. In 2015, 16.5% of the population was aged 65 plus and by 2026 this will increase to 22.5% (Arnott & Porteous, 2017).

Rising multi-morbidities

Currently, nearly 1 in 3 Australians aged 65 plus live with three or more chronic diseases (Australian Institute of Health and Welfare, 2016a). The most common conditions affecting older people are arthritis; hypertensive disease; hearing loss; heart, stroke and vascular disease; dementia; diabetes; and cancer (Arnott & Porteous, 2017; Australian Institute of Health and Welfare, 2017f).

Population groups most impacted

Some groups in our community are more vulnerable than others and some people will have an increased risk of vulnerability if their diversity is multi-faceted.

Women

In Australia, women currently make up a greater proportion of older people with 65% of those aged 85 years being women (Australian Institute of Health and Welfare 2015b). Similarly, in the EMR, 60% of those aged 80 plus are women (Arnott & Porteous, 2017). The centrality of gender in health and ageing outcomes has received significant research and policy attention (Davidson, DiGiacomo, & McGrath, 2011; Department of Health and Ageing, 2010; Women’s Health Victoria, 2009). Although women have longer life expectancies relative to men (Australian Institute of Health and Welfare, 2017a, 2017b), they are also more likely to have less financial resources (Australian Human Rights Commission, 2009), live alone or in care (Eshbaugh, 2008), experience more marginalization, and
suffer more chronic illnesses and disabilities, thus having high need to access the health care system (Boneham & Sixsmith, 2006; Carroll, 2008; Department of Health, 2010). There is need to be cognisant of the ‘feminization’ of ageing and the associated challenges in order to cater to the needs of older women (Davidson et al., 2011; World Health Organization, 2002).

Recognising the importance of gender to ageing, the WHO has released a gendered guide to ageing, which aims to assist policy makers, practitioners, government, and non-government organizations to ensure equity in health and ageing outcomes for men and women (World Health Organization, 2001, 2007b).

Aboriginal and Torres Strait Islander Australians
Aboriginal and Torres Strait Islander people have experienced generations of disadvantage, and as a result are generally less healthy, experience more disability, lower quality of life, and generally die younger than other Australians (Australian Institute of Health and Welfare 2010). Only 3% of Aboriginal and Torres Strait Islander Australians reach the age of 65 years and most have a life expectancy approximately 10 years lower to the general community (Australian Institute of Health and Welfare, 2014b). It is therefore not surprising that Aboriginal and Torres Strait Islander Australians access aged care and dementia services at a younger age compared to the general community (Australian Institute of Health and Welfare, 2011). In light of these reasons, Aboriginal and Torres Strait Islander people aged 50 plus are generally viewed as ‘older Australians’.

Culturally and linguistically diverse groups
Victoria is currently home to the largest proportion of people from culturally and linguistically diverse backgrounds. About 27% of Victorians, aged 65 plus were born in a non-English speaking country compared with 20% for Australia as a whole (Federation of Ethnic Communities’ Councils of Australia 2015). In the EMR, Italy, Greece, China, Germany and the Netherlands are the prominent non-English speaking countries of birth for people aged 60 plus (Arnott & Porteous, 2017). Research highlights that older people from CALD backgrounds are faced with significant challenges including low access to services due to lack of knowledge, cultural differences, language barriers, reluctance to disclose problems to strangers, and lack of culturally appropriate services. Consequently, older people from CALD backgrounds are at higher risk of social isolation and discrimination compared to the general Australian population. In addition, CALD women may face significant difficulties as they
are less likely to access language classes and are more economically and socially reliant on their spouses (Warburton, Bartlett, & Rao, 2009).

**LGBTI populations**

It is estimated that up to 11% of Australians identify as gender or sexually diverse (Commonwealth Government 2012) and that 19% of women and 9% of men in Australia have had same-sex attraction and/or experience (Richters et al. 2014). Aged care service providers have traditionally assumed that their clients are heterosexual, which has led to an absence of appropriate services for LGBTI people (Commonwealth of Australia, 2012). Additionally, older LGBTI Australians have historically experienced discrimination and stigma, leading to a fear of disclosure and/or failure to access health and aged care services (Tinney et al., 2015).

**People living in regional and remote areas**

Regional, rural and remote communities are rapidly ageing. The proportion of older people aged 65 plus in regional areas is 21-24 %, in remote areas it is 14%, and in very remote areas 9% (Baxter, Hayes, & Gray, 2011). In the Yarra Ranges, much of which is classified as regional, 21.8 % of the population is 60 plus years of age (Yarra Ranges Council, 2016). However projections suggest that by 2031, nearly a third of the population in Yarra Ranges will be over the age of 60 (Commissioner for Senior Victorians, 2016a).

Regional or remote-dwelling older people face unique challenges associated with their geographical location including limited access to services, employment opportunities, and infrastructure (Commissioner for Senior Victorians, 2016a); such limitations increase social disadvantage and social isolation and require thoughtful planning to implement programs and services aimed at optimizing healthy ageing in regional communities (Davis & Bartlett, 2008).

**Other Disadvantaged Groups**

**Individuals with a disability (psychiatric, physical, intellectual or chronic illness)**

In Australia, half of the older population has some degree of disability (Australian Institute of Health and Welfare, 2017f). People with a disability are more likely to be living in poverty, lack housing security, and have low levels of workforce participation and education (VicHealth, 2012). They also
face discrimination due to their disability in society. As a result, Australians with a disability usually have poorer health outcomes.

**Individuals with socio-economic disadvantages**

Reliance on the age pension has been linked to socio-economic disadvantage and for many means living a life of poverty and deprivation with pervasive food and housing insecurity, inadequate living conditions due to cost of repairs and utilities, and limited access to transportation and social activities, which all have significant implications for health and well-being (Per Capita, 2016).
Interventions

Risk and Protective factors of Healthy Ageing

Many chronic diseases are preventable and/or modifiable, and are not an inevitable part of ageing. Prevention and early intervention are fundamental to address the determinants of healthy ageing. These are important targets for health promotion and strategies to reduce the burden of disability and mortality in older age by enabling healthy behaviours and controlling metabolic risk factors that should continue across the life course.

For older people, benefits can be made by targeting modifiable risk such as:

- Reducing: smoking, alcohol and drug use; injury and falls;
- Promoting: physical activity, mental health, healthy eating; screening and early detection; maintenance of hearing, vision and oral health; safe sex; social inclusion and community connection.

Reducing the use of tobacco, alcohol, and other drugs

There is strong evidence that smoking is harmful to health. Quitting smoking at any time of life is associated with lowered health risks and improvements in quality of life (Beggs et al. 2007).

Alcohol is the most common drug used by older people with Australians aged 70 plus are most likely to drink daily (Australian Institute of Health and Welfare, 2014a). National data indicate that while risky drinking is declining in younger people, this is not the case in Australians aged over 50 years of age, highlighting a need for improved interventions for older Australians (R. Rao & Roche, 2017). While the current Australian alcohol guidelines indicate some benefits associated with light-to-moderate alcohol consumption (one to two drinks per day), these benefits may be outweighed by the increased risk of cognitive decline, falls, injuries and some chronic conditions, including liver disease associated with alcohol consumption in older adults, and interaction between alcohol and multiple medications (National Health and Medical Research Council, 2009) (Cousins et al., 2014; Pringle, Ahern, Heller, Gold, & Brown, 2005).
Cannabis is the most popular illicit drug used by older Australians (Australian Institute of Health and Welfare 2014a) with rapid increases noted in the baby boomers (55 – 75 years approximately) in recent years (Kostadinov & Roche, 2017). While medicinal cannabis may confer health benefits for older people, research is sparse in this area and cannabis use, medicinal or recreational, can carry significant risks including falls, negative drug effects, and increased risk of heart attacks for older people (Kuerbis, Sacco, Blazer, & Moore, 2014). However, the long-term effects of illicit drug use on cognitive health and function are still largely unknown (NSW Ministry Of Health, 2015).

The misuse of pharmaceuticals is another risk factor that needs to be reduced. Approximately 4.7 per cent of people aged 60 plus reported misuse of pharmaceuticals (using a pharmaceutical drug such as paracetamol, ibuprofen or codeine for non-medical purpose) in the previous 12 months (Australian Institute of Health and Welfare, 2014a). Opioids and Benzodiazepines misuse have been identified to be problematic in Australian aged care services with estimates suggesting that up to 4.4 per cent of residents have problematic use of medication (Li & Jackson, 2016) and that older women are especially vulnerable to problematic prescription drug use (Li & Jackson, 2016).

The over prescription of pharmaceutical drugs and their misuse represents a complex, and growing, problem, both in the general community as well as in older people, and requires a multifaceted approach to address this issue (Monheit, Pietrzak, & Hocking, 2016). There is growing recognition for the need for general practitioners, pharmacists and drug and alcohol services to collaborate to address systemic issues that lead to misuse of prescription drugs. Initiatives such as the Home Medicines Review, a Commonwealth program, can be undertaken by a GP and pharmacist, and has been found effective in the prevention, detection and resolution of medication related issues for older people (Castelino, Bajorek, & Chen, 2010). The Victorian Alcohol and Drug Association (VAADA) is a peak body representing alcohol and other drugs services in Victoria. They provide advocacy and information to organisations or individuals working in alcohol and drugs.

Reducing injury & falls
Falls are common in older people and increase with age (Australian Institute of Health and Welfare, 2017d). While not all falls are serious, falls in older people can have serious consequences, including injury and at worst, death. Falls result from the interplay between intrinsic (person-specific) and extrinsic (environmental) factors. Although falls are a common occurrence, they are not an
inevitable part of ageing. Evidence supports the effectiveness of both single and multifactorial interventions, including strategies such as strength and balance exercise, reducing medications, and addressing vision impairment (Vieira, Palmer, & Chaves, 2016). Despite the evidence of effective interventions, the translation of this evidence into practice remains a challenge at both individual and population levels.

**Promoting physical activity**

Physical activity is essential for maintaining physical abilities, health and independence as people age (I. M. Lee et al., 2012). Research suggests that uptake of physical activity later in life confers significant health benefits (Hamer, Lavoie, & Bacon, 2014), including the lowering risk of cognitive decline and dementia (Middleton, Barnes, Lui, & Yaffe, 2010; Zheng, Xia, Zhou, Tao, & Chen, 2016). Interventions focusing on physical activity are highly beneficial to physical functioning, reducing falls, improving mobility, quality of life and mental health, lowering the risk of cognitive decline, and fostering increased social connectedness (Bauman, Merom, Bull, Buchner, & Fiatarone Singh, 2016; Carter et al., 2001; Pahor et al., 2014; Stewart et al., 2001; Vrantsidis, Hill, et al., 2014; Zheng et al., 2016).

**Promoting healthy eating**

As people age, physiological changes occur that may make it more difficult to meet optimal nutrition needs. These may include changes in appetite, hormone levels, disease and injury reduced mobility, medication and difficulty chewing and swallowing. Adequate nutrition is critical to healthy ageing. It is possible to improve dietary patterns and nutritional intake among older people, which in turn positively influences the burden of chronic disease in this population (Pietinen, Valsta, Hirvonen, & Sinkko, 2008; Tourlouki, Matalas, & Panagiotakos, 2009). The [2013 Australian dietary guidelines](https://www.nhmp.gov.au/dietary-guidelines) (National Health and Medical Research Council, 2013) provides guidelines for healthy eating for older people (but does not cover nutrition for frail older people). The evidence suggest that diets high in vegetables, fruit, whole grains, poultry, fish, and low-fat dairy products are associated with better quality of life and survival in older adults (A. L. Anderson et al., 2011).
Promoting mental health

Aged care residents, people in hospital, people experiencing multi-morbid conditions and/or dementia, carers, women, Aboriginal and Torres Strait Islander people, and migrants are more likely to experience mental illness in older age (Rickwood, 2008; Wells et al., 2014) (Australian Institute of Health and Welfare, 2013). Causes of mental illnesses are multi-modal and strongly influenced by both intrinsic factors (e.g. genetic predisposition) as well as environmental factors (e.g. socio-economic disadvantage, physical and social isolation) (Haralambous et al., 2009; Wells et al., 2014). Mental health symptoms can be masked or mistaken for physical health conditions. It is important for accurate and early diagnosis of mental health conditions to ensure appropriate treatment and supports are made available.

Similar to the overall population, a multidisciplinary approach is essential to addressing mental health problems among older people (B. Dow et al., 2010; Haralambous et al., 2009). Comparable to the treatment approaches in other age groups, psychological interventions are usually the first point of call and a combination of medical and psychological interventions may be employed in more resistant and/or severe cases (Royal Australian College of General Practitioners Silver Book National Taskforce, 2006). Other alternative approaches to treat depression are also gaining ground including physical activity (Lautenschlager, Almeida, Flicker, & Janca, 2004) and reminiscence and life reviews (Bohlmeijer, Smit, & Cuijpers, 2003).

Poor mental health is also linked to social isolation. Programs with proven efficacy targeting social isolation in older people include collaborative partnership approaches; involving older adults in planning, implementation and evaluation of programs; using evidence-based approaches; addressing local needs; using existing resources; and utilising volunteers (Department of Health & Human Services, 2016).

Promoting screening and early detection

Chronic illness and disease such as cancer and dementia can result in significant morbidity and mortality. The incidence of cancer increases with age, indicating the importance of screening over the age of 50, including for breast, prostate and bowel cancers (Australian Institute of Health and Welfare, 2017c). Early and regular screening can result in timely diagnosis, early intervention, and treatment, prolonging the lifespan of older Australians (World health Organization, 2018a).
Although some chronic illnesses such as dementia are incurable, the condition can be treated and managed, so it is important to diagnose dementia early in older Australians to ensure quality of life is maintained.

**Maintaining hearing, vision, and oral health**

Hearing and vision loss is common in older people and is associated with increased social isolation (Mick, Kawachi, & Lin, 2014), depression (Hogan & Philips, 2014; Mener, Betz, Genther, Chen, & Lin, 2013), poorer physical functioning and increased risk of falls (Chen, Genther, Betz, & Lin, 2014; Lin & Ferrucci, 2012), reduced quality of life (Ciorba, Bianchini, Pelucchi, & Pastore, 2012), diminished daily functioning (Grue et al., 2009; Nael et al., 2017), reduced cognitive functioning (Lin et al., 2013) and dementia (Golub et al., 2017; Lin et al., 2011; Nael et al., 2017; Rogers & Langa, 2010).

In addition to vision and hearing impairments, poor oral health in older people has been closely linked to poor general health and illness, nutritional deficits, caries and periodontal disease, teeth loss, dry mouth and oral cancer (Gil-Montoya, Ferreira de Mello, Barrios, Gonzalez-Moles, & Bravo, 2015).

To ensure early detection and treatment of any hearing, vision, or oral impairment, older Australians are encouraged to get regular screenings, at least every 2 years (Green, Goodfellow, & Kubie, 2014).

**Promoting safe sex**

Sexual activity has been shown to confer significant benefits to older people including increased life satisfaction, health status, and overall wellbeing (R. Anderson, 2013; Lyons et al., 2017; Woloski-Wruble, Oliel, Leefsma, & Hochner-Celnikier, 2010). Not surprisingly, there is a taboo around discussing sexuality with older people and those who are aged care residents, LGBTI, and older victims of sexual violence are particularly marginalised (Department of Health & Human Services, 2016). A recent study showed that older Australians are sexually active, and underscored the need to reduce stigma, improve STI and sexual health knowledge and testing practices (Fileborn et al., 2017; Lyons et al., 2017). Strategies to promote safe sexual practices in older people and ameliorate stigma should include provision of information and support by health and community services, education for older people, public health campaigns, further research and data collection, and policy direction (Lyons et al., 2017; Scaunich, 2014).
Promoting Social inclusion and community connection

The WHO includes ‘social wellbeing’ as part of the definition of health (WHO 2016). Social participation is associated with feelings of connectedness and improves mental and physical health (World Health Organization, 2002). There is evidence to indicate a direct link between social connectedness and mental and physical health outcomes. There are a number of ways that older people can and do engage in their community and society. Engaging in life-long learning, volunteerism, and remaining longer in the workforce are all avenues in which older people can improve their social wellbeing (Batchelor et al., 2016).

Integrating older people through social inclusion and community connection has a number of benefits, particularly in the workforce participation of older people. Key strategies for successful participation programs for older adults include using collaborative partnership approaches; involving older adults in planning, implementation and evaluation of programs; using evidence-based approaches; addressing local needs; using existing resources; and utilising volunteers (Batchelor et al., 2016).
**Intervention design considerations**

Entry points for public health interventions to promote healthy ageing should be identified and tailored to any age and across varying levels of capacity, sectors and services (United Nations, 2015; World Health Organization, 2002, 2016). As shown in Figure 2, the nature and scope of prevention may change according to the target population, their capacity, and the setting.

**Public-health framework for healthy ageing**

**Opportunities for public-health action across the life course**

![Public health framework and entry points for intervention (WHO, 2015)](image)

In Australia, and Victoria, the overarching aim is to promote and improve health through health promotion and prevention strategies (for example, to avoid the development of chronic diseases) (Australian Health Ministers’ Advisory Council, 2017; Victoria State Government, 2015). As highlighted in Figure 2, intervention can occur at different points of illness progression, however it is ideal to prevent or reduce the risk of the development of illness which in turn will have significant impacts on the health and well-being of the individual long term (Australian Health Ministers’ Advisory Council, 2017; Victoria State Government, 2015).
Interventions aimed at older people with high levels of intrinsic capacity should focus on the maintenance and improvement of health (for example through lifestyle programs and environmental programs to encourage healthy lifestyle behaviours) (World Health Organization, 2015). Interventions need to be carefully tailored to the target community; for example, designing interventions for older people who are experiencing decline in intrinsic capacity means that the focus of intervention will shift from preventing illness occurrence to minimising the impact of the illness and further progression, as well as supporting and improving functional abilities (World Health Organization, 2015). For example, to improve limited physical capacity, interventions could improve the physical environment to be supportive of such decline (World Health Organization, 2015).

The importance of careful and thoughtful design, implementation and evaluation of interventions and programs to improve the health and well-being of Victorians across the life span cannot be understated (Department of Health, 2013). To this end, the Victorian State Government has released the Guide to municipal public health and wellbeing planning which aims to assist in the planning of programs and interventions to improve the health and well-being of the Victorian community.
Health promotion and prevention strategies

Health promotion and prevention strategies may be delivered in different settings and targeted at the level of the individual, the community, or the population. In this resource, **primary prevention interventions** are defined as actions targeting population, environmental, and systems level factors that influence healthy ageing. **Secondary prevention interventions** are defined as actions targeting the modification of risk factors (lifestyle and behavioural) for healthy ageing. **Tertiary prevention interventions** are defined as actions targeting the treatment and management of disease and rehabilitation (World Health Organization, 2018b).

**Primary prevention intervention**

Examples of primary prevention include programs that aim to improve health and wellbeing through urban design (Calise, Dumith, DeJong, & Kohl III, 2012), affordable housing, and immunization.

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**Primary prevention intervention: The age-friendly city of Melville, Perth**

The City of Melville located in Perth, Australia became a member of the WHO Age-Friendly Cities network in 2010. Seniors and people living with a disability make up a significant part of the Melville Community.

The Melville Age-Friendly Accessible Business Network (MAFAB) is an initiative of the businesses within the City of Melville, which was created to support businesses meet the requirements of an age-friendly city. Dementia was a disability that the MAFAB identified early on, and members wanted to gain a better understanding of the condition. MAFAB engaged with Alzheimer’s WA for education and resources, and a number of local cafes provided dementia training for staff.

There have been positive outcomes of this initiative. A retail centre within the city of Melville was awarded the 2016 WA Seniors Business Award, and recognised as the only retail centre in WA to implement strategies to provide outstanding services to older people. MAFAB regularly receive positive feedback on exceptional customer service for older people amongst its business members.

The changes made provide an environment that is more age friendly, improving accessibility for older people and supporting greater community participation.
Secondary prevention intervention on the risk factors for healthy ageing

Secondary prevention is concerned with ‘catching it early’. One such program includes the National Bowel Cancer Screening program which specifically targets older Australians to increase early diagnosis of bowel cancer.

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**Secondary prevention intervention: The National Bowel Cancer Screening Program**

The National Bowel Cancer Screening Program is a government-funded, population-based initiative that aims to minimise the incidence, illness, and mortality related to bowel cancer in Australia through early and systematic screening to detect cancers and pre-cancerous lesions.

The National Bowel Cancer Screening Program invites older people aged 50 – 74 to screen for bowel cancer using a free, simple test at home. A free immunochemical faecal occult blood test (iFOBT) is sent by mail at regular intervals to eligible Australians.

Evaluation of the program suggests a reduction in morbidity and mortality resulting from bowel cancer (Australian Institute of Health and Welfare, 2017e).

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Tertiary prevention intervention in treatment and management of disease

Tertiary preventions improve function and minimize the consequences of disease, and prevent further deterioration, disability and complications through management and rehabilitation. Examples include chronic disease management programs such as treatment to prevent further complications, or disability and rehabilitation initiatives.

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**Tertiary prevention intervention: Diabetes Victoria Education**

Diabetes Victoria represents and supports people in Victoria affected by all types of diabetes and those at risk. They work with diabetes health professionals and educators, researchers and healthcare providers to minimise the impact of diabetes in Victoria.

As part of their role, Diabetes Victoria provide information and support to individuals who have been diagnosed with diabetes to help manage the symptoms.
Service delivery interventions

The **core principles** that are essential to any service delivery intervention include:

- Multidisciplinary care
- Person-centred care;
- Coordinating care for multiple chronic diseases;
- Comprehensive health assessments;
- Medication reviews;
- Age-appropriate self-management programs, including education, goal setting and ongoing support; and
- Clear spoken and written communication by health professionals (health literate environment)

**Person-centred care** is at the centre of Australian health care policies. In person-centred care the values, goals and past experiences of the older person are considered in the management of health (B. Dow, Haralambous, Bremner, & Fearn, 2006) and encourage the establishment of an on-going partnership between the person and health care provider to empower the person to be an active partner in their health care (Sharma, Bamford, & Dodman, 2015).

To operationalise the empowerment of patients through patient-centred care paradigms, there is a great focus on self-management programs. Such programs have demonstrated moderate improvements in changing behaviours in older people regarding physical activity, weight loss, nutrition, and diabetes. Evaluation of these programs have also highlighted that complex interventions are more effective than single component interventions regardless of the way the interventions are being delivered (tailored vs. generic; online vs. offline)(Aalbers, Baars, & Rikkert, 2011).
Health literacy

The Australian Commission on Safety and Quality in Health Care (2014) separates health literacy into individual health literacy and the health literacy environment:

1. **Individual health literacy** is the skills, knowledge, motivation and capacity of a person to access, understand, appraise and apply information to make effective decisions about health and health care and take appropriate action.

2. **Health literacy environment** is the infrastructure, policies, processes, materials, people and relationships that make up the health system and have an impact on the way that people access, understand, appraise and apply health-related information and services.

For older people, low individual health literacy is linked to poorer health and a higher risk of premature death. Barriers to health literacy are increased where there is disadvantage and vulnerability, such as lower education levels, low English proficiency and disability (Australian Commission on Safety and Quality in Health Care, 2014).

Adequate health literacy generally increases from 15 to 19 years up to 35 to 39 years, and then generally declines. More than 8 out of 10 older Australians aged 65 - 74 years do not have an adequate level of health literacy (Australian Bureau of Statistics, 2008). The differences may be due to health care participation expectations, cognitive decline, and length of time since, and level of, formal education (Australian Commission on Safety and Quality in Health Care, 2014).

Physical, psychological and social changes associated with ageing often increase the need to access health care services. Therefore, as people age it is important for them to have an adequate level of individual health literacy to be able to negotiate our complex health systems (Centre for Culture, 2015). It is also important for health services to reduce or eliminate the barriers to health literacy by addressing health literacy in a coordinated way. This includes embedding health literacy into organisational policies and processes; ensuring health information is clear and understandable and communicated effectively; and educating consumers and providers about health literacy (Australian Commission on Safety and Quality in Health Care, 2014; Centre for Culture, 2015).
Interventions with a health equity lens

It is important to recognize that the older population is not a homogenous group, but rather one of great diversity and must be considered in terms of ethnicity, culture, sexual identity, degree of disability, and socio-economic status. In addition, while older people are categorised as those aged 60 years plus, this “group” spans some 40 years or more. There is a significant difference in the health of those in their 60’s compared to those in their 90’s, and many variations in between. Such diversity requires a complex and multi-faceted approach to meet the needs of older individuals, and to ensure equity across all segments of the community.

Co-design

Finally, when considering designing interventions to promote healthy ageing, the wishes and capabilities of the older person and their carers must be considered. A co-design approach is a process in which societal challenges are addressed with active participation of the local community. Involving people with lived experience (the end-users of solutions to those challenges) ensures that those solutions are more effective and meet the needs of the people they are targeting (Roper, Grey, & Cadogan, 2018). Co-design is the underlying principle of dementia friendly communities’ work. In Kiama, NSW, the Dementia Advisory Group is made up entirely of people living with dementia to steer actions towards a dementia friendly Kiama.
Summary

Healthy ageing enables individuals to maximise the quality of life that is afforded to them through biomedical and societal advances. There are a number of factors that influence healthy ageing including ageism, gender, cultural background, socio-economic status, and the environments in which we live. The influence of these factors on healthy ageing in Australia is important, because the population of Australia is ageing, and a number of older Australians are living with co-morbidities. Furthermore, the diversity of Australians means that certain population groups are likely to be more affected by factors influencing healthy ageing than others. The specific needs of women, Aboriginal and Torres Strait Islanders, culturally and linguistically diverse communities, LGBTI populations, people living in rural and remote areas, people living with a disability and those who are socio-economically disadvantaged need to be taken into account with interventions and services designed to promote healthy ageing.

In this review, we have identified a number of risk and protective factors for healthy ageing. These include: reducing the use of tobacco, alcohol and drugs, reducing injuries and falls, promoting physical activity and healthy eating, promoting mental health, promoting early screening and early detection, maintaining hearing, vision and oral health, promoting safe sex, and promoting social inclusion and community connection.

Health promotion and prevention strategies may be delivered in different settings and targeted at the level of the individual, the community, or the population. There are three levels of interventions: primary, secondary and tertiary prevention interventions. A central consideration in developing interventions is the heterogeneity of the older Australian population, and the importance of co-design strategies to develop effective interventions in promoting healthy ageing. At a primary prevention level, optimising the physical and social environments conducive to healthy ageing, such as the WHO recommends, would enable participation, social engagement, and health and safety for all.
References


