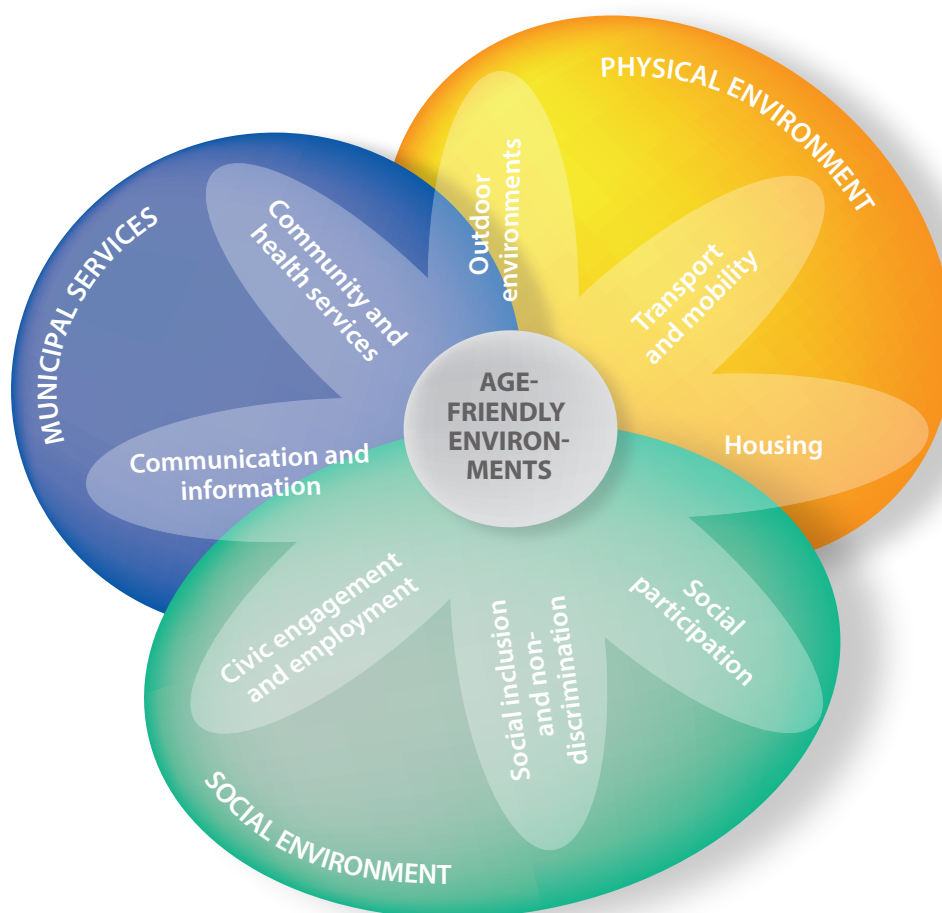




Age-friendly environments in Europe

A handbook of domains for policy action



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Abstract

Policies to create better age-friendly environments have become a forceful movement in Europe and globally in which a growing number of cities and communities, local authorities and regional governments participate. This publication provides a handbook for local policy-makers and planners on eight domains for policy action. These cover both the physical and social environment as well as community services. It builds on a WHO model of eight domains for age-friendly cities and communities that is widely used by local governments in Europe as point of reference.

This handbook is based on lessons learned from existing age-friendly initiatives in Europe. It thus builds on the richness of relevant locally and regionally developed tools that are now available, as well as the latest evidence from research. This publication links actions to create more age-friendly environments to the broader context of European health and social policies for ageing populations. A focus is on the inter-connectedness and mutual synergies between the eight domains and how they can work together to address common goals such as increasing social inclusion, fostering physical activity or supporting people living with dementia.

Keywords

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Foreword

As people become older, the neighbourhoods and communities in which they live become more important. Age-friendly environments empower people so that they can continue to lead independent lives in good health, stay engaged in their communities and remain socially included and active in different roles: as neighbours, friends, family members, colleagues and volunteers.

Many cities and communities in Europe have led the way and shown how policies at different levels of local government can make a difference to the health and well-being of our ageing populations in the WHO European Region, which has the highest median age among all WHO regions.

The WHO Regional Office for Europe has a long track record of supporting this movement by providing evidence on how physical and social environments can support people to lead healthy lives, working closely with members of the European Healthy Cities Network and, more recently, with the WHO Global Network of Age-friendly Cities and Communities.

Age-friendly policies contribute to the achievement of a number of Sustainable Development Goals, ensuring healthy lives and promoting well-being for all at all ages – “leaving no one behind” – and working towards sustainable cities and communities. These policy principles are also core principles of Health 2020, the WHO policy framework for health and well-being in Europe. As strategic directions, they are vital for implementing WHO’s European and global strategies and action plans on ageing and health.

This handbook provides a welcome update for the framework of the WHO publication Global age-friendly cities: a guide, which is used widely in Europe and globally. It adapts the guide’s core principles and domains for action to the Europe-specific context and experience.

The handbook is the outcome of a joint project between the European Commission’s Directorate-General for Employment, Social Affairs and Inclusion and the WHO Regional Office for Europe. It has greatly profited from the cooperation with WHO’s partners in the European Innovation Partnership on Active and Healthy Ageing and with members of the European Healthy Cities Network.

We at the WHO Regional Office for Europe hope that this handbook will provide inspiration and guidance for politicians and practitioners to join the movement for age-friendly, healthy cities or to continue developing new innovative practice to improve the health and living situations of senior citizens in Europe.

Zsuzsanna Jakab
WHO Regional Director for Europe

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Introduction

Introduction

This chapter presents an introduction and overview of the Age-friendly Environments in Europe (AFEE) handbook, created through a joint project between the European Commission's Directorate-General for Employment, Social Affairs and Inclusion and the WHO Regional Office for Europe. The handbook expands the framework of an earlier WHO publication, *Global age-friendly cities: a guide* (hereafter the "WHO global guide" (WHO, 2007a)), which has been widely used to structure and inspire local government initiatives in cities and communities around the world (WHO, 2015a). The original WHO global guide summarizes eight domains of age-friendly environments and their characteristics that older people identified as key features of an age-friendly environment.

The AFEE project complemented this framework by bringing together evidence from research and an empirical analysis of community action in Europe. Its findings suggest that age-friendly environments are most supportive if policies and projects comprehensively cover physical accessibility, social inclusion and person-centred services.

"The population in the European Region has the highest median age in the world. People in many European countries enjoy some of the highest life expectancies in the world... However, trends in longevity gains are uneven, and gaps between and within countries of the European Region continue to grow."

WHO Regional Office for Europe (2012a: 3)

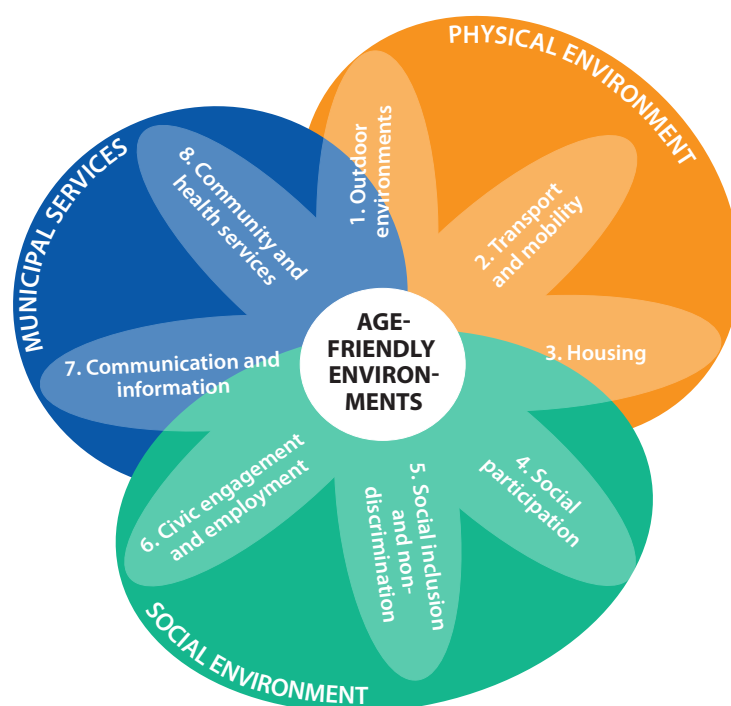
The AFEE project also added to the WHO global guide with a companion publication to this handbook that provides guidance on the policy process and management cycle of putting in place and sustaining age-friendly action (WHO Regional Office for Europe, 2016a). A complementary paper sets out how local governments have used indicators, monitoring and assessment to support age-friendly policy initiatives (WHO Regional Office for Europe, 2017a).

Age-friendly environments aim to encourage active and healthy ageing by optimizing health, stimulating inclusion and enabling well-being in older age. They adapt physical environments, social environments and municipal services to the needs of older people with varying capacities (see also WHO, 2015b). Fig. 1 groups the eight domains for age-friendly action into these three clusters of supportive local environments.

A key idea here is the "person–environment fit" coined by environmental gerontology (Iwarsson, 2005). This concept refers to the fact that a person's ability to age well and independently depends on the relationship between his or her physical and mental capacity and the "press" (or barriers) of his or her environment. For example, an older person living independently in his or her original home may find it increasingly difficult to climb stairs due to chronic health problems or a physical disability. Rather than move, however, they may

1

Fig. 1. Framework of the AFEE project



choose to adapt their home and reduce environmental impediments by installing a stair lift or find other ways to remove barriers. A number of approaches reviewed in this handbook are based on the person–environment fit concept – for example, universal design, walkability or liveable communities. They all seek to reduce environmental burdens so that older adults can age in place, age well and maintain independence.

While all domains interact with each other, each is described in a separate chapter of this handbook that presents a synthesis of the evidence for policy action. Moreover, each chapter contains a table of practical examples that show how local governments have operationalized policy interventions and initiatives in their action plans.

The glossary at the end of this handbook brings together key terms on healthy ageing, mainly adopted from the recent *World report on ageing and health* (WHO, 2015b).

Healthy ageing: a priority for Europe

WHO and the European Commission recognize active and healthy ageing as a major societal trend, providing both challenges and opportunities. The European Commission's Innovation Union initiative gives priority to active and healthy ageing as part of its broader goals to achieve the Europe 2020 strategy objectives of smart, sustainable and inclusive growth for the European Union (EU). Improving the conditions for active ageing is also among the key objectives of the European Commission's Social Investment Package (European Commission, 2014a).

Age-friendly, supportive environments have been singled out as one of four strategic areas for policy interventions in the WHO strategy and action plan for healthy ageing in Europe, 2012–2020 (WHO Regional Office for Europe, 2012a). At a global level, evidence-based goals for investment in supportive environments are a core element addressed in WHO's *World report on ageing and health* (WHO, 2015b) and subsequently endorsed as strategic priority area for action in the global strategy and plan of action on ageing and health (WHO, 2016a). Moreover, age-friendly environments are a priority of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA), which is part of the Innovation Union initiative (EIP on AHA, 2015), and the European Commission has long played an active, supportive role in this field (AGE Platform Europe, 2012a;

European Commission, Committee of the Regions & AGE Platform Europe, 2011).

WHO's overarching European policy framework for health and well-being, Health 2020, underlines the fact that cross-sectoral policy action is needed for promoting active and healthy ageing. Health 2020's strategic objectives include reducing inequality and providing better governance (WHO Regional Office for Europe, 2013a; AARP, 2015; HelpAge International, 2016). Cities, communities and other local authorities play an important role in helping Member States achieve the targets set by Health 2020 and in aiming at more equal health and well-being outcomes for ageing populations (WHO Regional Office for Europe, 2012b).

Supportive environments: a European and global movement

Supportive environments for healthy ageing contribute to optimizing opportunities to promote population health over the life-course and into older age. They enhance the quality of life and well-being of every senior citizen, whether in good, moderate or poor health, and free or not from disability.

Over the past 10 years many cities and communities have expressed their commitment to making local communities more age-friendly; they have created what has now become a European and international movement (Age Friendly Ireland, 2013). The WHO Global Network of Age-friendly Cities and Communities is growing quickly, bringing together those who are committed to making their communities more age-friendly (Box 1; WHO, 2015a; 2015b). Moreover, a number of cities in the WHO European Healthy Cities Network have engaged in age-friendly environment initiatives (Green, 2013; Jackisch et al., 2015a). Some of these have formed the Healthy Ageing Task Force to work together to find innovative ways to support healthy ageing. The growing recognition of the rights and needs of people living with dementia has exerted a strong influence for a number of cities (Alzheimer's Disease International, 2016).

Cooperation under the EIP on AHA has added momentum to the age-friendly environments movement in Europe and has exerted a strong influence, creating new ways of cooperating and exchanging practice examples between cities, communities, regional networks and other initiatives. The Thematic Network on Innovation for Age-Friendly

Box 1. 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. They help people to remain independent for as long as possible, and provide care and protection when they are needed, respecting older people's autonomy and dignity.

Since 2010, the WHO Global Network of Age-friendly Cities and Communities has supported municipalities by:

- inspiring change and showing what can be done and how it can be done;
- connecting cities and communities worldwide to facilitate the exchange of information and experience;
- supporting cities and communities to find solutions by providing innovative and evidence-based technical guidance.

The network included more than 250 cities and communities in 28 countries by 2015. Network members commit to:

- engage with older people and other stakeholders across sectors;
- assess the age-friendliness of their cities and identify priorities for action;
- use the assessment findings to engage in evidence-based planning and policy-making across a range of fields;
- adapt their structures and services to be accessible to and inclusive of older people with varying needs and capacities.

Source: WHO, 2015b: Box 6.1 (see also WHO, 2015a).

Environments (AFE-INNOVNET) has spurred this momentum by mobilizing an EU-wide community of local and regional authorities and other stakeholders, with the goal of scaling up innovative solutions for age-friendly environments that support active and healthy ageing across Europe. This is now also carried forward by the Covenant on Demographic Change (AFE-INNOVNET, 2015a). Moreover, age-friendly policies contribute to realizing the “Right to the City” for older people in the context of the new EU Urban Agenda (AGE Platform Europe, 2016)

To support their commitment, local authorities have requested further guidance on how they can respond to the needs of older people (EIP on AHA, 2013). The AFEE project responded to this demand and provided direct support to these initiatives.

Aim and objectives of the AFEE project

The aim of the AFEE project was to inspire policy-makers to take decisive action and to create environments that are supportive of and responsive to the needs of older people. It thus had three main objectives:

- to increase knowledge and awareness of the main areas of action for age-friendly environments and what is known about policy initiatives undertaken by cities, communities and other regional and local authorities;
- to summarize for local and regional authorities the main steps and processes required to become a more age-friendly city or community;
- to make recommendations on how to set up the information systems and indicators needed for monitoring and evaluation of age-friendly projects and communicating them to the public.

The AFEE project benefited from synergies with a range of activities on age-friendly environments – in particular in cooperation with partners under the WHO European Healthy Cities Network, the Global Network of Age-friendly Cities and Communities, and the EIP on AHA (EIP on AHA, 2015) and other projects funded by the European Commission.

Target audience

The target audience for the AFEE handbook is primarily local politicians, regional authorities, nongovernmental

agencies and city networks engaged in policy development, advocacy and implementation of environments supportive of healthy ageing. Other stakeholders include citizens engaged in healthy ageing initiatives, academia, councils and representatives of older people, national and subnational governments, regional networks and private and third sector partners, such as those engaged in the EIP on AHA.

Methodology

The WHO age-friendly city concept was created in 2006 through a project involving 33 cities worldwide, which asked older people in focus groups to describe the advantages and barriers they experienced in eight areas of city living. This gave a voice to older people and culminated in the original WHO global guide and a checklist of characteristics that older people identified as critical features within eight domains of an age-friendly city (WHO, 2007a). The global initiative provided the inspiration and a framework for age-friendly cities that has now become a dynamic bottom-up movement in many countries in Europe and around the globe.

The AFEE handbook adds to the methodology used to develop the WHO global guide by shifting the focus from problem identification and demands to policy action and interventions. Rather than asking older people and other stakeholders to define age-friendly features again, the AFEE project focused on how local authorities have reacted to the areas and challenges raised by older people and outlined in the WHO global guide. This handbook brings together both evidence from research behind each of the action areas and experience from local action plans and strategies on how to respond to the main points identified by older people.

For the latter, the AFEE project reviewed action plans, initiatives and approaches adopted by communities and local authorities from a number of sources: the WHO Global Network of Age-friendly Cities and Communities, the WHO European Healthy Cities Network, websites from other cities and communities and examples from EIP on AHA projects. The project thus adopted a “realist synthesis” methodology (de Leeuw et al., 2015; Jackisch et al., 2015a). This approach synthesizes evidence from different sources: scientific and grey literature and experiential, primary and secondary information.

At the heart of the empirical analysis were existing age-friendly strategies and action plans and a wealth of reports from member cities of the European Healthy Cities Network (EHCN) that were gathered during 2009–2013, including comprehensive reports for the EHCN Phase V report:

- strategies and action plans from European countries, complemented with innovative examples from a number of non-European countries;
- 33 structured case studies on the topic of healthy ageing, submitted by 32 member cities of EHCN;
- 51 case studies presented at the EHCN’s annual business meetings, from 35 cities and 16 countries (including three non-EU countries);
- annual reports of EHCN member cities;
- case studies presented at meetings of the Healthy Ageing Task Force of the EHCN;
- practice examples submitted by initiatives under the EIP on AHA and the AFE-INNOVNET project (European Commission & Funka Nu, 2013).

Case studies and action plans were systematically analysed and coded in the Nvivo© software for qualitative analysis. Each planned or reported intervention or action towards age-friendly environments was mapped to one or more of the eight domains, clustered around (i) physical environment, (ii) social dimensions and (iii) municipal services. For each action intended outcomes, mechanisms of change and context were identified, leading to clusters of approaches and actions under each domain. The resulting structures and lists of interventions are at the core of this AFEE handbook and are summarized in tabular form at the end of each domain chapter.

In addition to the empirical analysis, insights and evidence from academic literature were used to complement and structure the information from reports and action plans from communities. External experts conducted “reviews of reviews” of published and grey literature in support of the actions and pathways identified in the action plans. The literature on what is known about pathways to health and well-being for older people in various policy fields has grown exponentially in the past 15 years, but progress in this field of research has been uneven. In general, few age-friendly projects have systematically evaluated the impacts of their interventions so that most evidence stems from more general studies in the respective fields. Some mechanisms (such as those concerned with how environments can

support physical activity) are much better researched, whereas many other fields of action currently still lack systematic evaluation.

How age-friendly environments unlock the potential of healthy ageing

The AFEE handbook is based on evidence of a logic pathway that begins with processes and structures of local governance and ends with the well-being of older people in cities and communities. The sequence is summarized in Fig. 2.

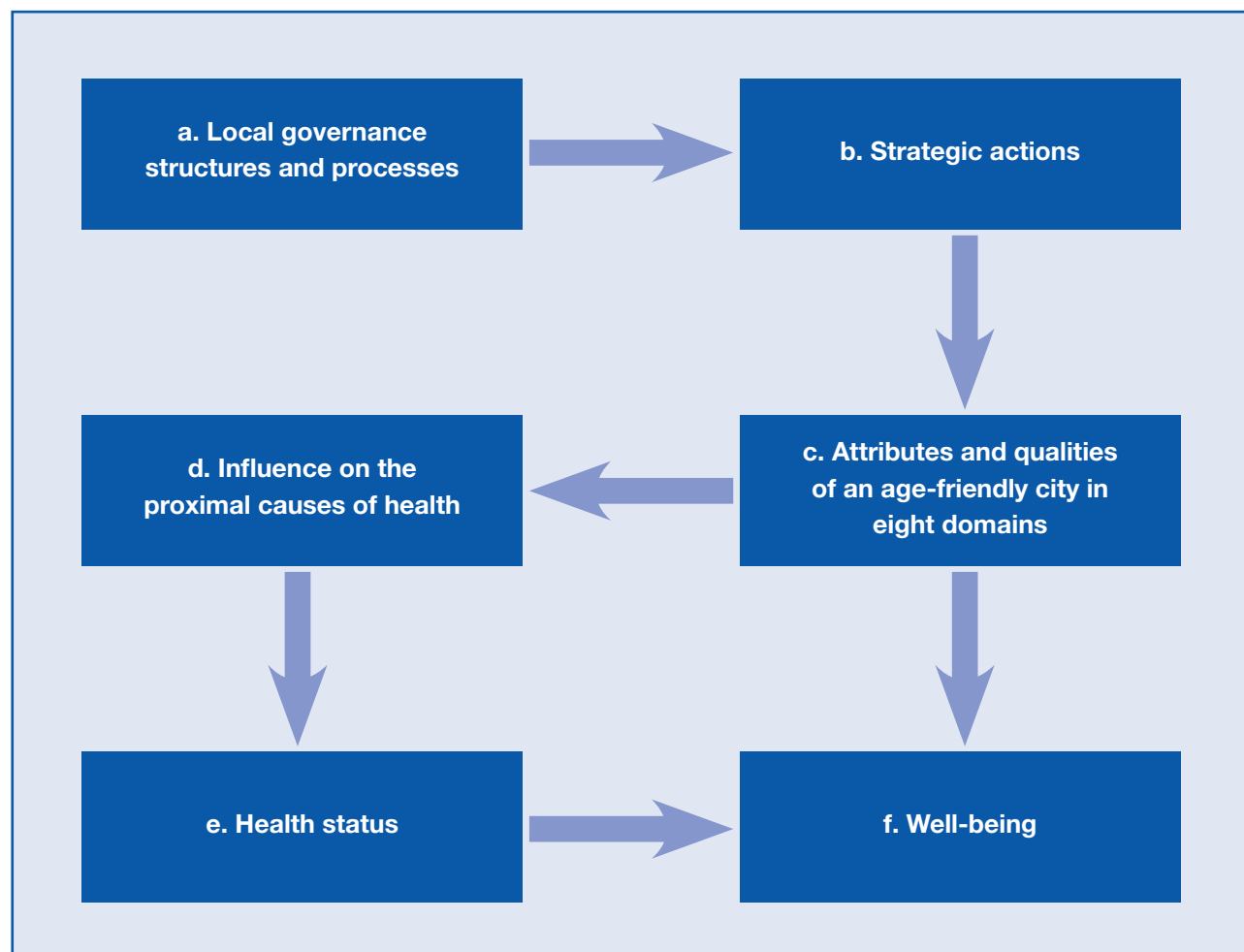
This dynamic model fuses the insights of the original WHO global guide (WHO, 2007a) with evidence from the literature and from WHO's recent *World report on ageing and health* (WHO, 2015b). The WHO global guide focuses on the attributes and qualities of an age-friendly city or community, organized into eight domains. The AFEE handbook further analyses the critical importance of these supportive environments (c) in unlocking the potential of healthy ageing (e) and promoting well-being as a final aim (f).

The well-being and quality of life of older people depends on ageing in good health. Health and healthy ageing are not the absence of disease but people's ability to do the things they value most (Nordenfelt, 2001) – what is called “functional ability” in WHO's public health framework for healthy ageing (see Fig. 3). This functional ability depends on the level of both physical and mental health of individuals – their intrinsic capacity – and the support provided by the environment in which a person lives and grows older (WHO, 2015b).

In order to foster functional ability by promoting healthy ageing, actions thus need to go beyond a focus on disease, creating systems that promote health throughout the life-course and support continued functioning into old age. WHO identifies local environments as key entry-points for action to promote healthy ageing, next to health services and long-term care services (Fig. 3; WHO, 2015b).

Supportive environments are crucial across the life-course for promoting healthy living and functioning of individuals with less than optimal capacity. Three

Fig. 2. Pathways to health and well-being for older people



principles can be drawn from the life-course approach to healthy ageing for the different phases of the life-course (WHO Regional Office for Europe, 2015a).

- Maximize intrinsic capacity: start as early as possible.
- Maintain the peak: it is never too late for prevention, rehabilitation and effectively managing chronic conditions.
- Minimize loss and maximize functional ability: create and maintain supportive environments and develop integrated systems of care.

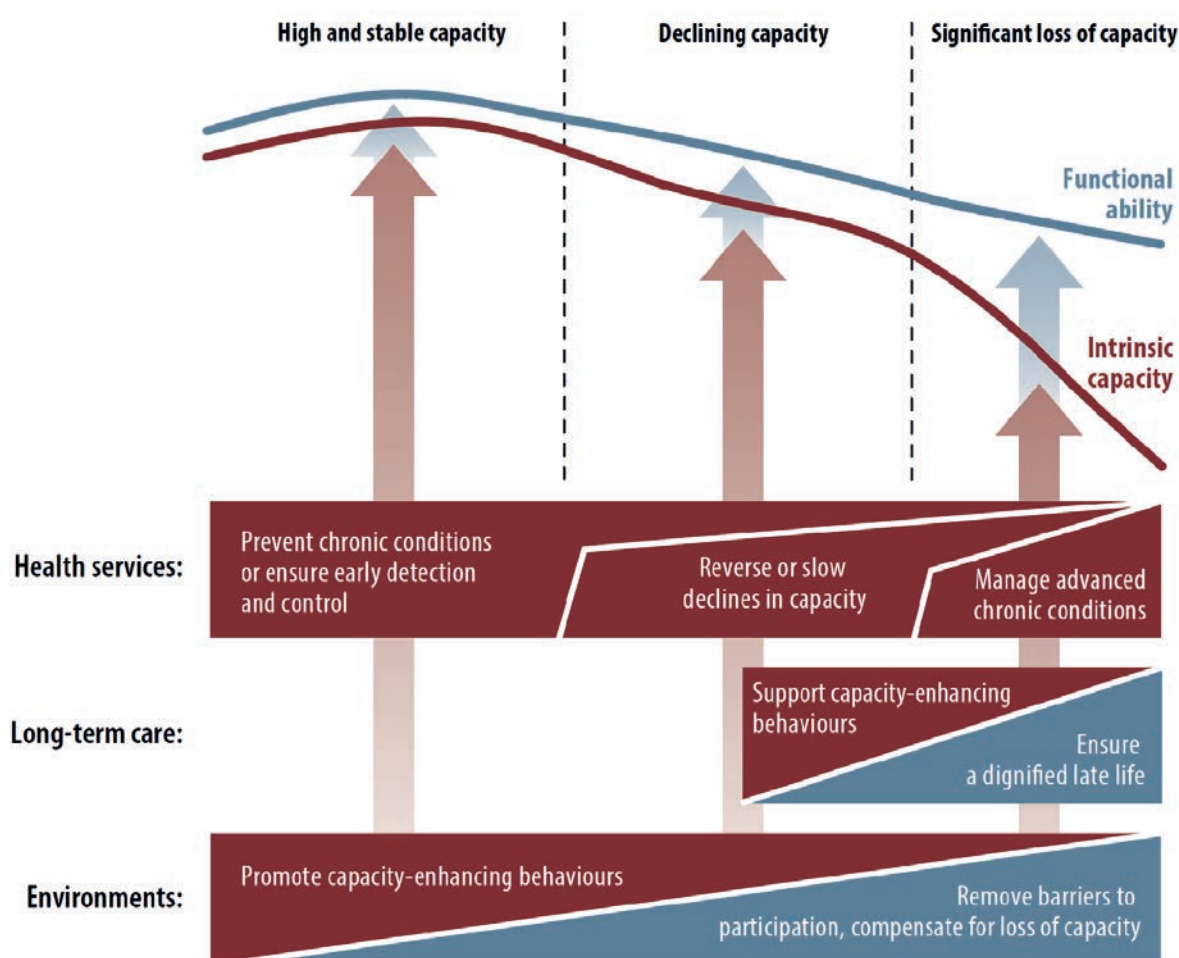
Supportive environments for healthy ageing contribute by maximizing intrinsic capacity, with action that starts as early as possible. Walkable streets, for example, encourage a person to stay active and take exercise, which promotes physical activity and health. A good social environment promotes mental health and social participation. This contributes to minimizing loss of capacity and maximizing functional ability. Many of these strategies target people with relatively high or stable levels of capacity and health. Healthy living is also

still relevant in phases of life when health and capacity decreases in order to maintain good functional ability and independent living as long as possible.

Supportive environments, moreover, assure that age-related declines in intrinsic capacity do not translate into similar declines of functioning. The importance of this pathway increases when intrinsic capacity declines. Older people can continue to participate and live to the fullest of their capacities when barriers in the environment are low and support is provided where capacity is lost. A life-course approach also supports action at critical transitions (such as from work life to pension) and when faced with sudden decline of intrinsic capacity (such as after a fall), offering opportunities for participation, rehabilitation and support of lost capacity.

More can be done across sectors both to improve supportive environments and to provide better integrated systems of services and care for more efficiently coordinated health and long-term care. This would ensure

Fig. 3. Public health framework for healthy ageing: opportunities for public health action across the life-course



Source: WHO (2015b).

that even those with serious limitations in functioning have opportunities for participation and a more active role in families, neighbourhoods and society more generally (WHO, 2015b).

To improve the health and well-being of older people and to increase their opportunities for active participation in society, a challenge is to reach out to those older people most at risk. In particular, this includes those living on their own or at risk of social exclusion and loneliness; thus, a focus on equity should always be kept in mind.

How local governments create age-friendly environments

The bottom-up movement of age-friendly environments has long realized the importance of acting on supportive environments and the potential of healthy ageing. Age-friendly communities foster healthy and active ageing at the local level by adapting structures and services to the needs of older people with varying capacities.

Approaches and opportunities for intervention by local authorities are at the core of the AFEE handbook. Fig. 1 above clusters eight age-friendly domains across three overall guiding categories. For each domain, the AFEE handbook identifies areas for action, the main strategic directions and objectives that cities and local authorities have pursued with them and examples of policy interventions and initiatives. These examples and evidence from the literature help communities that have started a dialogue about barriers and opportunities with their older members to consider strategies for intervention; assess and anticipate the effectiveness and impacts of their potential policies, programmes or project interventions; and learn from existing experience.

Supportive physical environments

The first three domains focus on the physical components of age-friendly environments:

- domain 1: outdoor environments;
- domain 2: transport and mobility;
- domain 3: housing.

Policy interventions and initiatives under these three domains have a critical role in reducing physical and structural barriers to lowering the disability threshold and enabling full participation of older people,

regardless of their physical or mental abilities and functional status. In the physical dimension it is critical to increase awareness of the needs of people living with limitations and ensure accessibility and safety in all areas of the physical environment, including public places, streets, public transport and housing.

Supportive physical environments aim to lower the disability threshold and help older people to find new ways of coping with reduced functional abilities. Moreover, physical environments are crucial to increasing health and resilience over the life-course by encouraging healthy behaviour and social interaction.

Whether old age and early stages of reduced health result in experience of ill health and disability depends to a large extent on the physical environment in which the person lives; this can enable people to do or prevent them from continuing to do the things that are important to them (WHO, 2015b). It is now well established that some characteristics of the physical environment can promote health, well-being and participation (Annear et al., 2014). Research and age-friendly assessments have also identified a range of environmental barriers that limit older people's opportunities to live and move around places like home and the neighbourhood and to pursue interests (Gilroy, 2008; Kerr, Rosenberg & Frank, 2012).

An older person with slightly reduced vision and mobility, for example, can feel in good health and lead an independent life if the physical environment does not create overly high demands. This means that even if feeling unsafe to drive due to impaired vision, he or she can go out to the next shop or café at walking distance, or visit friends, family or activities using public transport if it is easy to use, well signed, affordable and well connected to the local area.

Age-friendly physical environments optimize opportunities for people to live healthily and actively across the life-course and encompass different needs and abilities. Among a growing number of studies and community assessments, consensus has emerged about the main components of age-friendly physical environments. These include “land use and community design that increase social integration and reduce automobile dependence, a wide range of accessible and affordable housing options, multiple forms of transportation and mobility supports” (Lehning et al., 2010: 418). In terms of implementation of better physical environments for ageing, the importance of space and place for health and active ageing means

that urban and transport planners and city developers are key actors and need to become more age-aware (Gilroy, 2008).

Participatory and inclusive social environments

The second cluster of domains covers the social dimensions of age-friendly environments:

- domain 4: social participation;
- domain 5: social inclusion and non-discrimination;
- domain 6: civic engagement and employment.

The social dimensions of age-friendly environments can be highly interwoven with the domains of the physical environment. Thus, age-friendly programmes usually need to address both dimensions jointly; this is one of the common themes that emerged from the work that has led to the AFEE handbook (Menec et al., 2011; Buffel, Phillipson & Scharf, 2012; Liddle et al., 2014).

The social dimensions of age-friendly environments are important for encouraging people to lead active and healthy lives and for lowering barriers for healthy and active ageing – barriers that are sometimes less visible than elements of the physical environment like a lack of benches or obstructed pavements. The social environment is a crucial determinant of health in older ages: strengthening it can help overcome barriers to older people's active and healthy ageing and contribute to substantially improving health and well-being in the population. Social networks and support, for example, can buffer the effects of declining health on quality of life and well-being by enabling those with less than optimal health still to contribute in meaningful ways and helping them do the things that are important for them (WHO, 2015b).

Social barriers and exclusion, by contrast, can lead to older people being isolated involuntarily and suffering from feelings of loneliness; these have a major impact on older people's quality of life and contribute to inequalities in healthy and active ageing. Creating a better understanding of social relationships in later life and the nature of barriers for full participation, alongside developing evidence-informed interventions and evaluating them, is crucial to enhancing social participation and social relationships of older adults in the future.

Starting from strategic interventions to promote social participation, the AFEE handbook also reviews the

impacts of social exclusion and discrimination for equity in age-friendly environments and discusses the opportunities and benefits of voluntary engagement in the community and in political and economic life. Addressing the social determinants of health of older people requires policies across different sectors and concerted action at all levels of government. The Commission on Social Determinants of Health has confirmed that local authorities are key actors in this respect (WHO Regional Office for Europe, 2013b).

The role of municipal and local government services

The final cluster brings together two domains that address how municipal and local government services can contribute to age-friendly, supportive environments:

- domain 7: communication and information;
- domain 8: community and health services.

Municipal and local government services are critical in ensuring communication and coordination across sectors. Furthermore health, care and community services that are delivered by the local authority to older people are essential for promoting healthy ageing and enabling a dignified life. Services from all different sectors and actors of the community need to be well integrated in order not to create unnecessarily high demand on older people.

Cross-cutting themes that link between domains

The next subsections discuss three cross-cutting aspects and links between the domains of age-friendly environments. These topics address important interim outcomes of age-friendly community design and action, which have been identified as protective factors for active and healthy ageing, supporting people to stay physically active and preventing falls and elder maltreatment.

Evidence is growing about the specific challenges and what works in terms of interventions for each topic, although much more is currently known about community action on physical activity and falls prevention than about what works for preventing elder maltreatment. All three topics have a range of resources and tools that support their implementation. All have received specific policy recognition as priority

interventions in the WHO strategy and action plan for healthy ageing in Europe, 2012–2020 (WHO Regional Office for Europe, 2012a) and they are also priorities in the EIP on AHA and in the WHO global strategy and plan of action on ageing and health (WHO, 2016a).

Promotion of physical activity

The physical and social environment of a community can support increased physical activity of older people in many ways (Van Holle et al., 2012; Olanrewaju et al., 2016). Level of physical activity is a key enabling factor and strong predictor of healthy ageing for all groups of older people (WHO Regional Office for Europe, 1996; Council of the European Union, 2013). Staying physically active, however, is especially crucial for the oldest of old age groups and for those at risk of functional decline and frailty (Cavill, Kahlmeier & Racioppi, 2006).

For the adult population, physical inactivity is very high and is one of the major risk factors for mortality. It ranked fourth highest as a risk factor after high blood pressure, tobacco use and high blood sugar. Over the life-course, a lack of physical activity is linked to morbidity and many noncommunicable diseases (NCDs) including cardiovascular disease, type 2 diabetes, depression and some cancers (WHO, 2010; 2017b).

Increasing physical activity can result in extending healthy life expectancy for older adults, while reducing the impact of morbidity on public expenditure (McPhee et al., 2016). Studies have shown that physical activity among older adults is associated with an overall improvement in their quality of life, with benefits including cardiorespiratory and muscular fitness, bone and functional health and reductions in the risk of NCDs, depression, cognitive decline (Chodzko-Zajko & Schwingel, 2009) and falls (Cavill, Kahlmeier & Racioppi, 2006). Physical activity interventions play an important role in preventing or reducing frailty levels among older adults (Puts et al., 2017).

Despite evidence of the risks posed by physical inactivity for poor health, older adults engage in less physical activity than younger adults (Hallal et al., 2012). This gap seems to increase with age, making the promotion of physical activity an important policy intervention for healthy ageing. Data from a 2013 Eurobarometer survey show that inactivity levels are particularly high for women and men aged 55 years and older (European Commission, 2014b). Physical activity for older adults can include recreational or leisure-time activity (such as gardening and hiking), aspects of daily mobility (such as

walking and cycling), household chores, games, sports or exercise organized in the context of daily, family and community activities (WHO, 2016b).

The physical and social environments can promote physical activity and healthy ageing in many ways. Economic benefits are detailed in a WHO health economic assessment tool (HEAT) (WHO Regional Office for Europe, 2014). The physical activity strategy for the WHO European Region 2016–2025 sets out three objectives to improve physical activity among older people: improving the quality of advice on physical activity by health professionals; providing infrastructure and appropriate environment; and involving older people in social physical activity (WHO Regional Office for Europe, 2015b). Physical activity is connected to many interventions under a number of age-friendly policy domains:

- domain 1: outdoor environments and domain 2: transport and mobility:
 - creating barrier-free public spaces and buildings to improve walkability among older adults;
 - strengthening infrastructure for active mobility and walkability, including creating accessible walking paths with resting points, increasing road safety, supporting safe cycling and developing accessibility standards in public transport;
 - installing exercise equipment and areas in public places and parks, as well as making parks more accessible and safe by installing benches and lighting;
- domain 3: housing and domain 4: social participation:
 - setting and enforcing standards for newly built houses, such as creating “20-minute neighbourhoods” with key facilities within reach of older people’s housing within a limited time of walking or public transportation;
 - providing a range of opportunities for social participation and physical activities that are accessible for older people such as day and field trips for older people;
 - creating supportive environments for social exchange and places to meet, and providing opportunities for social contact in the community, while combining the promotion of physical activity with social and cognitive activity;
- domain 5: social inclusion and non-discrimination and domain 6: civic engagement and employment:

- creating targeted action for individuals in vulnerable situations, such as reaching out to excluded and isolated individuals and promoting social inclusion of older people through voluntary work;
- encouraging interaction between neighbours by providing community-based initiatives to promote health and well-being.

Prevention of falls

Falls are the second leading cause of accidental or unintentional injury deaths worldwide (WHO, 2012a; 2007b). The consequences of falls among older people are often severe; injuries sustained from falls are responsible for a large share of the burden of disease. In many cases, injuries from falls mark the onset of frailty (Chodzko-Zajko & Schwingel, 2009). Falls prevention is therefore a priority intervention in the WHO strategy and action plan for healthy ageing in Europe, 2012–2020 (WHO Regional Office for Europe, 2012a).

Falls are a common problem affecting many older adults, as the risk and prevalence of falls increases steeply for higher age groups (Campbell et al., 1990;

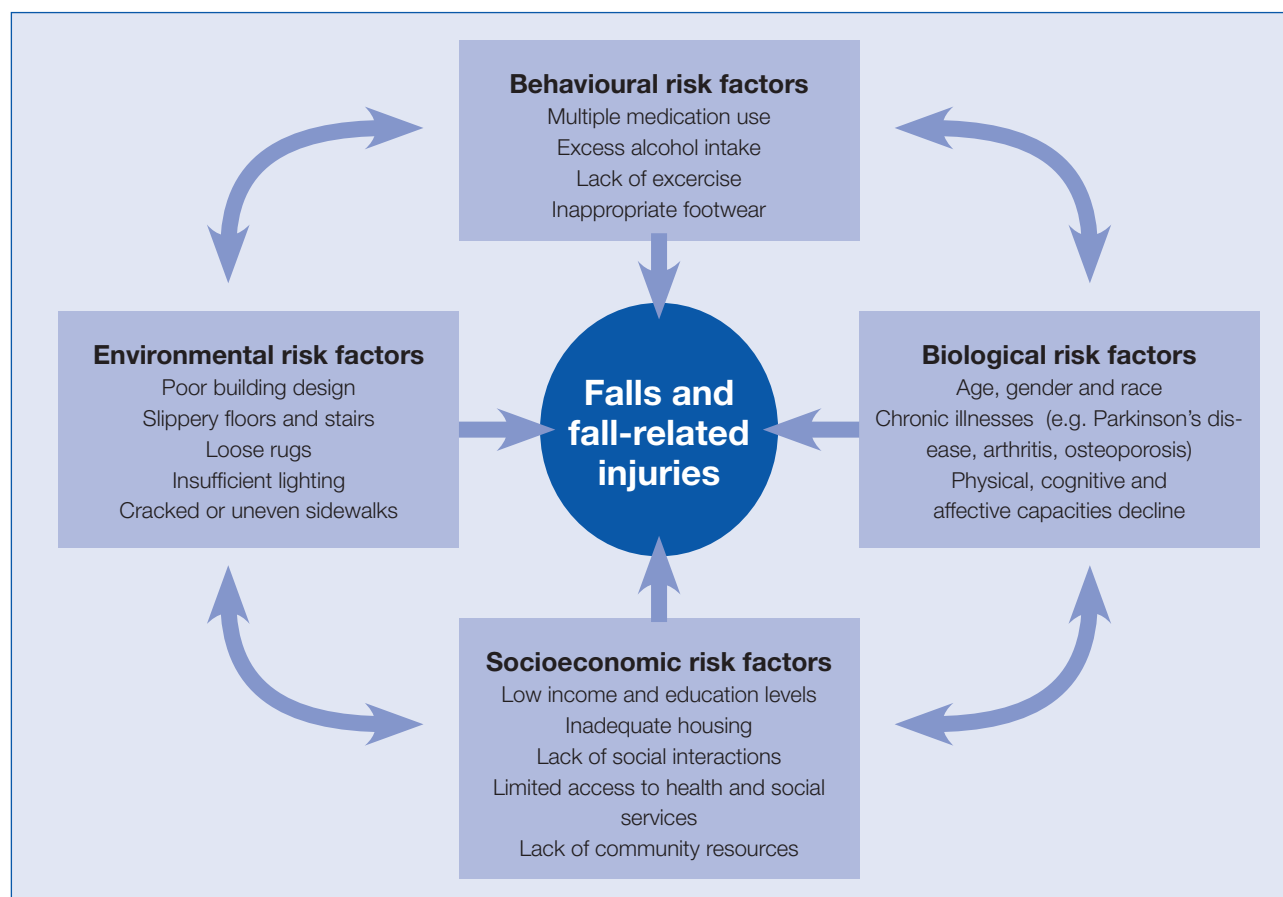
Rubenstein, 2006). Such injuries are costly, especially if falls result in femur fracture that requires hospitalization and rehabilitation (Peel, Bartlett & McClure, 2007). Moreover, the risk of falls is even higher for those living in institutions. Falls are the results of a complex interaction of risk factors relating to biological, behavioural, environmental and socioeconomic factors (see Fig. 4). An age-friendly environment can address these in a holistic way by removing potential barriers that might cause falls while promoting physical activity to improve fitness as a protective factor against falls.

Prevention of falls is an important component of active ageing, and research has shown that many falls are preventable (Goodwin et al., 2014; Gillespie et al., 2012). Preventive measures have been shown to be cost-effective and even cost-saving in a number of studies (Todd & Skelton, 2004).

The many relevant policy interventions within each AFEE domain include:

- domain 3: housing and domain 2: transport and mobility:

Fig. 4. Risk factor model for falls in older age



Source: WHO (2007b).

- supporting home assessments and modifications, including providing home hazard assessments and professionally supported evaluations of fall risks;
 - informing and helping older people to plan for ageing in place, including offering counselling and information on grants to solve older people's housing problems and help to apply for support;
 - providing visiting services from specialists to find solutions and offer training on how to overcome functional limitations;
 - creating infrastructure for active mobility and walkability, including building accessible walking paths with resting points, water points and points of interest along the path, as well as pedestrian streets with good lighting;
- domain 1: outdoor environments and domain 4: social participation:
 - retrofitting public spaces and infrastructures to create barrier-free access to public places, routes, buildings and transport;
 - using multilevel interventions, including combining promotion of physical activity with social and cognitive activity.

Prevention of elder abuse

Elder abuse is a common problem. It is defined as “a single or repeated act or lack of appropriate action, occurring within any relationship in which there is an expectation of trust, that causes harm or distress to older people” (WHO, 2002a). Like violence, elder abuse can occur at home, in the community and in institutions in the form of psychological, physical, sexual and financial abuse and neglect. It can cause injury, illness and despair, and can have serious consequences for the victims, their family members and the wider community. Community action to prevent elder maltreatment has to act on all the instances where people may be maltreated: in their home by family members and caregivers, or in institutions by professional staff or visitors.

But elder abuse is not inevitable and can be prevented (WHO, 2014c). The WHO global strategy and plan of action on ageing and health (WHO, 2016a) and the strategy and action plan for healthy ageing in Europe, 2012–2020 (WHO Regional Office for Europe, 2012a) call for urgent action for multisectoral collaboration and supportive environments to address elder abuse.

Abuse and neglect of older people is a gross violation of fundamental human rights; thus, addressing this

problem is a crucial prerequisite for an inclusive society. This may include addressing fear of crime and victimization in the neighbourhood and tackling the problem of ageism through education, public awareness, engaging older adults in community participation and training and support of carers. Community settings offer opportunities to raise awareness about elder maltreatment and to improve the quality of services in the community and in institutions, to adapt them better to the special needs of older people with functional limitations and to ensure that high-quality guidelines are in place for preventing elder maltreatment (Sethi et al., 2011). This has become a priority area for European countries, as addressed by a number of activities (Box 2).

Several of the age-friendly domains can contribute to elder abuse prevention:

- domain 1: outdoor environment and domain 3: housing:
 - creating barrier-free environments and boosting environmental confidence using techniques such as “design out crime” and “passive surveillance”, in collaboration with local police to reduce fear of crime;
 - ensuring security and safety of older adults through crime prevention activities, such as

Box 2. Preventing elder abuse and ensuring high-quality services in the EU

Preventing elder abuse by ensuring high-quality care services across the EU is a priority action for the European Commission. The European Charter of the rights and responsibilities of older people in need of long-term care and assistance was developed to set out the fundamental principles and rights for those dependent on others for support and care due to age, illness or disability.

The accompanying guide provides examples of experiences and initiatives relating to the Charter. The European Quality Framework for long-term care services contributes to preventing and fighting elder abuse. The Framework aims to improve the quality of life for older adults in need of care and assistance with a set of 11 quality principles and seven areas of action, recommendations for policy-makers and a methodology on how to implement them.

Sources: AGE Platform Europe (2012b; 2012c).

collaborating with police on crime prevention programmes and organizing ambassador and policing initiatives in neighbourhoods that are perceived as unsafe;

- fostering the feeling of safety at home and in the neighbourhood by setting up neighbourhood watch or friendly call initiatives to reach out to older people at risk of isolation and abuse;

- domain 4: social participation and domain 5: social inclusion and non-discrimination:

- empowering older people to participate in activities by creating local meeting places to inform older people of their rights and to provide resources to recognize and report abuse;
- combating ageism by raising awareness and education campaigns to challenge the representation of ageing, while striving to promote positive representations of older people in the public;
- creating intergenerational spaces and activities to promote intergenerational contact, mutual understanding and exchange of values, skills and experiences;
- collaborating with the police force to enforce prosecution of suspected perpetrators of elder abuse and safeguard older people from further victimization;

- domain 8: community and health services:

- supporting carers and families with dependent older people, including providing psychosocial counselling, capacity-building programmes and training for carers;
- developing strong quality control of health care providers, including establishing a health worker registry of those terminated for reasons of abuse and fraud to help prevent abuse at home or institutions.

Trends of demographic ageing in Europe

The population of the WHO European Region had the highest median age (42 years) among all WHO regions in 2015, according to United Nations Department of Economic and Social Affairs (UN DESA) Population Division estimates (UN DESA, 2015a). This has mainly been the result of decreasing fertility rates and growing life expectancy. From 2000 to 2015, female life expectancy at birth increased by 3.7 years in the European Region, to 80.2 years. During the same period, men gained 5.1 years of life expectancy and can now expect to live to 73.2 years; thus, the gender gap in life

expectancy has decreased by 1.4 years. As life expectancy increases, more people live past 65 years of age, many of them into very old age, greatly increasing the numbers of older people in the population. Meanwhile, the cohorts of younger people are shrinking.

As women outlive men, Europe has the lowest ratio of men to women (both current and projected) among all world regions, although the ratio is improving. In general, increasing sex ratios among very old people reflect the fact that improvements in life expectancy at age 80 are occurring at a faster pace among males than among females (UN DESA, 2015b).

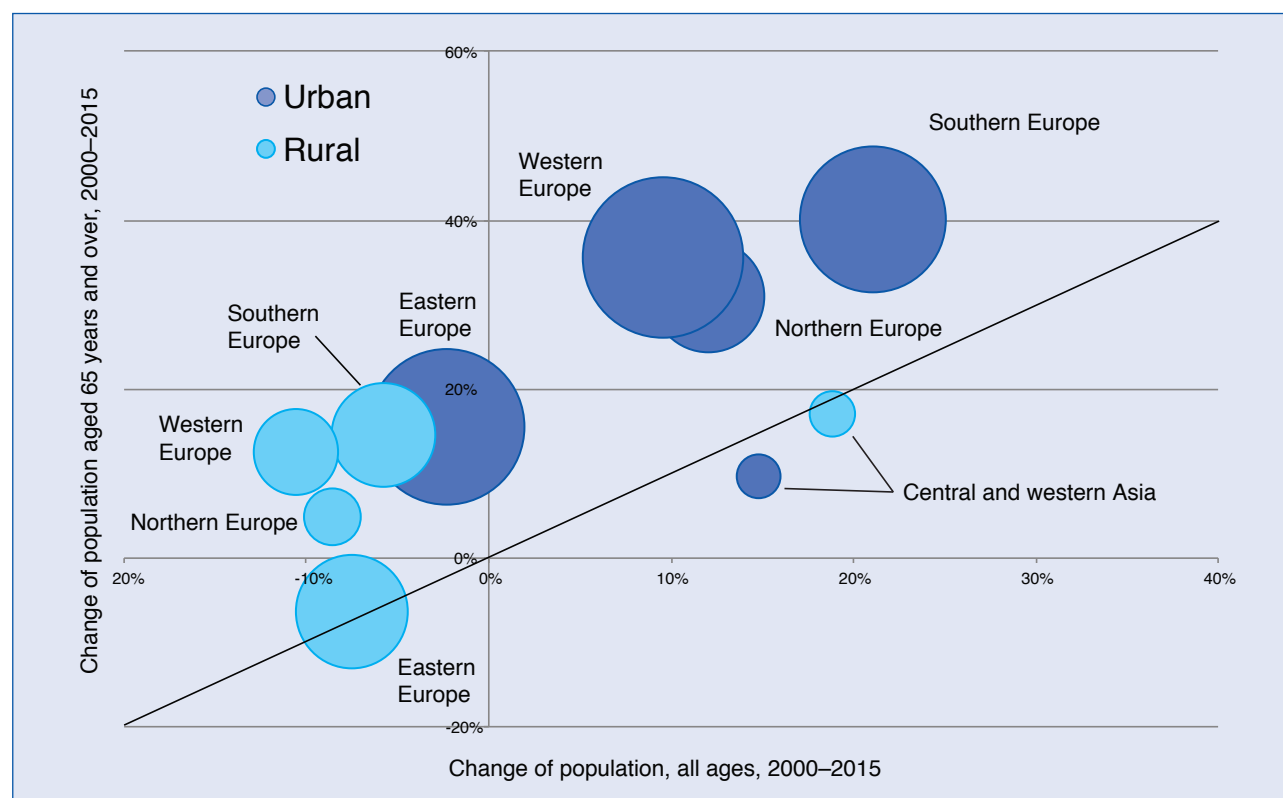
The proportion of people aged 65 years and older in the population is projected to continue to increase rapidly. According to UN DESA population projections, in 2010 only two countries in the WHO European Region had more than one in five inhabitants aged 65 years and older (Germany and Italy). By 2015 this was the case for six countries. By 2030 the number is expected to grow to around 30 countries, which is more than half of the 53 Member States in the Region. This is projected to include all but three of the current 28 Member States of the EU (Cyprus, Ireland and Luxembourg). Moreover, the older population is itself ageing: the UN DESA European region currently has the highest proportion of people aged 80 years and older among those 60 years and older, and this situation is projected to continue until around 2030 (UN DESA 2015a).

While many people in Europe are living not only longer but also healthier lives, there are important uncertainties about future trends in the health and functional status of ageing populations (WHO Regional Office for Europe, 2012a; WHO, 2015b). For the WHO European Region as a whole, healthy life expectancy increased by almost four years between 2000 and 2015 (from 61 to 65.5 for men and from 67.3 to 70.5 years for women), according to data from the WHO Global Health Observatory (WHO, 2017a). Results from different data sources that use differing methodology, however, are not always consistent.

Patterns of ageing by broad geographical region in Europe

In 2000–2015, population ageing was an almost universal trend in the 53 Member States in the WHO European Region. Fig. 5 compares the changes in population of all ages with the growth in numbers of people aged 65 years and older for broad geographical groups that

Fig. 5. Patterns of ageing by broad geographical region in Europe



Note: countries included in each category are as follows: central and western Asia: Armenia, Azerbaijan, Cyprus, Georgia, Israel, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan, Uzbekistan; eastern Europe: Belarus, Bulgaria, Czechia, Hungary, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Ukraine; northern Europe: Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Norway, Sweden, United Kingdom; southern Europe: Albania, Andorra, Bosnia and Herzegovina, Croatia, Greece, Italy, Malta, Montenegro, Portugal, San Marino, Serbia, Slovenia, Spain, the former Yugoslav Republic of Macedonia; western Europe: Austria, Belgium, France, Germany, Luxembourg, Monaco, Netherlands, Switzerland.
Source: calculation based on UN DESA population estimates.

follow definitions from UN DESA (2014; 2015a; 2015c). For each geographical group, population trends are shown separately for people living in predominantly urban versus predominantly rural regions.

With the exceptions of both urban and rural areas in those countries in central and western Asia that are Member States in the WHO European Region, the numbers of older people have grown faster in all parts of the Region compared to the total global population (depicted as lying above the line of equal growth for total versus older populations in Fig. 5).

From 2000 to 2015, population ageing was strongest for both urban and rural areas in western Europe, with the total rural population in western Europe declining by around 11% – a greater decline than for any other regional cluster – while the number of older people in predominantly rural areas in western Europe grew by 13%.

Fig. 5 also provides a snapshot of where older people live in Europe: the size of each bubble corresponds

to the estimated number of people aged 65 and over in the year 2015. Of the 140 million older people in Europe, around 99 million live in predominantly urban areas – more than twice as many as live in predominantly rural areas (41 million).

The combination of population decline and ageing is a common trend for all the predominantly urban regional clusters, with the exception of central and western Asian countries. Population decline and ageing also coincided in rural areas of eastern Europe, whereas all other urban clusters experienced population growth and ageing – again, with the exception of central and western Asian countries. Besides the urban and rural western European clusters, population ageing was strongest in urban areas of eastern Europe. On average, population ageing was stronger in urban than rural areas. The older population will therefore be increasingly concentrated in urban areas, and more so in Europe than in other world regions (UN DESA, 2014). This combination of ageing and shrinking populations will pose special challenges for rural and remote areas.



Domain 1: outdoor environments

Domain 1: outdoor environments

Introduction

The importance of adapted outdoor spaces and buildings for active and healthy ageing is confirmed by growing evidence from research (Sugiyama & Ward Thompson, 2007a; Sugiyama & Ward Thompson, 2007b; Curl et al., 2012). The links between the design and features of public space and intermediary goals such as promoting physical activity and preventing falls are now well documented (Van Cauwenberg et al., 2011).

Land use patterns, urban design and transportation systems are three dimensions of the physical environment that can affect functional limitations and disability in positive and negative ways (Rosso, Auchincloss & Michael, 2011). The key issues to be addressed may be particular to a local context, like steeply sloping neighbourhoods or a specific target group of people living with dementia or in precarious economic circumstances. The term “environment” is used in the AFEE handbook in a broader sense than the classic policy field of environmental protection. There is, however, ample evidence that older people can be especially vulnerable and negatively affected by environmental degradation (see e.g. Simoni et al., 2015) for adverse effects of air pollution).

This chapter presents the first domain – outdoor environments – of the AFEE framework. This is the first of three domains that address the physical dimension of age-friendly communities. It corresponds to the “outdoor spaces and buildings” domain in the original WHO global guide (WHO, 2007a).

Strategic directions for policy interventions

The goal of interventions in this domain is to plan and design the built environment and public spaces with awareness of the needs of – and in consultation with – older people, recognizing their diversity. To support ageing in place, initiatives to create age-friendly outdoor environments focus on retrofitting existing neighbourhoods in addition to following good practice in the design of new neighbourhoods.

In most cases, age-friendly city initiatives that address the outdoor environment do not start from scratch: existing buildings and infrastructures, regulations, culture and history of places already shape the experience of ageing in any specific neighbourhood. In order to make cities more age-friendly it is crucial to understand the barriers, constraints and strengths of existing outdoor environments in order to retrofit them and to reduce barriers, while preserving what is valued by building on community assets.

Older women and men themselves are frequently an excellent source for monitoring and evaluating the quality of their own urban environments, including those living with dementia (WHO, 2012b). Their voice is critical for evaluation of and planning for change, for both shorter- and longer-term action plans. Although changing basic urban design may require long-term vision, many interventions in outdoor environments implemented as part of community action plans can

Key facts

- In the WHO European Region each year 46 000 people aged over 70 years die as a result of falls (WHO, 2014a). WHO estimates that 26% of these falls can be attributed to the environment, such as housing environments, access to building sites and recreational environments (WHO, 2006). Improved design of outdoor environments can help reduce the risk of accidental falls.
- Survey results for the EU indicate for 2012 that 13% of people aged over 65 years perceive crime, violence or vandalism in their area as a problem (Eurostat, 2015a).
- Many older people face barriers getting outdoors; for example, 52% of respondents in the United Kingdom said that a lack of public toilets in their area prevented them from going out as often as they would like (Hogg & Godfrey, 2007).
- People living close to open and green spaces are more likely to go out and walk (Saelens & Handy, 2008; Sugiyama & Ward Thompson, 2008).

yield benefits in the short term (Kerr, Rosenberg & Frank, 2012; Annear et al., 2014).

The following sections bring together main features and initiatives that practitioners, age-friendly action planners and researchers have identified as relevant age-friendly practices for neighbourhood development. Recent research has provided evidence supporting many elements of the urban initiatives for healthy ageing that have been undertaken in a growing number of cities and communities. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

Barrier-free public spaces and buildings accessible and usable by people with impairments

As people get older they often experience a greater sensitivity to seemingly small physical features that might be obstructive or decrease their feeling of safety and confidence in outdoor spaces, and are thereby discouraged or inhibited from going outdoors and moving around. A number of studies, however, have shown promising results from interventions in the outdoor environment that address these concerns. There is evidence that some interventions have the potential to increase walking and participation, both in the short term and over the longer term (Hallgrimsdottir, Svensson & Ståhl, 2015).

For example, a lack or insufficient density of facilities such as benches, public toilets or elevators has been

reported to discourage independent movement outdoors for older age groups (Moran et al., 2014; Yen et al., 2014). Planners and policy-makers increasingly recognize the need to pay more attention to the corresponding quality-of-life issues that older people have raised and to include them in all planning decisions. Moreover, some of the actions listed below can create synergies with the broader planning agendas of sustainability, cohesion and liveability, to create places that promote well-being for all age groups (Gilroy, 2008).

“An impairment becomes a disability only when the built environment does not compensate for impairments.”

Utton (2009: 380)

Supportive and barrier-free environments can make the biggest difference to people at greater risk of disability and poor health.

With increasing age the likelihood of living with one or more functional limitations or disabilities grows. This may not automatically lead to dependence and frailty but needs special attention from city planners and transport planners. Studies suggest that the built environment may have more limited effects among those with mild or no impairment, but as soon as some impairment occurs, potential barriers of the built environment can become a more important factor (Clarke & Nieuwenhuijsen, 2009). Having a number of chronic conditions or living with dementia can undermine the confidence of older people to navigate and master the outdoor environment and hence put them at risk of social exclusion (see also the chapter on domain 5: social inclusion and non-discrimination).

Adapting or designing public environments in a way that is accessible for all, regardless of age and level of ability, benefits not only older people but also the wider community.

Accessibility has been promoted by concepts such as “inclusive design” and “universal design” principles, which have become part of national legislations in some countries (including in the Nordic countries). These principles are also enshrined in the United Nations Convention on the Rights of People with Disabilities, to which the EU and European countries are signatories. Local action plans should assess the level of accessibility in neighbourhoods and make sure that it is promoted. Guidelines on accessibility standards and universal design have increasingly become available at national and subnational levels (see Box 3); these help planners to identify gaps in communities, in consultation with older people, their organizations and other relevant stakeholders (see the section on resources and toolkits).

Safe and well signalled pedestrian crossings are a major concern for people with any kind of impairment, frequently identified in focus groups and surveys.

Special buttons have been installed at important crossings in some cities that grant people with disabilities more time to cross the street. A more refined way to request longer crossing time has been introduced in the form of an electronic card for disabled people. More details on crossings can be found in the chapter on domain 2: transport and mobility.

Special solutions can support people with sensory impairments or with reduced vision or hearing.

Audio signals at traffic lights and specially designed curbs that provide better visibility are among the examples that have been implemented in many cities.

The right of access to the city includes people with dementia as well as people with mobility limitations.

Research has shown that the majority of older people with dementia live at home – many on their own (WHO, 2012b). Unless outdoor environments are designed to help older people who live with dementia to continue to use their local neighbourhoods, many of them may become effectively housebound (Mitchell, Burton & Raman, 2004). Designing urban areas that are easy to understand and have landmarks and high legibility,

Box 3. Oslo’s common principles for universal design

In 2014 Oslo City Council adopted common principles for its local implementation of the Norwegian national action plan on universal design. The principles provide guidelines for each city department and agency, which are required to develop individual plans for universal design. The city’s Agency for Social and Welfare Services is in charge of coordinating these initiatives across the municipality.

The principles of universal design cover three main areas:

- transport and communication
- planning of construction, property and outdoor areas
- information and communication technology (ICT).

The common principles are based on the government’s vision that universal design is to be implemented in Norway by 2025.

Source: City of Oslo (2014), WHO (2015c).

including clear signage and layout, is critical for people with dementia but also relevant to other members of society (Box 4). This includes not only outdoor environments but also buildings and public meeting places. For instance, shopping centres can be challenging environments for people with dementia as they can be disorienting (Blackman et al., 2003).

Support for community interaction and personal independence

When there are places to rest, interesting street-life and a perception of safety an older person is likely to venture outdoors more often, to walk and meet people and participate in everyday life. Conversely, a busy street right in front of the house – especially without traffic lights or with short crossing times – can create frightening situations, thus discouraging some older people from going out into the community.

A direct neighbourhood and residential context that invites older people to go out and about, to take care of daily activities independently and to interact with others is of great importance. This is particularly true

Box 4. Case study: designing outdoor spaces to become dementia-friendly neighbourhoods for life

A three-year research project from the Oxford Institute of Sustainable Development examined how outdoor environments can be made more dementia-friendly. People with dementia have more difficulty using outdoor spaces independently: studying the way they perceive, experience and use the outdoor environment enabled the researchers to identify design factors and criteria that influence their ability to use and negotiate their local neighbourhoods successfully. While the majority of participants with dementia said that they enjoyed going out, many could no longer drive or use public transport when unaccompanied, often limiting their choice of destinations to places within walking distance.

Older people with dementia tend to prefer:

- mixed-use, compact local neighbourhoods;
- short, gently winding streets with wide pavements and good visual access;
- varied urban forms and architectural features and aesthetic environmental features;
- historic, civic or distinctive landmarks;
- quiet, pedestrianized streets and welcoming open spaces;
- places, spaces and buildings whose functions and entrances are obvious;
- simple, explicit signs with large, dark unambiguous graphics and a light background;
- easy-to-use street furniture in styles familiar to them;
- smooth, plain, non-slip, non-reflective paving.

These findings were translated into preliminary guidance for designers – at all scales from urban design to street furniture – on the criteria to consider when developing dementia-friendly urban environments.

In summary, this research identifies the six major requirements for outdoor environments to be dementia-friendly: they need to be familiar, legible, distinctive, accessible, comfortable and safe. All criteria are very closely related to the topics in this chapter. Environments that are easy for people with dementia to access, understand, use and enjoy are likely also to be age-friendly and to benefit other people with or without limitations; this gave rise to the concept of “neighbourhoods for life”.

Source: Mitchell & Burton (2006).

for people who live in residential care and those who through various life events (such as the death of a loved one or relocation) or characteristics like health, gender, ethnicity or income have become more isolated (Clarke & Nieuwenhuijsen, 2009; Atkinson et al., 2014).

It is important for older people that neighbourhoods have access to core destinations such as local shops, services and amenities.

Access to and density of nearby open spaces, services and amenities and interesting street frontages have been shown to be among the most important factors influencing older people's walking and ability to take care of their daily activities (Kerr, Rosenberg &

Frank, 2012). Decisions of how and where to locate health services and integrated service providers, including housing and residential choices for older people in the community, need to be considered in this context. Consideration is especially required for people with dementia, who – it has been shown – usually feel more comfortable in a familiar environment, hence with amenities close to home.

Efforts to support personal independence include improved access to buildings and to the local transport network.

An environment that supports social contact and access to public transport adds to quality of life and fosters physical ability in older people (Elmståhl & Ekström, 2012; De Donder et al., 2013). Relevant

neighbourhood infrastructure includes not only local commercial centres but also meeting places for older residents; both should be designed in inclusive ways. Amenities close to home may, however, be absent in rural and remote communities, which underlines the need for combined planning and transport strategies, and special solutions to bring services to people, such as mobile shops (Keating, Eales & Phillips, 2013).

Physical environments can be co-created with older people and older people's associations.

Involving older people in consultation processes for newly planned urban developments can ensure that their needs are respected in urban planning. Many cities have set up "senior councils" that advise the local authority on issues affecting the lives of older people (see also the chapter on domain 6: civic engagement and employment). To support these planning processes, municipalities have developed a range of methods for street audits and public consultations (Buffel et al., 2014).

Older people's associations and other organized or informal groups of older people are important stakeholders with an interest in promoting local activity and healthier physical environments. Co-creating public, residential and open spaces with older people has two benefits: first identifying and avoiding barriers for older people with special needs (Gilroy, 2008; Beard & Petitot, 2010) and second increasing subsequent use by organized and informal groups through creating a feeling of ownership.

Places to be and to stay outdoors

Going out is not only an act of getting things done or getting from A to B. Being in public and open spaces also gives people the broader feeling of taking part in the life of their community and of having social encounters. Physical environments that enable life and participation need to plan with people in mind and define relevant and measurable targets for what they want to achieve (Gehl, 2011).

Public benches and other opportunities to rest, as well as adequate access to toilets, are essential for older people with some functional limitation to feel confident in public spaces.

This also concerns privately owned extensions of public spaces: shops, supermarkets and commercial shopping malls. Where "age-friendly" or

"generation-friendly" business labels have been introduced, their checklists usually address these issues, sometimes with a special focus on the needs of people living with dementia.

Insufficiently safe or clean environments are frequently stated concerns by older people when asked about rating their neighbourhood.

Uncleanliness, litter and graffiti can be perceived as evidence for decline and degradation of the neighbourhood (De Donder et al., 2013). This can lead to the subjective feeling among older people of a lack of safety. Feeling secure in one's living environment is a major factor in older people's choices to leave their homes and engage in their communities (Broekhuizen, de Vries & Pierik, 2013; Yen et al., 2014).

The feeling of safety can depend on a number of factors. These include negative factors such as objective or subjectively perceived risk of violence, observed antisocial behaviour and reported crime, but also positive factors such as adequate street lighting or having emergency phones around public transport hubs. In addition to perceived disorder and litter, experiencing road safety problems adds to feelings of unsafety, as do poor conditions of pavements and insufficient recreational infrastructure or heavy traffic (De Donder et al., 2013). An infrastructure of local shops, on the other hand, might lead to the perception of increased safety. Some longitudinal research has shown that fear of crime or street design that favours motorized transportation and neighbourhood degradation may adversely influence health outcomes among older people (Beard & Petitot, 2010).

Neighbourhoods need to be created where older people have a choice of places for recreation, physical activity and other leisure activities.

Some evidence exists that seeing other people being active in one's neighbourhood can increase the perception of trustworthy and responsible residents, motivating older people to participate more (Annear et al., 2014).

An increasingly popular intervention in age-friendly cities is the creation of accessible walking paths, infrastructures for physical activity and cycle paths that older people can use for recreational purposes. The health benefit goes beyond physical activity to additional social interaction and mental health benefits.

These infrastructure investments should be considered in disadvantaged neighbourhoods, in combination with other measures to increase perceived safety and attractiveness. Walking groups invite older people to leave their houses and foster recreational walking, while promoting social engagement.

Case studies indicate some positive effects from physical structures in the community, such as intergenerational playgrounds where grandparents can play with their grandchildren and special equipment from the recent “adult playground” movement. All of these can make the use of open spaces more attractive for older people and provide possibilities for social interaction. (More details on participation and recreational activities can be found in the chapter on domain 4: social participation.)

Natural environments, parks and green spaces can promote well-being and health through increased activity levels.

Access to a green living environment is positively linked to better perceived health, less disease and longer lives in people aged 60 years and over (Broekhuizen, de Vries & Pierik, 2013). One possible explanation of this effect is illustrated by research suggesting that older people who live close to parks and other open spaces walk more and leave their homes more frequently (Saelens & Handy, 2008; Sugiyama & Ward Thompson, 2008). Design, attractiveness and the perceived safety of green places are all critical to their effect on increased activity levels (Michael, Green & Farquhar, 2006). Some beneficial effects of green spaces studied were stronger among older people than in the general population; for example, in improving quality of sleep (WHO Regional Office for Europe, 2016b).

Nature and green spaces have additional effects on well-being and mental health.

Research indicates that older people have a preference for green environments, like tree-lined streets, plants and things to watch in the park (Ward Thompson, 2013). Distribution of trees within the neighbourhood and exposure to green open spaces appear to be correlated to older people's subjective well-being and subjective health (Kweon, Sullivan & Wiley, 1998; Van Dillen et al., 2011).

Engaging with nature has been shown to have a positive effect on mental health, alleviate stress, restore energy and enhance mood – effects that have been described as “therapeutic landscapes” or “restorative environments” (Kaplan and Kaplan, 2003; Hansen-Ketchum et al., 2011). Moreover, allotments and community gardening can be beneficial to the mental health and well-being of older people (Milligan, Gatrell & Bingley, 2004; Van den Berg et al., 2010). By interacting and working in the garden older people get a sense of achievement, satisfaction and aesthetic pleasure (Milligan, Gatrell & Bingley, 2004).

In urban action plans communal gardening or allotment sites often appear in intergenerational and intercultural strategies for social integration, but they have clear links to age-friendly policies. Community gardens can have the double benefit of simultaneously helping to combat social isolation and contributing to social networks and skills. People with dementia also value a connection to nature and participation in nature-based activities, rating them as highly enjoyable – for those living either in the community or in sheltered housing (Gibson et al., 2007).

Urban environments that support belonging, continuity and sense of self

The space around the home is more than just a geographical unit and physical quality: it also has character, history, meaning and value for residents. The wish of older people to age in place is connected with a feeling of continuity and being familiar with a place. Rapid changes in a neighbourhood, however, may make it feel new and unfamiliar and threaten the continuity and attachment that older people have with it. This may be particularly relevant for people with dementia, but limited research has been done so far into how rapid urban changes affect older people in this regard.

Attachment and a sense of belonging are shaped through experiences of accessibility, social bonds, feelings, memories, thoughts and routines in the neighbourhood over the life-course. It is important to recognize the ways in which people have and build connections to places, and more research needs to be done in this field. The experience of a place can affect older people's subjective judgement of it and

their ability to participate in the built environment (Phillips, Walford & Hockey, 2011).

“Public and shared spaces are critical environments shaping the conduct of everyday life. Our use of and identification with public spaces is an essential component of an overall sense of being in place. There are public places in which we feel safe, welcomed, and within which we can experience a sense of belonging and identification. Other public spaces are dangerous, hostile and alienating. The design and ambience of these spaces is a critical element in determining our ability or willingness to venture forth from the relative security of our residence.”

Rowles & Bernard (2013: 4)

Perceptions and feelings about a place can have an important impact on actual use and participation.

Aesthetic buildings, streetscapes and scenery are highly valued and are associated with increased participation by older people (Moran et al., 2014). Thus, a subjective reading of the security or attractiveness of a neighbourhood is linked to whether older people are actually leaving their houses. Research has shown that aesthetics, usability and shared memories help older people to develop a sense of place and attachment, even in unfamiliar places (Phillips et al., 2013).

Urban planners and city developers increasingly recognize that older people have not only technical and material needs but also emotional demands from their neighbourhoods.

People develop ties of belonging and agency with their neighbourhoods over the life-course (Wahl, Iwarsson & Oswald, 2012). These lead to place attachment and create memories and meaning. Considering that people in their older years have often lived for a long time in the same neighbourhood, such processes of belonging explain subjective evaluations of neighbourhoods. Understanding these dynamics is crucial to creating environments that enable ageing in place; it may also help to assist older people in adapting to new places should they need or wish to relocate to more fitting environments.

Finding ways to preserve and recall meanings, values and collective memories of places could help to preserve a feeling of continuity and support a sense of belonging to the neighbourhood.

Research is only at an early stage of understanding how such emotional levels influence the health and well-being of older people, particularly in contexts of rapid urban change and regeneration. People transform the spaces of their lives by imbuing these patterns of use and the habituation of their everyday activities with meaning. Community integration and continuing engagement with the environment are critical to enhancing quality of life for older adults (Rowles & Bernard, 2013).

It is important for urban planners and policy-makers to recognize how place affects older people's confidence of going outdoors.

Unsupportive environments may lead to a loss of self-efficacy and self-esteem. For instance, not being able to find a toilet or having to ask for help to access a building as a wheelchair user can evoke feelings of being dependent. Supportive outdoor environments can benefit from an understanding of people's subjective experiences and aspirations in terms of use of space and quality of life. People-centred environments respect the subjective values and meanings of the people inhabiting a place; support the diversity and needs of older people; and focus on physically and emotionally inclusive design of spaces. Listening to the voices of older people is crucial throughout the design and planning process.

Policy interventions and initiatives by action area and objective

Table 1 follows the structure of this chapter's proposed directions for interventions and objectives and adds examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 1. Practice examples for outdoor environments from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Barrier-free public spaces and buildings that are accessible and usable for people with impairments (cross-cutting with domain 4: social participation)	Support to people at risk	● Neighbourhood regeneration programmes for the development and improvement of infrastructures in socially disadvantaged neighbourhoods (including social development) ● Urban audit-informed improvements in specific disadvantaged areas or with specific target groups ● Planting of greenery and planning for the provision of urban amenities in disadvantaged areas
	Accessible/inclusive design	● Retrofitting public spaces and infrastructures to create barrier-free access to public places, routes, buildings and transport (even with mobility aids) ● Following accessibility principles for newly built infrastructures ● Age-friendly and accessible design workshops with city planners and urban designers ● Participatory mapping of accessibility and targeted retrofitting of outdoor environments and buildings (developing walkability, accessibility and street audit tools)
	Crossings and traffic lights	● Street audits including people living with impairments ● Adjustable timing of traffic lights to allow safe crossing of mobility-impaired people ● Sonar signals on traffic lights
	Sensory impairments	● Universal design initiatives ● Consideration of safety and accessibility for vision-impaired users in the planning of public infrastructure, recreational zones and walking/sport facilities ● Information and signage in braille and audio versions
	Dementia-friendly	● Dementia strategies for the public realm and civic buildings ● Involvement of people with dementia in neighbourhood audits ● Familiar design of benches, traffic lights ● Other dementia-friendly design principles, e.g. legibility, distinctiveness, good lighting ● Walking groups for people with dementia
Support for community interaction and personal independence (cross-cutting with domain 8: community and health services)	Access to amenities	● Co-location of amenities and local services, especially in places close to care institutions and age-friendly buildings ● Regulated distribution of pharmacies and health services in line with locations for older populations ● Providing decentralized social services in the neighbourhood (offices proportional to number of inhabitants) ● Service providers and businesses consulting with senior councils in relation to development of buildings and outdoor spaces ● Promotion of urban planning concepts such as the 20-minute neighbourhood and the city of short distances ● Promoting access to, and viability of, healthy food, markets and local stores in the neighbourhood

Table 1 contd

Action area	Objective	Examples of policy interventions and initiatives
	Access to buildings and local transport	● Mapping accessibility of buildings (heavy doors, steps without handrails or wheelchair access) ● Building ramps to public buildings and housing ● Analysing distribution and density of bus stops and their distance to residential areas of older people (using geographical information system mapping)
Places to be and stay outdoors (cross-cutting with domain 4: social participation)	Benches and toilets	● Online bench request forms ● Improvement of signage for public toilets ● Mapping of toilets and ensuring maintenance ● Accessible toilet initiatives and labelling with local shop owners and gastronomy
	Safe and clean environments	● Working with private landlords to control noise and litter issues from their premises ● Removal of litter and graffiti ● Urban renewal and regeneration initiatives
	Places for recreation and leisure	● Installing exercise equipment and areas in public places and parks ● Supporting swimming pools and leisure centres ● Creating culture and walking tracks
	Parks and green spaces	● Creating new parks ● Making existing parks more accessible, inviting and safe by installing benches and lighting and increasing maintenance ● Providing dog fouling collection bags
	Resilient and therapeutic places	● Improving accessibility and connection to forests and natural places ● Allotment gardens ● Community gardens ● Assessing resilience to extreme climates: climate evaluation and adaptation of city centres
Belonging and sense of self (cross-cutting with domain 2: transport and mobility and domain 4: social participation)	Agency	● Supporting local citizen initiatives to improve the urban environment
	Aesthetics and usability	● Recognizable design of outdoor furniture ● Neighbourhood beautification campaigns designed with inhabitants
	Understanding belonging	● Focus groups with older residents ● Asset mapping of neighbourhoods
	Preserve memories and continuity	● Using participatory planning approaches to urban renewal and regeneration ● Preservation of historical urban landscape

Table 1 contd

Action area	Objective	Examples of policy interventions and initiatives
	Environmental confidence	● Clear signage and legible layout ● Focusing on fear of crime as well as crime itself, using techniques such as “design out crime” and “passive surveillance” in collaboration with local police ● Developing and promoting use of impact assessment tools for older people

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Domain 2: transport and mobility

Domain 2: transport and mobility

Introduction

Public transport remains one of the key strategies to make transport systems ecologically and demographically sustainable. This chapter discusses a number of features of age-friendly public transport, as well as other support measures that help remove barriers to transport and mobility.

Transport and mobility is the second of three domains of the AFEE framework that aim to make physical environments more supportive. It corresponds to the “transportation” domain in the original WHO global guide, in which the majority of issues covered relate to public transport provision (WHO, 2007a). Current research often addresses issues of transport and ageing in broader terms and emphasizes the important health benefits of walking and other active forms of mobility for older people. The AFEE handbook therefore chooses to address broader questions of mobility and road safety together in this domain, including other issues that are critical to safe mobility, such as pavements. As with other domains of age-friendly environments, transport and mobility have important interconnections with other domains and can reinforce each other. To facilitate ageing in place and to maintain quality of life as people get older, it is important to understand the role of the built environment in fostering or limiting mobility.

Strategic directions for policy interventions

For older people, the ability to get “out and about” is critical to well-being (Marsden et al., 2007). Transportation is crucial for maintaining social connections with families, friends and neighbours and for keeping engaged

in life and participating in society more broadly, including access to health and social services. Many older people cannot be self-sufficient without transportation if they have reduced mobility (UN-Habitat, 2013). This chapter elaborates major pathways for remaining physically active and being able to participate in social and community life for as long as possible.

The goal of interventions in this domain is to promote safe, accessible, appropriate and reliable transport services and infrastructure for active living. The aim is to enable people to maintain their mobility, independence and connections as they get older.

Having all the necessary services (including hospitals, doctors’ surgeries and grocery shops), social networks and activities (including friends’ houses, day centres, churches and parks) available in the local neighbourhood can help to compensate for reduced mobility. As Marsden et al. (2007) have argued, however, there is also evidence of frustration and health consequences if destinations important to older people’s lives cannot be reached easily. Helping older people increase their mobility can help reduce dependence and isolation, and thus prevent or slow down further decline in health and daily functioning.

The coming decades will see ageing generations accustomed to car use, high levels of mobility and travel-intensive lifestyles (Hjorthol, Levin & Sirén, 2010). This may help some older people to compensate for their reduced mobility, while others may become more homebound and risk social isolation and loneliness.

Key facts

- The likelihood of living with reduced mobility increases significantly from the age of around 75 years. Age alone, however, is not the direct factor for this decline, which is strongly connected with the state of health and related impairments usually more prevalent among the older age groups, including cognitive and motor impairments. Even in the oldest of old age groups many people still exhibit a high level of autonomous mobility (Bell et al., 2010).
- Older people and people aged 15–29 years have the highest road traffic mortality rates in the WHO European Region (Jackisch et al., 2015b).
- Every fifth person who dies today on the EU's roads is aged 65 years and over (European Transport Safety Council, 2008).
- It is estimated that around 12 500 people aged 70 years and over die each year in the WHO European Region from road injuries (WHO, 2014a).
- Environmental barriers such as poor access to transport, neighbourhood safety and unavailability of exercise programmes and equipment are experienced as barriers to physical activity participation (Franco et al., 2015).
- In the EU around 25% of people aged over 55 years use public transport (European Commission, 2011). Of people aged over 65 years, 23% experience some or great difficulties in accessing public transport facilities in the EU (Eurofound, 2012).
- Older people's experiences of mobility can be shaped by gender and life events. Although gender differences are changing and differ by country, older women are currently less likely to drive and to own a car; on the other hand, older women use more and different modes of transport. While older men are overall less prepared for a life without car, older women can be seriously affected by loss of a spouse in terms of their unmet travel needs (Ahern & Hine, 2012).
- When asked, older adults suggested that motor traffic control measures are one of the most important environmental issues to address (Strath, Isaacs & Greenwald, 2007; Saelens & Handy, 2008).

One of the biggest challenges and the root of many barriers found in age-friendly city assessments is the lack of consideration given by transport planners to mobility difficulties, possible impairments and age-related vulnerabilities (such as reduced walking speed and distances and the need for seating in public places and clear signage). By bringing together public health and transport engineering specialists and older people, a range of actions have been identified that may lead to better services. According to the European Metropolitan Transport Agencies (EMTA) many of these actions are low-cost and easy to implement and would benefit both older people and other groups of the population who use public transport (Fiedler, 2007).

Older people use a variety of transportation options including driving, walking, public transport and private and specialized transport services. Walkability

of neighbourhoods (see also the chapter on domain 1: outdoor environments) and accessibility of public transport have been shown to predict older people's transportation choices and are therefore key areas of intervention for age-friendly environments. Mobility is more than just transport from A to B: it is also an experience in itself, which is important to the self-efficacy and subjective well-being of older people. It also opens up opportunities to interact with others and feel part of the city.

The following sections bring together main features and initiatives that practitioners, age-friendly action plans and researchers have identified as relevant age-friendly practices for mobility and transport. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

Infrastructure for active mobility and walkability

Walking should be promoted among older people as it has the “win-win” result of being a form of both physical activity and mobility; it enables older people to be independent, to do the things that are important to them and to participate in social life.

Walking is the most popular mode of transport of older people for local trips in all European countries. To enable older people to walk and use other modes of active transport, safe infrastructure is crucial. In some countries cycling is also a popular mode of transport among older people. Separating pavements and cycle paths from each other and from motor traffic can then foster active mobility in older people.

Accessibility, maintenance and other features of the built environment can empower people to walk.

Traffic planning is crucial: many older adults may not feel comfortable negotiating street crossings that have issues such as intersections without traffic lights and with relatively large crossing distances. Studies show an increased risk of motor vehicle collisions with pedestrians over the age of 65 years at marked crossings with no traffic signals or stop signs (Koepsell et al., 2002). To promote walking, consultations with older people and the available research evidence support a number of factors.

- Streets should be well connected and well lit, and should be and feel safe.
- Pavements need to be wide enough, free of barriers, well maintained, cleared (of snow, leaves and litter), segregated from motorized traffic and other transport users (including cycle and motorcycle users) and free of obstructions from other uses of pavements (such as parked cars and garbage containers).

Well connected streets can be achieved by ensuring the availability of potential walkable destinations, frequent formal crossings, well laid-out and signalled intersections and traffic lights that allow enough time for older people to cross safely. As outlined in the chapter on domain 1: outdoor environments, the wider characteristics and design of public spaces, facilities and amenities reachable within short distances also support and encourage walking and participation.

Well maintained and well designed pavements, walkways and cycle paths are crucial to physical activity.

Safe and smooth footpaths and tracks for walking are linked to more frequent walking of older people and the ability to perform activities of daily living independently; they also help to prevent falls (Nyman et al., 2013). Quality of pavements features strongly in many age-friendly audits in which older people have participated (Garin et al., 2014).

“Outdoor falls are frequent; approximately half of falls among adults aged 65+ occur in outdoor environments.”

Nyman et al. (2013: 2)

Local action plans and assessments identify shortcomings by consulting both older people themselves and available (national) accessibility guidelines. The literature reveals a notable concentration on the details of pavement quality and maintenance, slopes, curbs and temporary obstacles on pavements, which are important determinants of walking among older people (Annear et al., 2014; Stav, 2014). For example, walkways and cycle paths need to be clearly separated and have safe intersections, as accidents tend to happen more frequently at intersections. On hills or stairs older people appreciate the presence of handrails. They dislike cracked, uneven, steeply sloped or high curbs. Narrow pavements, slippery sidewalk surfaces, holes and cracks also pose barriers (Moran et al., 2014).

Interventions can increase confidence for mobility if they reduce motor traffic, reduce traffic speed and increase road safety.

Further to the criteria mentioned above, road safety, violence and injury prevention are key determinants of older people's feelings of safety when walking. In many local needs assessments older adults suggested that they feel motor traffic measures are among the most important environment issues to address (Strath, Isaacs & Greenwald, 2007; Saelens & Handy, 2008). Recreational walking and physical activity have consistently been correlated to perceptions of neighbourhood safety and negatively related to neighbourhood problems (Li et al., 2005; Li, Fisher & Brownson, 2005; Piro et al., 2006; Nagel et al., 2008; Mendes de Leon et al., 2009; Shores et al., 2009; Tucker-Seeley et al., 2009). Interventions should therefore also consider calming of motorized traffic, speed limits and road safety campaigns, as well as crime reduction.

In some countries people up to the oldest of old age groups rely on bicycles to get out and about.

The use of cycling as a mode of transport varies greatly, depending not only on the culture but also on the provision of infrastructure for older people to feel confident to cycle (Oxley et al., 2004). When there are balance problems, three-wheeled bikes make it possible to continue cycling, and new technology – such as e-bikes – opens up new opportunities for older people's mobility. Nevertheless, older people need safe conditions to cycle, including segregated cycle lanes and sufficient green phases at traffic signals. In a number of European cities, as well as in some rural areas, bicycle-sharing schemes have been set up through which bicycles or e-bikes are available for temporary use and can be returned to a different point from where they are picked up. Initial evaluations of the health benefits of such schemes suggest that, although the majority of

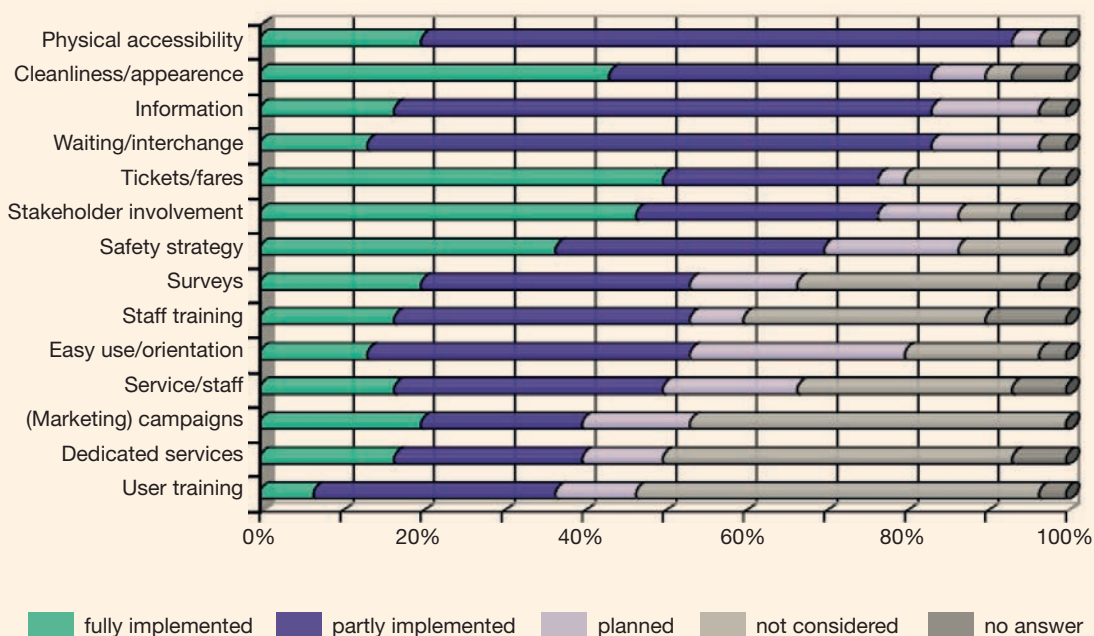
users are younger than 45 years, there are also positive health impacts for older users (Woodcock et al., 2014).

Public transport

Evidence shows that interventions in public transport can prevent a significant reduction in older people's participation in activities. Such activities include visiting exhibitions, museums and libraries; going to restaurants; exercise or playing sports; travelling or going on tours; playing with or helping children/grandchildren; participating in community or voluntary organizations; going to professional events or trade union meetings; and going to classes or lectures (Hallgrimsdottir, Svensson & Ståhl, 2015). Ageing populations can also be seen as an opportunity for public transport providers to attract an important and growing target group (Box 5).

Box 5. Perspectives from the public transport sector

An EMTA report pointed out that healthy and active ageing offers potential benefits for both older people and public transport providers – public transport has an important market in the increasing number of older people, while older people can use public transport to remain mobile for as long as possible. The EMTA survey asked metropolitan transport agencies in 2007 which strategies and measures they had planned or implemented to react to the demographic change.



The results highlight the trend of involving older people as stakeholders in consultations, planning and decisions for transport. EMTA also recommends clear communication strategies improving the image of public transport among older people and increasing efforts to service quality, cleanliness and punctuality.

Source: Fiedler (2007).

Cities need to apply accessibility criteria and guidelines more consistently to overcome barriers by adapting existing public transport systems.

Implementation of age-friendly guidelines for public buses, trams and trains has shown promising results for improving satisfaction and perceived usability of the bus system. It may help older people to maintain participation in social life (Broome et al., 2013). Evidence from both reviews and individual studies suggests that measures to improve transport accessibility may have significant equity benefits. Those who most need improved access – not least the most vulnerable – might gain most (Hallgrímsdóttir, Svensson & Ståhl, 2015).

Accessible and reliable public transport options affect the health and well-being of older people.

A longitudinal study from Sweden found access to transportation and activities to be the third strongest predictor of quality of life, mobility and functional limitations, after education and age (Elmståhl & Ekström, 2012). Accessible public transport has to provide more than wheelchair-accessible vehicles because older people perceive many different barriers in access to public transport. These include knowledge and information; availability, frequency and reliability of transport; flexibility of routes and stops; affordable ticket prices; and confidence to navigate transport systems. Gaps exist in the evidence about which barriers and facilitators have the greatest impact, however (Broome et al., 2009).

Main areas of intervention for more accessible public transport include:

- making public transport easy to use, improving the quality of pre-trip and on-trip information and considering barriers for impaired individuals (no complex technical knowledge needed, considering the digital divide – user-unfriendly ticketing machines or complex tariff schemes can contribute to barriers that prevent more frequent usage);
- planning of public transport services with all age groups in mind and considering the increasing demand of ageing societies – new approaches are necessary to overcome barriers, including improved demand-responsive services, more frequent scheduling outside working hours and improved links between pedestrian infrastructure and public transport, such as bus buddy programmes or flexible route schemes (Broome et al., 2013);

- reduced fees or free transport for older people and for individuals with disabilities that also consider the need for accompanying people.

Social facilitating factors are the presence of helpful staff, positive attitudes and willingness to help, such as with information.

Age and disability awareness training for staff and enforcement of traffic rules are frequently recommended strategies for interventions (European Conference of Ministers of Transport, 2000; OECD, 2001; UNDP, 2010). Incentives and regulatory structures need to be scrutinized. For example, punctuality targets for public transport may contribute to bus drivers setting off before people are safely seated. Training and appraisal criteria for drivers and transport staff can encourage staff to strive to be approachable, inform, assist and improve safety and security (Broome et al., 2011).

On-demand services and other support to improve mobility

Older people need support in the transition phase when they are no longer willing or able to use their own cars.

When people get older they can become trapped in habitual car use as they are not used to, or have little or no experience of, public transport; as such, they are unaware of the available services (Oxley & Whelan, 2008). Encouraging the use of different kinds of active transport options early in life and throughout the life-course is important and has been pointed out as necessary for sustainable development (Nordbakke & Schwanen, 2013). Women over the age of 55 years are less likely to use the car, but are also more likely to live with functional limitations or disabilities: for them, public transport options are particularly important. Impracticality of public transportation (particularly in suburbia and in remote and rural areas) adds to car dependency and disadvantages for participation in older age (Zeitler et al, 2012; Hausteijn & Siren, 2015).

Public transport systems and local transport planning have to adapt to the needs and expectations of the increasing share of older people; public transport will have to attract older passengers and familiarize them with the use of services to be sustainable. For rural areas, the development of appropriate rural alternatives and provision of public transport systems could help to secure road safety and support the transition from driver to non-driver (Hanson & Hildebrand, 2011).

Specialized community transport can offer services and support (such as taxi vouchers) for disabled people and others with special needs.

The services provided by voluntary or private sectors are crucial to mitigate further health consequences for those at risk of exclusion. The community service landscape is changing rapidly (Freund & Vine, 2010) and new demand-driven opportunities are evolving, based on new technology. Policy can stimulate and promote such alternatives and shape transportation systems of the future that are user-friendly and appropriate for all ages (Box 6).

Box 6. Case study: Cyclopousse, Lyon

The region of Lyon, France, launched rickshaws as an innovative public-private partnership to provide transportation services accessible by and tailored to older people. The “cyclopousse” can transport two people to the destination of their choice in a perimeter of between 500 metres and 1.5 kilometres. The service is free for recipients of home allowances and fairly cheap for regular users. It provides friendly, comfortable and secure means of transportation, based on a proximity approach, which in particular reaches older people at risk of social isolation.

Local authorities can collaborate with private or social enterprises to support other alternative on-demand transport services.

Sustainable concepts of transport, such as car-sharing schemes, emerge driven by cities and citizens alike. These might enable older people, who use the car less often or only for short distances, to save money and alleviate the pressure of maintenance. The potential of such innovative sharing schemes for older people is underexplored and it remains unclear whether car-sharing could also work in more rural and remote areas.

Policy interventions and initiatives by action area and objective

Table 2 follows the structure of this chapter’s proposed directions for interventions and objectives and adds examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 2. Practice examples for transport and mobility from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Infrastructure for active mobility and walkability (cross-cutting with domain 1: outdoor environments)	Promoting walking among older people	● Intersectoral “active city” working group ● Health economic assessment tool for walking and cycling ● Pedestrian streets with lighting, shade (tree lining) and interesting street fronts ● Accessible walking paths with resting points, water points and points of interest along the path (paths with thematic information, billboards with mental exercises, routes along meaningful places) ● Guided walking tours on different themes (led by volunteers) ● Walking groups (e.g. Nordic walking, women groups etc.) ● Intergenerational walks (e.g. historical city walks; older people volunteer to walk children to school) ● City map of places suitable for physical activity

Table 2 contd

Action area	Objective	Examples of policy interventions and initiatives
	Pavements	● Making walkability audits with older people ● Ensuring regular maintenance of pavements with remedial work and repair of slippery and uneven pavements and walkways ● Ensuring good room for passage and avoiding obstructions (garbage, parked vehicles, plant pots) ● Ensuring new pavements fulfil accessibility criteria and considering special curb design
	Increasing road safety and reducing motor traffic and speed	● Better enforcement of traffic rules and laws ● Awareness campaigns and education programmes on road safety ● Pedestrian priority in city centres and historic, cultural and social sights, including provision of seating and restricted car traffic (only essential traffic to support local businesses, drop-off/collect and limited free parking) ● Speed indication devices (local volunteers to monitor) ● Road safety observatory
	Supporting safe cycling infrastructure	● Creation of cycling lanes separate from pedestrians and cars ● Well connected network of bicycle lanes with easy access from residential districts and older people's residences and reaching locations of interest ● Safe and wide cycling lanes (that allow riding at different speeds) ● Self-service bicycle-sharing schemes ● Bicycle traffic counting devices ● Intergenerational cycling events and bicycle workshops
Public transport	Developing and enforcing accessibility standards in public transport	● Understanding and investigating barriers to use ● Priority seating ● Barrier-free vehicles and low-floor buses
	Offering reliable and affordable public transport options	● Surveying appropriateness of routes and density of traffic stops (in particular with connections to socioeconomically disadvantaged areas and rural and remote areas) ● Real-time information service at bus stops ● Considering flexible bus route services ● Neighbourhood minibus services on specific routes with door-to-door pick-up and drop-off (shop route; health route) ● Considering concessions or free travel schemes

Table 2 contd

Action area	Objective	Examples of policy interventions and initiatives
	High-quality and appropriate public transport service for older people	- Ensuring the presence of staffed service desks and ticket offices in the neighbourhood - Simplifying complex ticketing - Ensuring maintenance and safety of bus shelters - Staff training on age and disability awareness, safety and security - Regular customer satisfaction surveys (including older people) - Adjusting training and appraisal criteria for drivers and transport staff to promote approachable and assisting attitudes
On-demand specialized transport services and other support to improve mobility	Technological solutions	- Accurate and accessible automated on-trip and pre-trip information with audio and visual information - Consideration of the digital divide; offering “offline” alternatives for transport planning information and ticketing service - Online private ride-sharing schemes
(cross-cutting with domain 6: civic engagement and employment)	Supporting transition from the car to other means of transportation	- Regular car-free days (bicycle parades, street festivals) - Training for road safety and mobility without the car - Special incentives/campaigns for using public transport
	Specialized community services for people with special needs	- Taxi vouchers - Door-to-door transport services for people with special needs (e.g. organizing training and ensuring volunteers, including in remote areas) - Special neighbourhood minibus services at specific times to reach medical and social services, access to local shops, day and community centres and for participation in events (especially in urban fringes, rural and remote areas)
	Support and facilitation of alternative transport schemes	- Car pools and car-sharing - Bicycle and e-bike-sharing - On-demand bicycle taxis with priority rates for frequent users

Resources and toolkits

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Domain 3:
housing

Domain 3: housing

Introduction

It is possible to age at home even when health declines and care needs arise, but the home needs to be suitable for the changing needs of older people. A large part of the housing stock in the WHO European Region and worldwide has not been designed to accommodate the needs of older people in terms of safety, accessibility, location and independence. Existing housing stock may therefore need building modification. Moreover, within the home a number of environmental hazards (such as mould, noise, cold, overcrowding and accidents) can threaten health (Braubach, Jacobs & Ormandy, 2011).

Even in early old age – and growing in importance with increasing functional limitations – difficulties can appear in keeping up with house maintenance tasks; these increase the risk of injuries. In people of higher old age (over 80 years), especially as the risk of frailty increases, difficulties in moving around, climbing or descending stairs and getting out may lead to increased risk and fear of falls (Rowles & Bernard, 2013). Homes that are maladjusted to the needs of older people can set off a whole chain of consequences that include the risk of accidents and injuries and difficulties in performing the activities of daily living. These can mean that the older resident needs to move into more costly settings of care (Braubach & Power, 2011).

This chapter considers housing: the third of the eight domains of the AFEE framework. Housing corresponds to the domain with the same title in the original WHO global guide (WHO, 2007a). This is the third of three domains that address the physical dimension of age-friendly environments. Housing has important

interactions with the creation of accessible outdoor environments that support independence, as described in the chapter on domain 1. It is also strongly connected with domain 2: transport and mobility, which considers the environment around the house and the connections between residential settings.

Issues of housing for the ageing population also have important links with domain 8: community and health services. As most people want to age at home rather than in institutions, an increasing number of older people will receive social and health care services at home rather than in an institutionalized setting. While this chapter includes sections on the home as a site for prevention and rehabilitation, the important topic of home care and health care services at home is covered in the chapter on domain 8: community and health services. Nevertheless, the designs of both new houses and adaptations to the home are essential to assist professionals and family members in fulfilling these tasks. Private and public houses occupied by older people need to be made fit for these additional functions, so readers are advised also to consult the relevant sections in the chapter on domain 8.

Strategic directions for policy interventions

The goal of interventions in this domain is to provide adequate, accessible, safe and affordable housing; a more seamless continuum of housing choices; and support for ageing in place through measures modifying the existing housing stock and making newly built houses better adjusted to older people's needs.

Housing is an important determinant of health and quality of life of older people. Housing conditions have been identified as one of the mechanisms through which social inequality translates into health inequality (Braubach & Savelsberg, 2009). One reason housing is so crucial for older people is that they spend a larger amount of their time at home than other age groups (for example, in the United Kingdom older people spend 70–90% of their time at home). Older people wish to stay in their own homes and familiar surrounding as long as possible, rather than moving to potentially more adapted or accommodating locations or residential care facilities (Rosso, Auchincloss & Michael, 2011). The political aim of “ageing in place” is based on this aspiration and has been widely adopted.

Homes can be supportive of active and healthy living on multiple levels. The physical design and layout of houses influence healthy living, exposure to risks and the ease of performing daily activities. Moreover, influences of household composition and the direct housing environment can provide opportunities for social contact, social networks and feelings of safety and support. Research has shown that falls can be prevented and older adults’ functional ability preserved by

multifactorial home-based programmes that include home evaluations and modifications; physical activity or exercise; education, vision and medication checks; and assistive technology to prevent falls (Chase et al., 2012). Alongside assessments and adaptations for homes that reduce physical barriers for impaired individuals, the home is also a setting to support prevention by ensuring safe physical activity, healthy living and rehabilitation (Stolee et al., 2012; Geraedts et al., 2013).

Studies suggest that the burden of maladjusted and unhealthy housing for older people in the European Region is high, as are the costs to society related to it. A study from England, United Kingdom (Garrett & Burris, 2015), found that the total cost to the national health service attributable to the health outcomes for older people from unhealthy housing is some £1.4 billion (around €1.7 billion) per year. This includes direct costs to the health system alone and represents only a fraction of the total cost to society, which could be saved if hazards were removed or reduced to a non-health-threatening level. It has been estimated that the investment of £10 billion needed to improve all the 3.5 million “poor” homes in England, United Kingdom, would pay for itself in just over seven years

Key facts

- Older adults spend a large proportion of their time at home; for people aged over 80 years this can be more than 80% (Iwarsson et al., 2007).
- In the age groups between 65 and 84 years, the majority (67%) live with a partner, 28% live alone and 2% live in institutions in the 31 countries for which data were available. In the age group 85 years and over, the proportion of those living with a partner decreases to 32%, while almost half (47%) live alone and 13% in institutions (Eurostat, 2016).
- Low indoor temperatures have been estimated to cause 13 deaths per 100 000 population each year in the WHO European Region. Older people are at greatest risk of indoor cold-related health effects (WHO, 2006; Braubach, Jacobs & Ormandy, 2011). In 2014 11.8% of people aged over 65 years in the EU reported being unable to keep their home adequately warm (Eurostat, 2015b).
- High indoor temperatures are also a health risk, in particular for people of advanced ages and with pre-existing medical conditions. The European heatwaves in 2003 were responsible for more than 70 000 deaths. Significant consequences were also caused by the Russian heatwaves, forest fires and associated air pollution in 2010 (McGregor et al., 2015). In 2012 16.6% of people aged over 65 years in the EU reported being unable to keep their home comfortably cool during the summer (Eurostat, 2016).
- In the EU 47% of non-fatal injuries among older people occur at home (EuroSafe, 2013). Poor design or construction of homes plays an important role in home accidents.
- Injuries in people aged over 60 years account for almost 60% of all injury-related hospital bed days (Bauer & Kisser, 2013). More than one quarter of all people suffering a hip fracture die within a year of falling; another 50% never return to their prior level of mobility (EuroSafe, 2013).
- Of people aged over 65 living independently, 30% fall each year (Bauer & Kisser, 2013). Falls are the most preventable cause of needing nursing home placement. Home-based exercise programmes and home safety interventions can reduce the number of falls by 15–20% (Gillespie et al., 2012).

and continue to accrue benefits into the future. More policy efforts are needed to reflect the housing-related needs of older people.

A number of policy frameworks at the international level and an increasing number of national frameworks support commitments to improve housing to ameliorate health and quality of life. The Istanbul Declaration on Human Settlements (UN-Habitat, 1996) features a commitment by Member States to “endorse the universal goals of ensuring adequate shelter for all and making human settlements safer, healthier and more liveable, equitable, sustainable and productive”. Within the EU the European Social Charter identifies the right to adequate housing under article 31 (Council of Europe, 1996).

The following sections bring together potential objectives, features and initiatives for the main areas of intervention that practitioners and policy initiatives have identified as relevant for age-friendly housing. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

Combating inequity through improved housing

Ensuring equitable availability of adequate housing for older people is crucial in reducing the health gap and protecting older people under socioeconomic pressures from serious health consequences.

Housing quality is an important factor for older people’s mental health (Howden-Chapman et al., 2011; Kendig, Clemson & Mackenzie, 2012). Older people with lower socioeconomic status are more likely to live in disadvantaged neighbourhoods and occupying lower-quality housing; they are also more exposed to environmental risks in the private home or residential area (Braubach & Fairburn, 2010). Socioeconomic pressure can lead to insufficient investment in maintenance (Begley & Lambie-Hanson, 2015). Research on social determinants of health and well-being suggests that housing tenure explains the prevalence of functional limitations in people aged over 75 years, even when it is controlled for higher age, living arrangements and subjective income adequacy (Matthews et al., 2005).

In some countries in Europe – in particular in rural and remote areas – essential services such as connection to a sewerage system or basic sanitation like having a bath or shower may be an issue, with older people usually even more affected than other age groups (WHO Regional Office for Europe, 2012c; Eurostat, 2015c).

Affordability is critical.

High house prices and rents and housing shortages in many metropolitan areas have made living in urban centres less affordable. Living at the periphery, however, may make access to community life and services more challenging. The availability of subsidized housing and housing adapted to the needs of older people or in compliance with accessibility standards varies widely across Europe. Production of social housing in the EU decreased between 2009 and 2012, while at the same time the number of households on waiting lists for social housing increased (Housing Europe, 2015). Housing and related services have also been particularly adversely affected by the economic and financial crisis as governments cut expenditure (Frazer & Marlier, 2011). Nevertheless, a number of countries in central, eastern and southern Europe that have traditionally had high rates of home ownership have in recent years started to develop new social housing programmes.

Additional financial pressure can be caused by utility costs – such as the cost of heating – which may be high compared to pension levels in the area. This creates the risk that older people may face tough choices between spending on heating and on other essentials, such as food or co-payments for medical services. Large differences occur between countries in the European Region, but in some countries over 40% of older people are unable to keep their houses adequately warm and another 17% are unable to keep the home cool in the summer (Eurostat, 2015b; 2016).

Some countries have shown how collaboration with private landlords can help to tackle housing-related problems.

Local authorities or social renting agencies can mediate between private landlords and low-income households. Programmes of such agencies have, for instance, used vacant property for social housing or offered tax incentives to private landlords who charge moderate rents. Taxation on empty homes is an

alternative means of reacting to artificially high housing prices (Housing Europe, 2015). With the policy aim of ageing in place, the demand for adaptations of private homes is increasing.

Support for home assessments, repair, maintenance and adaptation

The wish to stay in familiar homes and environments calls for awareness of risks that increase with age-related decline in functional abilities.

Approximately half of falls occurs indoors, so the home environment is critical for avoiding them (Rubenstein, 2006). Four areas of household activities have been identified that may be particularly problematic for older people: entering and exiting the home; moving around at home; climbing stairs; and using sanitary and kitchen facilities (Braubach & Power, 2011). In order to support ageing in place, age-friendly policies need to understand these risks better and help to prevent them.

Evidence suggests that home safety interventions such as hazard assessment and active modification of homes can reduce the risk of falls in older people.

Studies indicate that unsafe features of stairs can be a frequent source of accidents. Risks frequently identified include uneven or excessively high or narrow steps, slippery surfaces, unmarked edges, discontinuous or poorly fitted handrails and inadequate or excessive lighting (Braubach, Jacobs & Ormandy, 2011). A high risk of falls was also found in homes with irregular pavements leading to the residence, loose carpets on kitchen and bathroom floors, loose electrical wires and inconvenient doorsteps. Poor home surroundings such as garden paths and walks that are cracked or slippery from rain, snow or moss are also dangerous. Entrance stairs and poor night lighting can also pose risks (WHO, 2007b). Prevention of falls can be achieved through programmes of combined home assessments and active interventions in home modification, particularly for older people with functional limitations or a history of falling (Braubach & Power, 2011).

There are indications that combining individual assessments and home modifications with physical exercise, education and vision checks or assistive technology may yield the strongest effects (Chase et al., 2012). Home safety measures are more effective when delivered by an occupational therapist (Gillespie et al., 2012), when they involve a multidisciplinary team and when

targeted at those with a history of falling or known risk factors (Clemson et al., 2008).

Whether home modifications by themselves can be effective in reducing injuries (Turner et al., 2011) and which are the best tools and protocols for making home assessments are yet to be established. Nevertheless, measurement of both objective and perceived home environments is recommended (Wahl et al., 2009). Among the factors addressed in a typical home visit are assessment and improvement of lighting; identification and removal of rugs and other trip hazards; and installation of railings on staircases and in bathrooms and toilets. Home safety interventions and home modifications have also been discussed as an important element in helping people living with dementia to feel safe (Alzheimer Europe, 2013).

A number of countries have developed systems to provide programmes and grants for home modifications to adapt existing housing for older people to enable independent living and home care as far as possible.

Publicly subsidized provision and easy access to home maintenance and modification services can help to make homes more accessible and support ageing in dignity and autonomy, avoiding injuries or institutionalization and the high costs related to this (WHO, 2015b). Evaluations of provision of such services in local communities consistently found that older people greatly valued such services. Moreover, old people living in more accessible housing perceive their homes as more useful and meaningful (Nygren et al., 2007). Less centrally organized solutions in local communities include local repair shops and caretakers in buildings.

House maintenance assistance could help to prevent injuries and increase quality of life.

Older people spend less on home maintenance and repair and often live in areas where there are more complaints about less well maintained houses. Projects could assist older home owners financially and with practical help to keep up maintenance (Begley & Lambie-Hanson, 2015).

The decision to apply for home adaptations or to move to more adjusted housing involves complex processes and decisions that involve the maintenance of self-identity.

Well-being and healthy ageing depend not only on accessibility problems but also on the perceived usability, meaning and satisfaction of home (Nygren et al.,

2007). Even with declining health, the majority of older people manage to find ways of supporting themselves in mainstream housing. Any offer of support needs to have dignity, autonomy and the choice and agency of the older person at its core. If not, home modifications and other supporting devices or services installed may disrupt routines, remind the older person of disabilities and affect the sense of identity. Interventions that aim to support autonomy, control and self-management are more likely to be successful if aligned with preferences and experiences of the older person (Pettersson, Löfqvist & Fänge, 2012).

Setting and enforcing standards for newly built houses

A distinction is often made between general housing – made up of houses where older people live independently or with partners or family – and specific sheltered housing that is a more age-segregated arrangement like residential care, where care can be delivered. A number of topics related to accessibility of public buildings also apply to the design of publicly or privately owned housing.

In many countries, guidelines have been developed that cover aspects of safety and accessibility to take account of the changing needs of ageing societies and offer tips for modification and maintenance to make housing more age-friendly (see the section on

resources and toolkits). As information and guidance these should also be widely applied to private houses where older people live. Public subsidies can support their implementation. The guidelines can also be used as checklists to assess action and investment needed for public housing options for older people, including for assisted living or similar residential housing.

Development and implementation of age-friendly building guidelines should be promoted.

Safety from risks is a particular consideration in buildings built especially for older people, like retirement homes and senior centres, where large numbers of individuals with elevated risk live or visit regularly (WHO, 2007b). In mainstream housing, however, few effective controls on new and existing dwellings are in place. In recent times, a number of more specific design guidelines for age-friendly housing have been developed, such as that under the WellHops project (Box 7).

Duties and responsibilities of private landlords can be framed in such a way that they include responsibility for maintenance and safety, backed by regulations and supported by systems and resources to monitor their compliance.

Action plans have included campaigns and publicity to inform housing owners and managers (in both the public and private sectors) of the benefits of good

Box 7. Applying WELHOPS guidelines in the City of Győr, Hungary

The municipality of Győr, Hungary is among several cities across Europe that use guidelines for the planning of houses for senior citizens, which were developed and piloted through the WELHOPS project. WELHOPS involved partners from five countries: Hungary (Győr municipality), Italy, Spain, Sweden and the United Kingdom.

The guidelines list design principles that support senior citizens in their goal to live in their own homes for as long as possible, developed by an international working group of sociologists, economists, architects, engineers and those responsible for study and research in social welfare. They cover aspects of both the direct home and housing needs of older people and accessibility, as well as the quality and safety of the immediate surroundings and of services closely related to housing such as parking, cleaning or postal services.

These guidelines have supported both the planning of new homes and the renovating of older people's homes. The local government also created a dedicated fund, which allows older people to apply for money to renovate their flats according to the design guidelines.

Sources: Interreg IVC (2015); Brighton & Hove City Council (2007).

maintenance and improvement, including the protection of their property from deterioration. While awareness-raising campaigns are important, their effectiveness could be improved by legal measures placing duties and responsibilities for the maintenance of their housing on landlords, housing companies and managers.

Creating broader housing choices that support independence

Healthy housing conditions can stimulate active and healthy lifestyles, prevent limitations in activities of daily living and help to avoid unnecessary institutionalization.

Local authorities have an important role to play in the provision of housing choices that meet the need of older people, support participation and ageing in place and protect older people from conditions that could threaten their health and safety.

Providing appropriate housing choices for an ageing population goes beyond planning for institutional long-term care (see also the chapter on domain 8: community and health services). For older people the house and direct housing environment often determine the decision of whether living independently is still possible; whether age-related reductions in physical and cognitive capacities can be compensated by building modifications; and whether relocation to a long-term care setting is necessary. For a number of countries (such as the United Kingdom) it has been noted that overall little progress seems to have been made in creating wider housing choices and improving housing affordability for older people (Pannell, Aldridge & Kenway, 2012).

While needs and life situations change with increasing age, financial or administrative barriers and a shortage of more supportive housing options in the same neighbourhood may hinder older people from moving to a more adjusted place. In parallel, architectural as well as financial limitations may not allow for the implementation of required building modifications. For older people their apartment or house may have become too big or maintenance might be overburdening, especially for those living alone. Home owners may want to sell their house, in which case special advice regarding the administrative and financial implications of such a decision is needed.

Local authorities and urban planners increasingly recognize the importance of housing for the health and welfare of older residents.

Housing is highly relevant for the health and well-being of older people, which calls for active involvement, close cooperation and coordination of efforts from public health professionals, urban planners, older people, social services and housing departments at the municipal level and other actors.

Local and regional authorities' strategies and policies can strengthen the provision of varied and adequate housing that promotes health, intergenerational mix and social contact for an ageing population (Kärnekull, 2011). Local authorities typically assess the housing needs of their areas and have responsibility for developing and implementing strategies for the provision of new housing and the application and enforcement of standards. They can also ensure that inadequate housing in the existing stock is identified and necessary action taken. Especially in countries where local authorities administer a large proportion of the public or social housing that aims to provide housing for less wealthy population groups, public housing can have an impact on the health and well-being of the most vulnerable groups of older people (Braubach, Jacobs & Ormandy, 2011).

Some countries have reacted to the demographic shift by providing senior housing, adjusted to the accessibility needs of older people.

In some countries, local authorities and housing markets have responded to the changing needs of older people by building new senior housing, mapping and increasing the accessibility of existing neighbourhoods and houses and counselling senior citizens about available age-friendly housing options. Accessibility of age-friendly housing is increased by handling separate waiting lists or registers for adults aged over 55 years who are interested in more accessible housing.

Where special apartments for older people are available, their attractiveness will depend on where they are located. (See also the chapters on domain 1: outdoor environments and domain 2: transport and mobility on well maintained neighbourhoods with good services – health care, groceries, childcare – at walking distance and with connections to cultural and other leisure-time activities.)

Box 8. Health has no age – a comprehensive settings approach for health promotion in residential homes

When older people live in residential care facilities, this has major health effects on users, staff and relatives. In contrast to hospitals with a longstanding tradition of health promotion, however, examples of health promotion are rare in this setting.

The innovative health-promoting Health has no age project in Vienna investigated the potential of a comprehensive settings approach for health promotion in residential care facilities for older people, with the aim of promoting positive health for all stakeholders (residents, staff, relatives and volunteers). It was conducted as a pilot in three sites (with 900 residents and 300 staff) of Vienna's largest care provider from 2011 to 2013. Evaluation of the pilot used qualitative and quantitative methods. Starting with a systematic needs assessment, the project developed and implemented health promotion strategies and measures that comprised:

- a mobility enhancement intervention for residents as a randomized controlled trial, which demonstrated effectiveness;
- measures to improve the involvement of relatives;
- several staff health measures.

The project showed that it is possible to implement a comprehensive health promotion approach in this setting. Agenda-setting for health promotion in this setting seemed especially successful. Experiences and results of a follow-up project have led to further specification and the scaling-up to other homes in Vienna in 2013–2015. Scaling-up/transfer projects were undertaken in Styria.

Sources: Krajic, Cichocki & Quehenberger (2015); personal communication from Ursula Huebel, Wiener Gesundheitsfoerderung/Vienna Health Promotion.

Residential care homes are a form of housing that provides a continuum of housing choices from assisted living to more service-intensive settings. They have received more attention in recent years, strengthening their role as a health-promoting setting. An example is the Health has no age project in Austria (Box 8).

Access to services needs to be addressed in relation to housing.

Older people, especially those in higher age groups, may need support with a number of services in order to be able to lead independent lives and to age in place. This includes small repairs in the home, cleaning and gardening, which may be expensive and scarce and are often not included in available social services. Volunteering services and family or neighbourhood help can provide support with some of these services for older people who live alone or far from their families. Where older people live together and jointly age in place, some neighbourhoods have taken the initiative to create what in the United States of America has been called “naturally occurring retirement communities” that commit to mutual support on

a voluntary basis, independent from or complementary to family support.

The home can be a site of prevention and rehabilitation.

Several intervention programmes have explored homes as settings for preventive interventions for healthy living in old age (Geraedts et al., 2013). Home-based individual exercise programmes have been shown to be effective in preventing falls, as are group-based exercise programmes (Gillespie et al., 2012).

The home might become a setting for care provision.

Particularly with technological innovation and remote surveillance programmes, the opportunities to live at home longer are expanded. Neither mainstream housing nor senior housing is usually built in ways that consider that care may need to be delivered at home. Design guidelines available for service houses and life-time homes could therefore guide the design of new senior flats that would enable care situations at home, or the modification of existing homes to allow people

in need of care to remain in their local and social settings. Despite promising results from home-based interventions, the socially isolating effects of home-based prevention and rehabilitation programmes have to be considered (see the section on ambient assisted living in the chapter on domain 8: community and health services).

Alternative models of living: collaboration with private and user-driven initiatives

Alternative housing options for older people include sharing close neighbourhood ties with people who are not necessarily from one's own family. Such arrangements enable spaces that respect older people's wish for autonomy while encouraging social support networks – for instance, in the form of older people babysitting neighbours' children and neighbours helping with shopping and gardening. To enable such neighbourhood ties, however, houses need to be built and designed in a way that supports social contact and exchange with neighbours, while giving the possibility of retreat.

Extra-care houses can be an alternative to residential care.

Special service houses or “extra-care houses” have been developed in some countries as an alternative to classical residential care services. Such houses typically provide self-contained accommodation adapted to some limitations in functioning and activities of daily living (such as mobility, hearing and visual limitations) and offer a number of services and care packages that can support people living with limitations and can mitigate the need for relocating to institutional care. Often staff offices offer 24-hour support, and access to other services such as catering, activity rooms, library, hairdresser and similar is provided in the house or neighbourhood (Croucher, Hicks & Jackson, 2006).

Cohousing is a created community of private homes clustered around shared space.

In cohouses people have their own self-contained apartments but are also living as a group sharing common rooms (such as a guest room, hobby room, large kitchen or dining room) in a building designed for ease of access and stimulating social interaction. Cohouses emerged mainly as the result of civil society campaigns that established close cooperation with public housing authorities. Exact models for cohouses differ from country to country, ranging from building/home owners' cooperatives to

rental arrangements with municipal housing providers. The participative management of the house and communal facilities gives older people the opportunity to make decisions together and stay socially integrated in the community (Choi, 2004; Killock, 2014).

In multigenerational houses different generations live under one roof.

In some countries communal forms of living – similar to cohouses – have developed around the concept of multigenerational living. By co-locating families, students, working adults and seniors in the same house, multigenerational housing stimulates social living activities and facilitate neighbourhood support in the housing community. Its aims are to increase intergenerational understanding and support.

Another form of intergenerational housing has emerged in particular in university cities – namely, intergenerational flat-shares or home-shares that exchange housing space for help in the home (Fox, 2011). The concept recognizes that older people may have a room to spare in their house or apartment while in need of support or company, and that younger generations are often in need of cheaper housing while having some time and enjoying physical fitness. Not-for-profit organizations match older people and younger people and provide assistance in case of problems. Typically, rent would be cheaper for the young person in exchange for company and/or an agreed level of support (like cooking or cleaning, but not including care) and trial periods are arranged to test that a mutual understanding of what is expected works in practice (Sánchez et al., 2011). A nursing home in the Netherlands has applied such a system on an institutional level, allowing university students to live rent-free in small apartments in a retirement home in exchange for 30 hours of “good neighbouring” services.

Villages and retirement communities facilitate access to existing services and aim to enable older adults to enhance their own well-being.

Village concepts take the idea of service homes one step further by enabling older people to remain in an independent home and maximizing the potential of community social organization (Scharlach et al., 2014). People live in specifically designed supportive environments and can access specialized services and programmes without relying on family and friends. Individual villages have been built for people living with dementia, such as De Hogewijk in the Netherlands. While first evaluations from similar projects in the United Kingdom have been

positive, various ethical debates and concerns about dignity, costs and equity in access remain to be further explored (Liddle et al., 2014).

Support for relocation

The aim of ageing in place is to enable people to stay in their home as long as possible. Nevertheless, there may be a time when relocation into safer, more adapted or more supportive settings is necessary. Such transitions are important moments when older people can be supported in order to avoid negative consequences. Relocation can be supported in a number of ways (Granbom et al., 2014), including into care facilities and assisted living.

Easing the negative impacts of giving up a home and sustaining a sense of continuity can be supported by return visits to the former residence or neighbourhood.

Case workers, family and local actors can help older people who relocate to retain social relationships and have opportunities to make return visits. In some instances, maintaining membership in local associations, churches or clubs can help to facilitate the transition.

Security and safety, including crime prevention

Housing professionals can offer an important contribution to making housing safer and healthier.

All those involved in the design, construction, management, maintenance and repair or rehabilitation of housing and building-related equipment need to be aware of the links between housing conditions and health. By involving different sectors and approaches, new and innovative solutions can be developed to avoid health- and safety-threatening housing conditions.

Failing to consider the needs of older people can cost lives in times of emergencies like heatwaves, flooding or earthquakes.

Extreme weather conditions and their effects on health are already felt. Future projections in the face of climate change suggest that events with the magnitude of the Russian heatwave of 2010 could become more common. In the light of both a growing proportion of people over the age of 65 years and continuing migration to cities, the risk of mortality represent a high potential

risk to human health (Watts et al., 2015). Emergency preparedness calls for well coordinated intersectoral planning, such as for an increasing number of heatwaves, floods or storms (Vandentorren et al., 2004). Heat-related health risks, for instance, can be reduced through systematic development of heatwave early warning systems (McGregor et al., 2015). Effective measures to communicate risks and prevent disasters require cooperation between environmental, social and medical organizations (WHO Regional Office for Europe, 2013b).

A concern in a number of countries in Europe is so-called “excess winter deaths” among older age groups of the population.

Poor control of indoor temperature (cold in winter or heat in summer) causes deaths and other adverse health events among older people and people with pre-existing health problems. The quality and energy efficiency of housing across the social gradient should be reconsidered (WHO Regional Office for Europe, 2012c). Ensuring fuel efficiency is a key priority in both new housing developments and refurbishment of older housing stock, with older people often more affected and the oldest of old age groups at higher risks of adverse health effects.

Crime prevention is crucial to increasing the feeling of safety at home.

Concerns over safety at home also include the perceived threat of crime and burglary. Concerns over both safety and fraud targeted at older people threaten housing satisfaction and are often raised in age-friendly assessments with older people. In Ireland, for example, a number of communities have started to collaborate with the local police to improve older people's awareness of common security risks. Intersectoral collaboration between local security forces and seniors in a specific neighbourhood are very popular and well accepted initiatives that can increase feelings of safety (Age Friendly Ireland, 2015).

Policy interventions and initiatives by action area and objective

Table 3 follows the structure of this chapter's proposed directions for interventions and objectives and adds examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 3. Practice examples for housing from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Combating inequity through improved housing (cross-cutting with domain 1: outdoor environments, domain 2: transport and mobility and domain 5: social inclusion and non-discrimination)	Ensuring equitable availability of adequate housing	● Enforcing maintenance and quality guidelines of public and private housing ● Ensuring the possibility of housing allowances or subsidies (including for age-friendly flats)
	Ensuring appropriateness and affordability of age-friendly housing options	● Regulating the housing market to provide alternative housing options for home owners ● Ensuring adequate quantity of social or low-cost housing ● Counteracting socioeconomic segregation of neighbourhoods by mixing areas of subsidized rental and owner-occupied housing ● Ensuring non-discrimination in access to adapted housing options (based on individual assessments rather than age barriers)
	Ensuring access to essential services	● Offering subsidies to ensure access to safe water and sanitation ● Providing information and subsidies for heating and energy efficiency
	Ensuring supportive neighbourhoods	● Ensuring accessible and well lit and maintained outdoor environments and entrances to buildings ● Building ramps and connecting barrier-free footpaths and cycle paths to apartment buildings ● Ensuring accessible transport options (distance to transport stops of less than 300 metres)
Support for home assessments and modifications (cross-cutting with domain 6: civic engagement and employment)	Providing support for repair and maintenance	● Providing a small repairs home service (also by organizing volunteers and/or general “caretaker” professions) ● Providing home hazard assessments and professionally supported evaluations of fall risks ● Organizing local repair shops to carry out or provide guidance for repairs and adaptations (such as car repair shops run by people in the neighbourhood or volunteers) ● Caretakers/concierges in buildings
	Providing support for home modifications	● Establishing local services to advise on individual needs and feasible modification measures in a given home ● Offering grant schemes for home adaptations and maintenance ● Offering government-subsidized home maintenance support ● Providing specialized advice and support for home adaptations for people suffering from dementia

Table 3 contd

Action area	Objective	Examples of policy interventions and initiatives
Setting and enforcing standards for newly built houses	Age-friendly building and design guidelines	● Developing adjusted or implementing existing design guidelines for adapted housing for older people ● Application of “lifetime homes and neighbourhoods” concepts – ordinary homes designed to incorporate design criteria that can be universally applied to new homes at minimal cost ● Setting up “20-minute neighbourhoods” with key facilities within easy reach of older people’s housing ● Ensuring intergenerational mix in newly constructed apartment blocks
Creating broader housing choices that support independence (cross-cutting with domain 7: communication and information and domain 8: community and health services)	Developing a vision and strategy to meet changed housing needs of older people	● Using housing needs assessments and surveys to understand the needs and preferences of older people and how well they are met by the available housing market (such as a fairer housing delivery plan) ● Monitoring and regulating trends in the real estate market, creating favourable conditions for provision of accessible housing ● Setting up a multisectoral working group or partnership ● Mapping accessible housing and identifying sites where adaptable structures and diverse housing options could be developed ● Including older people in urban and residential planning committees (also reaching out to very dependent and isolated groups)
	Informing and helping older people to plan for ageing in place	● Providing municipal guidance on available services, support, housing options and application procedures ● Raising awareness of fall prevention in home settings ● Offering counselling and information on grants to solve older people’s housing problems and help to apply for support ● Accessible housing registers where older people interested in more accessible housing can register
	Making existing housing stock appropriate and safe for older people	● Providing sufficient numbers and diverse sizes of age-friendly and accessible flats in the community (to fit the diverse needs of older people) and assisted housing for older people ● Providing information, support and incentives for the modification of existing homes ● Providing timely access to accessible housing for older people ● Considering technical solutions to support older people who are dependent or need more support ● Decentralizing distribution of age-friendly and specialized housing so that older people who are willing to relocate do not need to leave their district

Table 3 contd

Action area	Objective	Examples of policy interventions and initiatives
	Access to services	● Maintaining services in neighbourhoods ● Keeping a registry of reliable and honest services and handy people (sometimes connected to information centres or telephone hotlines) ● Providing agencies to coordinate services and provide information on services that enable people to stay at home for longer (such as a home improvement agency, geriatric centres) ● Developing options for home delivery (such as, most prominently, a meals on wheels services) ● Developing service housing (see the chapter on domain 8: community and health services)
	Multisectoral collaborations	● Collaborating with small businesses to support integration, proximity and co-location of services (in particular commercial services such as bakeries, grocery stores, pharmacies and health centres) ● Collaborating with care providers, third sectors and networks of professionals to provide support to people in their homes ● Creating initiatives with private tenants to build more accessible housing and make their houses more age-friendly – e.g. avoiding noise and litter ● Municipal bank offering support products useful and safe for older people
	Home as a site for prevention, rehabilitation and care provision	● Offering remote (phone- or IT-based) support or home courses to encourage physical activity ● Offering gym and exercise at home programmes ● Providing visiting services from specialists (occupational or physiotherapists) to find solutions and offer training on how to overcome functional limitations
Alternative models of living	Extra-care housing	● Providing choice of houses with care
(cross-cutting with domain 4: social participation)	Cooperative housing	● Setting up cooperative housing arrangements with common areas that allow for joint activities
	Intergenerational housing	● Intergenerational flat-share: centralizing municipal services to bring together students in need of accommodation and older people who would like to share their houses with a young person ● Offering support for intergenerational housing projects
	Village models	● Offering supported housing solutions, service housing, grouping of individual apartments and houses around an infrastructure that enables autonomy

Table 3 contd

Action area	Objective	Examples of policy interventions and initiatives
Support for relocation	Access to residential care for all if needed and wanted	● Creating effective and responsive systems for exchange of flats (e.g. from larger houses to smaller more adapted housing) ● Organizing day care and assisted living solutions for those who do not require 24-hour complex care ● Providing assisted and safe housing and access to day care services for people living with dementia ● Integrating residential housing in communities
	Supporting a feeling of “home”	● Providing adequate space in residential care facilities, and for retention and storage of private possessions and artefacts/memories ● Reconnecting people with their past
Security and safety (cross-cutting with domain 5: social inclusion and non-discrimination)	Crime prevention	● Collaborating with police on crime prevention programmes to protect older people from fraud ● Organizing ambassador and peer-to-peer initiatives (e.g. Seniors for Themselves; Crime Prevention Ambassadors) ● Organizing community policing initiatives, with police presence in neighbourhoods that are perceived as unsafe ● Having regular meetings between older people in the neighbourhood and police forces
(cross-cutting with domains 1: outdoor environments)	Feeling of safety at home and in the neighbourhood	● Offering free home safety checks ● Offering technical support for personal alarms (buttons or pendants), video surveillance, door phones and security lights ● Fire prevention at home ● Setting up call centres for older people with or without remote sensors in ambient assisted living ● Combating antisocial behaviour ● Setting up text alerts and friendly call initiatives (that have a registry of older people at risk of isolation), and organizing visiting services if the person does not respond to the phone in the morning
	Extreme weather events	● Organizing visiting schemes during heatwaves ● Offering support for energy-efficient adaptations or fuel subsidies during extreme cold
	Emergency preparedness	● Ensuring emergency exit doors adapted to the needs of people with reduced mobility ● Developing services to identify, locate and reach at-risk populations

Resources and toolkits

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Domain 4: social participation

Domain 4:

social participation

Introduction

The goal of reducing loneliness and social isolation and reaching out to people at risk of social exclusion is at the heart of many interventions in local action plans for age-friendly environments. An international review of longitudinal data on individuals' social relationships and mortality risk suggested that older people with adequate social relationships had a 50% greater chance of survival than those with poor or insufficient social relationships. Lack of social relationships was a risk factor for mortality comparable with, if not greater than, such well established risk factors as smoking, obesity and physical inactivity (Holt-Lunstad et al., 2010).

Social participation affects all aspects of health and well-being, from mental health and dementia to the risk of emergency admissions to hospital resulting from avoidable conditions such as severe dehydration or malnutrition (WHO Regional Office for Europe, 2012a). Local initiatives have consequently created numerous interventions and programmes that aim to combat loneliness and isolation in older adults. Nevertheless, important gaps in research and evaluations remain, and more in-depth studies are needed on the effectiveness of interventions in this domain to improve the evidence base.

Social participation is the first of three domains of the AFEE framework that address the social dimension of age-friendly communities. It corresponds to the domain with the same title in the original WHO global guide (WHO, 2007a). In this chapter "social participation" is used in the sense of a person's involvement in activities that provide interaction with others in society or in the community. This encompasses participation not only in formal structures and leisure activities (such

as social, cultural and leisure activities, meetings and religious participation) but also in informal structures of socializing and communicating that can take place in private spaces (in the form of neighbourhood contacts, virtual and telephone contacts and visiting friends and family). This comparatively broad view of social participation builds on a synthesis of definitions that have been used in studies of ageing (Levasseur et al., 2010). Social participation of older people can positively affect emotional and spiritual well-being, mental and physical health and quality of life.

If social participation is restricted due to a perception of barriers to social life, older people can become socially isolated. Social isolation and loneliness are often used interchangeably: while they have strong links, however, they are not the same. Social isolation refers to an individual's lack of contacts or ties with other people, such as with family members, friends, neighbours or others. In this sense, it is often regarded as an objective measure of individuals' personal social relations. Loneliness is typically seen as a subjective and negative experience, felt by individuals based on perceptions of their personal social relationships. Loneliness is therefore often understood as a mismatch between the actual and desired quality and quantity of an individual's social interactions (Heylen, 2010; Burholt & Scharf, 2014).

Social isolation can exist without loneliness and loneliness without isolation. While some people may have many social contacts and still feel lonely, others may have few contacts and not experience loneliness. Some older people may be content in their own company or even actively seek to live away from others; they may not feel that the lack of social interaction has a negative influence on their quality of life, so they might not wish to participate in social activities. Others may prefer to

have more contact with people or a greater quality of contact with people to whom they feel close, and this may lead to feelings of loneliness.

Unwanted social isolation and loneliness can be a consequence of non-supportive social environments and may lead to adverse outcomes for individuals and communities. Social isolation has a tendency to occur alongside other risk factors of poorer well-being (such as health problems, limitations in functioning, financial difficulties and political or neighbourhood exclusion). This can challenge age-friendly policy approaches that aim to promote active ageing and ageing in place by increasing the gap between those who age actively and those who are not reached and remain isolated (see also the chapter on domain 6: civic engagement and employment).

The following sections bring together potential objectives, features and initiatives for the main areas of intervention that practitioners and policy initiatives have identified as relevant for increasing social participation and combating loneliness of older people, and that are part of age-friendly action plans in many instances. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

Strategic directions for policy interventions

The goal of interventions in this domain is to promote older people's participation in social life and to combat loneliness and isolation. This can be achieved by creating, maintaining and promoting supportive environments that enable social interaction and active lifestyles and by providing opportunities for meaningful social activities that encourage older people to leave their homes and maintain supportive social networks.

The right of older people to live a life of dignity and independence and to participate in social, economic, cultural and civic life is firmly embedded in the EU's commitment to active ageing and solidarity between generations (Council of the European Union, 2012). Participation of older people is also a key concept of the 2002 WHO active ageing policy framework (WHO, 2002b). Moreover, the recent *World report on ageing and health* reconfirmed that social participation of

older people is one of the main pathways but also one of the main aims of active ageing (WHO, 2015b).

The original WHO global guide showed that older people wish to have a good balance between different kinds of activities – leisure, creative, spiritual or productive (WHO, 2007a). It also pointed out that local authorities should ensure good accessibility and affordability of such activities, as well as advertising them via a broad range of information channels (see also the chapter on domain 7: communication and information).

Over the past 10–15 years evidence on good practice relating to older adults' participation and social relationships has grown considerably. Research has found a relatively high prevalence of loneliness in the European Region. Exclusion from social relations has been linked to a range of negative health and well-being outcomes (Houtjes et al., 2014; Dumitrache et al., 2015).

Several factors can put older women and men at greater risk of loneliness and isolation; in order to be effective, interventions need therefore to respond to existing needs and be sensitive to the specific situations of different target groups. Loneliness, social isolation and social exclusion are risk factors most relevant for those in very old age and those without family networks or with insufficient support from a network of friends in the neighbourhood (Dykstra, 2009). Living in poverty or in rural and remote areas can act as additional risk factors. Loneliness and social isolation affect women more frequently than men.

People with dementia are often faced with stigma and may find it even more challenging to continue participating in social activities. Moreover, organized community support for social inclusion and activities may be more limited for many who live in rural or remote communities, making well functioning informal community support all the more important. Finally, many older people who are informal caregivers in their families can themselves be at risk of loneliness and isolation. For them, respite services and support groups of caregivers in the community can help them maintain a socially active life (see the section on supportive services for informal care givers in the chapter on domain 8: community and health services).

Evidence supports the idea that people who have higher levels of activity as they become older are

Key facts

- More than 50% of men aged 80 years and over still live as part of a couple household, while in 18 EU countries the majority of women of this age live alone. There is also a north–south divide in living arrangements among those aged 80 years and over: most live alone in northern Europe, while it is less common in southern European countries (Rodrigues, Huber & Lamura, 2012).
- In the EU, almost 18% of people aged 65 years and over participate in the activities of recreational groups or organizations (Eurostat, 2006).
- Among EU countries, between 3% and 45% of older people on average meet friends, relatives or colleagues less often than once a month or never; between 5% and 30% report that they lack a friend who could provide emotional support (Eurostat, 2006).
- Late-life social engagement is linked to a lower risk of mortality, and for older people with mild cognitive impairment it is linked to a lower risk of decline to moderate-to-severe cognitive impairment (Marioni et al., 2012).
- Social interventions that aim at alleviating social isolation are generally more likely to be effective if developed within the context of a theoretical basis, and when offering social activity and/or support within a group format. Interventions in which older people are active participants also appear more likely to be effective (Dickens et al., 2011).

happier and have better functional ability and lower mortality (Menec, 2003). Different activities can influence health and well-being in older ages in different ways, but in general, research has found that being active in social and productive activities is positively related to happiness, functioning and reduced mortality. (For details on the importance of voluntary or economic activity see the chapter on domain 6: civic engagement and employment.)

While the social activities offered at the community level often find enthusiastic attendance, they may tend to attract those older people who represent a healthier and more active part of the population, missing out on some groups of older people most at risk of social isolation and loneliness. A challenge for local authorities' initiatives in this domain is to reach out to older people most in need of social interaction, emotional and practical support, such as older men living alone or people from ethnic minorities (see chapter on domain 5: social exclusion).

The extent to which older people feel lonely or to which the empowerment of older people to take active roles in creating their own social activities has been successful across Europe, however, reflects differences in the traditional roles of family and neighbourhood cohesion. For example, the proportion of older people who live with their extended family and receive informal help if they need support with everyday living differs widely between countries in Europe.

The following sections describe the range of interventions that communities have developed for promoting social participation of older people and counteracting social isolation and loneliness. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

A range of opportunities for social participation accessible for older people

Many age-friendly community activities empower older people to participate in activities and increase awareness of the range of activities available.

The range of activities from local initiatives and action plans usually comprises both interventions targeted at special groups of older people and integrated activities. Among the activities most frequently included in action plans are:

- joint events for everyday activities, such as common meals and leisure activities;
- activities offered at seniors' clubs or community centres, such as talks, crafts classes, music or dancing;
- cultural activities;
- sport and physical activity events;
- traditional activities and events;
- educational activities (see the section on lifelong learning below);

- information and awareness-raising events to make existing community offers better known (including community days or weeks dedicated to activities with and for older people, which also provide a “market place” where the full spectrum of activities and initiatives in a community can be presented);
- special events for intergenerational activities, such as knowledge exchanges.

To make activities affordable, public subsidies and private sponsorship are often needed, including offers of public space. Community action plans should keep these aspects of affordability in mind. For example, for some cultural activities and access to public institutions, the community might offer reduced prices or free access (for example, public libraries and access to computers and Internet in the public space).

Other issues of access – such as transport, location and timing – can be crucial issues for reaching out to target groups. Activities in this domain can often build on existing engagement and a range of community assets from different private initiatives, nongovernmental organizations (NGOs) and other stakeholders, and on initiatives by older people themselves. An example is the city of Udine’s volunteering network *No alla*

solit’Udine that aims to foster social participation and combat loneliness (Box 9).

Building on these assets, it is important that older people are involved in planning and implementation of activities and helping to tailor them to their interests, wishes and requirements. The special needs of people with disabilities and those living with dementia have to be taken into account. Activities need to consider the areas in which they can conveniently reach out to older people.

Local authorities can build on existing community assets, volunteers and initiatives and support them – for example, by ensuring continuity of offers, coordination and awareness and by supporting accessibility for older people.

In many places, bottom-up initiatives organize formal or informal opportunities that help facilitate social contact and participation. Such initiatives involve volunteering to organize events, create networks of older people and reach out to people at risk of isolation. Many activities are organized by older people or with the active involvement of older people, which is crucial to empower the community, and using existing assets (Green & Tsouros, 2008).

Box 9. *No alla solit’Udine* [No to loneliness]: a network of volunteering action in the city of Udine, Italy

The activity of voluntary associations and their contribution to the community’s life represent irreplaceable social capital in many countries in Europe. With one quarter of the population above the age of 65 years, the Italian city of Udine has a strong tradition of volunteering when it comes to providing support for its elderly citizens.

The publicly managed telephone helpline *No alla solit’Udine* [No to loneliness] coordinates a broad volunteer services network. It serves older citizens who live with frailty or disability, or who are at risk of social exclusion. It is open for four hours every morning.

The helpline is organized by the municipality of Udine and serves older people, many of whom have no family or network to support them or lack the economic means to pay for commercial services. Moreover, the services provided complement the standard public home care services, with a focus on preventing social isolation of older people.

Three telephone operators are employed by the municipality to answer calls from older people and connect them with the services they need, the bulk of which are provided by volunteers. As of 2016, around 1000 volunteers from 30 organizations offer a variety of services, from delivery of groceries to providing advice, offering help for small repairs or with transportation, shopping or visiting and providing company; for example, reading the newspaper or books to those with limited eye sight. Since 2004, when the project started, there has been a continuous increase in use of the services.

Sources: Municipality of Udine (2015); personal communication from Gianna Zamaro, Stefania Pascut and Furio Honsel.

Reaching out to new participants and raising awareness of activities can also be achieved via word of mouth from people already engaged in them.

Social activities are usually reported as popular and attractive to many older people in the community. Older people in the neighbourhood and volunteers in seniors' organizations provide opportunities to reach out and motivate others to participate by showing them ways to profit from the social life of their community. For some groups in the population and in special cultural contexts, however, reaching out to older people to overcome isolation can be more challenging.

In some cases, offering targeted activities for some groups – such as for older men or for people from ethnic minorities – has been considered to provide an entry-point to community participation. Finally, a relatively recent emphasis has been given to the organization of activities with and for people living with dementia to enable them to continue to participate in everyday life.

Reaching older men in social and health-promoting activities poses specific challenges.

Provision of community-based activities for men may contribute positively to the physical, mental, social and occupational health of older men (Ormsby, Stanley & Jaworski, 2010). Reaching men in social and health-promoting activities has been found a challenge, in particular for men from lower socioeconomic groups.

Interventions that target men specifically are initiatives such as “men's sheds” projects (Golding et al., 2008; Milligan et al., 2013). As a much-cited practice example, the men's shed movement has grown popular in several countries including Australia, Canada and Ireland. Men's sheds can be successful in providing men with a place where they feel they can be in control of, use and share common activities – in other words, develop a sense of purpose, accomplishment, control and social engagement (Ballinger et al., 2009). They therefore aim at improving important determinants of health and well-being (Golding, 2011; Wilson & Cordier, 2013).

Increasingly, information technology can play a supporting role in creating awareness of existing activities that enable social participation.

New technologies (computer forums, Internet telephony and video calls) allow for new ways of keeping in contact, exchanging news and seeking social support remotely with families and friends. Many communities therefore offer computer courses for older people, which are

very well received (Blažun, Saranto & Rissanen, 2012). Staying connected through new technological means might offer important benefits and counteract loneliness, in particular for older people with mobility limitations or when family members live far away.

Municipalities increasingly use online information platforms and forums for older people to help them find activities that are relevant. A number of more specific innovative practice examples aim to use information technology for isolated individuals (see also chapters on domains 7 and 8). This broader use of innovative models and of technology to support older people to combat social isolation is only just emerging. Examples include:

- tele-links to call centres of social service providers for people living alone;
- access to and training in the use of technology to foster intergenerational exchange and bridge geographical distances within families;
- moderated phone conferences to link older people with severely reduced mobility.

Intergenerational activities have the potential to effectively promote social participation and at the same time help tackle age segregation.

Another focus of community action is frequently the contribution of intergenerational activities and “help to self-help” support in communities. Intergenerational activities encompass a whole range of options, including:

- joint activities with shared spaces or facilities (such as intergenerational community centres or multigeneration houses);
- activities of passing on experience and memories to younger generations;
- volunteering of older people in nurseries, museums and after-school centres;
- volunteering of children or young people in institutions for older people;
- activities at schools where adults or older people are invited;
- intergenerational learning activities.

Supportive environments for social exchange in the community

Attractive local meeting places and accessible neighbourhood centres can create important incentives for participation.

Communities may be able to offer buildings and facilities for activities organized by seniors' organizations

or for spontaneous events. The presence of a dedicated space that is part of a larger infrastructure, such as an intergenerational community centre for informal and formal activities, can foster social participation in the neighbourhood. Ways to organize meeting spaces range from facilities dedicated to services for older people – such as those linked to day care and respite centres – to multipurpose senior centres and houses that can host a multitude of activities, and social service centres or completely community-organized meeting places. Religious and church facilities/activities also play a traditional role in many communities.

Existing infrastructures can often be used more effectively, such as by co-locating activities for older and younger people.

Intergenerational facilities and activities can contribute to overcoming age segregation and stereotypes about “typical activities” for older people. In order to facilitate such activities, however, spaces and locations where people of different generations can interact are required. Local authorities can help to foster such intergenerational spaces by promoting the use of typically age-segregated spaces by other groups. For instance, local communities have established senior clubs and activities in schools, libraries and district centres, or have located after-school centres, residential care centres or public housing with older people closer together. Such approaches do not need new buildings but rather aim at more efficient use of existing infrastructure. Another example aiming at more efficient use of resources is to use school buses during school hours to transport older people.

Meeting places can also be fostered in NGO or private settings with public support.

Open (drop-in) meeting spaces or centres in neighbourhoods that are organized by local NGOs or communities can play an important role in promoting social integration and providing space for activities organized by private/volunteer activities. These may include bottom-up events such as courses, workshops or meetings. Courses and activities may rely on the provision of special equipment, such as for sports or educational activities or libraries: this is an area where local authorities are often enabling partners of bottom-up movements. The range of equipment for rent or booking could include games, computers and other workshop equipment.

Another example comes from Israel, where older people are supported by ESHEL – the Association for the

Planning and Development of Services for the Aged – to live in apartments, which are large enough to act as meeting places, in exchange for regular gatherings of a group of older people – so-called “warm homes” (Berg-Warman & Chekhmir, 2006).

Lifelong learning

Activities of lifelong learning provide continuing options for personal development in older age and for learning in an intergenerational context.

Opportunities for lifelong learning offered by local communities include training, seminars, lectures, conferences and “universities of the third age”. Senior academies and universities of the third age are among the most widely implemented measures at the local level across the WHO European Region. They can provide a wide range of benefits, including:

- personal development of older people;
- fostering social contact and preventing social isolation;
- intergenerational exchange and mutual learning;
- mental training and protective measures against a decline in brain capacity;
- acquiring knowledge and skills that are essential for benefiting from innovation and the “silver economy”, such as ICT for ageing populations;
- continual learning and improvement of basic skills, obtaining new qualifications and re-skilling or up-skilling for better employment chances, including self-employment and volunteer activities.

A wide range of actions are undertaken in cities and communities. Austria, Luxembourg, Slovakia, Slovenia and the Scandinavian countries are reported to have the highest participation rates in lifelong learning activities across the EU, with the lowest observed in the Baltic states (except Latvia), Hungary, Greece, Spain and Poland (EAEA, 2006; 2015). The disparities between countries, however, are large: the concept of lifelong learning barely exists in some countries, whereas in others it is well developed (Mercken, 2004). Some university of the third age initiatives have gained experience and developed over many years, as in the example from Slovenia (Box 10).

The European agenda for adult learning and the EU expert group on adult learning provide support for adult learning initiatives: experience from EU-wide initiatives may provide inspiration and guidance on activities that can be initiated (Box 11).

Box 10. The Slovenian Third Age University

Since 1984, the Slovenian Third Age University has grown steadily. It offers learning, educational and socializing opportunities and fosters social participation with retired people, older workers and those in the pre-retirement period as a target group, as well as professionals and volunteers. As of 2016, it comprised a national network of 52 universities in 51 localities with about 21 000 students, more than 1000 mentors and 1000 volunteers. Its practice has been widely researched, which resulted in the development of its own educational and organizational model.

The Slovenian Third Age University aims to:

- provide access to cultural events and education for personal growth, better employability and active citizenship of older adults;
- provide integrated advice and guidance, as well as opportunities within a broad range of topics related to active and healthy ageing;
- enable older people to mobilize interpersonal support (knowledge, skills, information and emotional support);
- conduct and publish research of older adult education and learning;
- train professionals as well as volunteers of all generations who want to be active in the field of older adult education;
- raise awareness and conduct public campaigns about older people, old age and the role of older adult education.

The scope of the network has grown steadily and now includes activities such as employment services for older adults.

Source: Slovenian Third Age University (2017).

Box 11. Experience from existing European Commission initiatives

Each year, the European Association for the Education of Adults (EAEA) recognizes achievements in innovation and excellence in adult education. The EAEA Grundtvig Award highlights project results that produce new ideas, new partnerships, new methodologies and a new understanding how adults' learning can be improved. In 2012 the specific topic of the award was projects that promote the active participation of older learners in society. Projects received included aspects of intergenerational learning and innovative partnerships.

The winning Crosstalk project aimed to give seniors, schoolchildren, young people and migrants the skills and confidence to communicate effectively with local media, and thus to make an active contribution to their own communities. Parts of the project motivated young and old people, from different backgrounds, to come together and share stories. Furthermore, a media education course provided different generations with the desire, self-confidence and necessary expertise to become involved in local media production and to tell stories about the games they played or play today. Participating seniors and children/young adults visited their favourite places, interviewed each other in turn and produced an audio guide, interactive maps and a manual with course materials.

The project was designed and carried out by a team of nine European partners in seven countries, which included community media practitioners, adult education specialists and university researchers.

Source: EAEA (2012).

While lifelong learning programmes are very popular among participants, there is little evidence of the benefits for people at specific risk of isolation.

Participation tends to be influenced by social class, gender, ethnicity and previous years of education (NIACE, 2010). A positive link is evident between previous levels of education and socioeconomic class and likelihood to engage in further learning (Aldridge & Tuckett, 2007), and women are slightly more likely than men to participate (Jenkins & Mostafa, 2012). Although available participation surveys use different methodologies and definitions, there is some evidence that relatively more advantaged populations are more likely to be engaged in activities of lifelong learning – including at higher age groups – than more disadvantaged groups, pointing to the challenges in reaching out to the latter.

Links between learning and health in older age have received increasing attention. The focus on the impact of learning interventions on health has been pursued by a number of studies, producing evidence that such a link exists. There remain gaps, however, in the evidence about causal pathways that transform participation to health. In particular, there are issues of potential selection bias, as healthier older people are more likely to participate in lifelong learning activities (Desjardins, 2008). This also raises the question of potential barriers to participation, which the following section explores.

Overcoming barriers to participation in lifelong learning among older people is crucial.

Three main levels of barrier to lifelong learning interventions exist (Slowey, 2008).

Attitudinal barriers: those with low confidence, resilience, self-esteem and other factors relating to mental health may question their ability to engage in learning. Individuals might cite lack of interest and “I’m too old to learn” as a reason for non-participation (Moss & Arrowsmith, 2003; Aldridge & Tuckett, 2007). For some, the term “learner” has connotations of some kind of deficit or inadequacy and they can therefore have reduced expectations or capacity to learn. Any

experience of discrimination across the life-course might have a negative impact on self-confidence and the social and cultural capital available to the individual (McNair, 2007: 61).

Situational barriers: there is some evidence that those who are less mobile and living in rural areas are less likely to engage in learning (Department for Work and Pensions, 2004). The same may be the case for those with health issues or disabilities (Dench & Regan, 2000).

Institutional barriers: these can arise from challenges to commit to the cross-sectoral cooperation that should be inherent in governing initiatives of lifelong learning for older people, which calls for ownership and responsibility cutting across government departments and organizations. Besides health and social departments, the education sector can be crucial to success.

Equity of access and broader reach can remain a challenge.

Older people participating in adult learning activities often tend to be in relatively good health (Findsen & Carvalho, 2007), predominantly middle class, female and with previous higher levels of formal education. Given some evidence that older people in better health who are more socially active and integrated in their communities are more likely to engage in lifelong learning activities, reaching out for more balanced participation – including of those facing the barriers listed above – remains an important concern.

Policy interventions and initiatives by action area and objective

Table 4 follows the structure of this chapter’s proposed directions for interventions and objectives and adds examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 4. Practice examples for social participation from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Range of opportunities for social participation that are accessible for older people (cross-cutting with domain 7: communication and information)	Empowering older people to participate in activities and increasing awareness of existing activities	● Conducting needs assessments and providing evidence-based offers and activities accordingly ● Regular activity calendars including information on accessibility or special support available for people with impairments and limitations, with a special section on events targeted at older people ● Mapping of existing activities and services and identifying gaps (including activities to promote physical activity and sports, dancing, cultural activities, educational offers, cognitive activities and training, performing arts, crafts, computer courses, spiritual activities) ● Day and field trips for older people ● Communication campaigns to increase awareness of existing activities ● Funny and appealing communication tools that present evidence-based information on well-being effects of active lifestyles ● Personal invitations to events sent to older people ● Announcements of local and neighbourhood events not only online but also in local media and in accessible print formats ● Encouraging participants to spread the word and bring friends and peers
(cross-cutting with domain 5: social inclusion and non-discrimination, domain 6: civic engagement and employment and domain 7: communication and information)	Supporting existing community assets and services from different stakeholders and NGOs, and making them accessible and appropriate for older people	● Involving older people in planning and implementation of activities (e.g. physical activity leader training) ● Supporting and maintaining infrastructure of NGOs' and community-based initiatives ● Facilitating formation and support initiatives of local groups – e.g. providing opportunities for informal education sharing experiences, feelings, learning, skills exchange and peer-to-peer support (for instance, through goal setting and reporting back in next group meeting)
	Meeting potentially divergent needs sensitive to health and functional abilities, gender, age, ethnic background, education and income	● Door-to-door transport services for interested participants with mobility limitations ● Buddy system or volunteer services that offer the possibility of organizing an accompanying person (and reduced entry fees for such volunteers) ● Supporting culture-specific activities and events led by ethnic and minority groups (cultural festivals, associations) ● Volunteer befriending schemes to support “getting out and about” and accompanying to activities those at risk of isolation (especially in rural areas)
(cross-cutting with domain 2: transportation and mobility)	Monitoring and supporting equitable access and affordability	● Providing activities and events free of charge ● Analysis of participation in events (including analysis of barriers to participation among non-participating older people) ● Concessions and senior cards that give free or preferential access to activities and institutions of culture, tourism and sport

Table 4 contd

Action area	Objective	Examples of policy interventions and initiatives
Supportive environments for social exchange and places and providing opportunities for social contact in the community, neighbourhood (cross-cutting with domain 3: housing)	Decentralization of activities	● Coordinating a plan of well dispersed activities across cultural, social and recreational centres and private locations
	Creating local meeting places and support neighbourhood centres	● Creating and supporting open (drop-in) meeting spaces/centres in neighbourhoods and communities that promote social integration and provide space for bottom-up activities ● Senior centres/houses to host a multitude of activities and volunteer centres ● Providing an equipment library (e.g. sports or educational equipment) for leisure activities in neighbourhood and community centres that can be booked or rented, such as indoor bowls, table tennis, games, billiards, computers and workshops
	Using existing infrastructures more effectively by collocating activities for older and younger people	● Marketing of activities not only for older people but for everyone or as intergenerational activities (avoiding the image that they are only “for old people”) ● Establishing senior clubs and activities in schools, libraries and district centres (such as handicrafts, chess, card games, knitting, sewing, cooking, IT and web 2.0) ● Locating nurseries or after-school centres together with residential and day centres for older people ● Computer courses open for older people in schools and youth clubs ● Using school buses during school hours for community transport of older people ● Awards for clubs with the highest membership and participation in relation to population ● Policy to allow flexibility in urban planning for uses for older people in public and private properties allowing for integrated and mixed uses in buildings designed for older people (e.g. places of worship and central places for older people) ● Alzheimer’s/senior cafés
	Support day care and activity centres	● Establishing daily activity centres, resource and active senior centres in neighbourhoods in order to animate older people ● Creation and support to senior clubs – providing “clubhouses” offering social and educational activities, health and psychosocial support and a variety of leisure-time facilities ● Facilitation and encouragement of neighbourhood networks and regular neighbourhood meetings – for instance, incentives to use private houses for senior activities, clubs for older people etc.
	Creating opportunities for social interaction attractive to older men	● Opportunities to meet and share experience targeted and led by older men, e.g. “men’s sheds” programme ● Allotments and community gardens

Table 4 contd

Action area	Objective	Examples of policy interventions and initiatives
Multilevel interventions	Combining the promotion of physical activity with social and cognitive activity	● Animating open group exercises (can be conducted by volunteer trainers professionally trained to adapt exercise programmes to specific needs of older people) ● Involving people in disadvantaged districts in designing walking paths and tours in their own neighbourhoods ● Facilitating formation of local groups of older people to meet regularly to exercise brain training, games and other skills
	Multilevel interventions targeting social isolation and loneliness	● Group-based interventions, like community-based exercise programmes, support and self-help groups ● Individual interventions for homebound, isolated or frail older people, like visiting programmes and befriending schemes ● Technological interventions such as hearing aids, telephone calls, web-based social media for older people, video call-based support
Lifelong learning	Promoting life-long learning in collaboration with educational institutions	● Universities of the third age ● Schools for all ages: involving older people in school activities, reading groups, field trips etc. ● Promotion of informal learning in workshops for memory and cognitive training, life-story writing workshops and other local activity groups ● Talks and workshops related to healthy living and physical activity ● Capacity-building to train older volunteers as trainers
Multisectoral collaborations	Collaboration with institutions of arts and culture	● Museum-organized workshops and activities in residential homes and neighbourhood centres ● Accessible infrastructure and tours in museums, including tactile and audio-supported visits (e.g. information in braille, audio guides) ● Special offers for accessible cultural events (opera, cinema and theatre) like senior subscriptions, free shows for members of pensioner associations, preferential rates etc. ● Collaborating with libraries to provide mobile and decentralized services in neighbourhoods and in assisted living and residential homes and delivery of books at home ● Libraries as meeting places for intergenerational reading groups, talks and lectures
	Collaboration with the private sector	● Supporting age-friendly business community and ethics through communication structures of chambers of commerce ● Offering accessible holidays and senior tourism

Resources and toolkits

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Domain 5:
social inclusion and
non-discrimination

Domain 5: social inclusion and non-discrimination

Introduction

Everyone has a right to health, regardless of gender, age, disability, mental health, social position and ethnicity. Nevertheless, social exclusion, isolation, harmful stereotypes, discrimination and abuse threaten healthy ageing and increase the equity gap in old age (WHO, 2015b). Social exclusion and isolation can put older people, and particularly the oldest of old age groups, women and minority groups, in vulnerable positions and may prevent them participating in society (WHO, 2007c).

This chapter presents the fifth domain – social inclusion and non-discrimination – of the AFEE framework. This is the second of three domains that address the social dimension of age-friendly communities and corresponds to the “respect and social inclusion” domain in the original WHO global guide (WHO, 2007a), which referred to different experiences of disrespect and exclusion among older people. Drawing on the growing evidence base on social determinants of health, this chapter puts social inclusion in age-friendly cities in the context of the wider debate about equity in health (SEKN, 2008).

People who are socially included have access to resources – economic, as well as social and personal – and make use of these opportunities. They can participate actively in society and family and are more resilient in the face of environmental stress and ill health. In contrast, socially excluded or marginalized individuals or groups experience (often multiple) disadvantages that can both limit this access to the social, cultural, economic, political and environmental resources required for health and lower their quality of life (Scharf, Phillipson & Smith, 2005a). Related concepts relevant

to inclusive age-friendly environments are social capital, social networks, intergenerational relations and actions to improve these for older people: these will be discussed in the following sections.

From consultations with age-friendly cities it has become clear that it is particularly challenging for local actors to reach out to those older people who are most in need and at risk of disadvantage or social isolation. Compared to the WHO global guide, the AFEE project has therefore broadened this domain to include issues of health equity and social exclusion that researchers and practitioners have identified as important in recent years.

A key feature of the WHO global guide (2007a) was a focus on developing an age-friendly approach from a citywide perspective. Research since the mid-2000s, however, has focused at least as much on the role of individual neighbourhoods (De Donder et al., 2013) and this chapter addresses these findings.

Strategic directions for policy interventions

The goal of interventions in this domain is to create environments that are socially inclusive places, where all people – regardless of age, gender, social position, health or disability – are respected and have opportunities to participate and contribute. To enhance equity, it is crucial to complement population-based interventions with targeted efforts, reaching out to people most at risk of poor health and exclusion, understanding their specific needs and promoting their health and quality of life.

Negative health outcomes are correlated with social exclusion, adverse life events and isolation at all levels of health (WHO Regional Office for Europe, 2013b). WHO defines social exclusion and vulnerability as “dynamic, multi-dimensional processes driven by unequal power relationships across four dimensions” (SEKN, 2008:2). Box 12 describes the four dimensions

of exclusion – economic, political, social and cultural – defined by the Social Exclusion Knowledge Network (SEKN) and adds a new fifth dimension of environment. These create a continuum of inclusion/exclusion characterized by unjust distribution of resources and unequal access to capabilities and rights, resulting in health inequities.

Box 12. Forms of social exclusion in later life

1. The **social dimension** is constituted by proximal relationships of support and solidarity (e.g. friendship, kinship, family, neighbourhood, community ... social movements) that generate a sense of belonging within social systems. Along this dimension social bonds are strengthened or weakened (see the following sections on social capital and neighbourhood cohesion and on intergenerational spaces and activities).
2. The **political dimension** is constituted by power dynamics in relationships which generate unequal patterns of both formal rights embedded in legislation, constitutions, policies and practices and the conditions in which rights are exercised – including access to safe water, sanitation, shelter, transport, power and services such as health care, education and social protection. Along this dimension, there is an unequal distribution of opportunities to participate in public life, to express desires and interests, to have interests taken into account and to have access to services (see also the chapter on domain 6: civic engagement and employment).
3. The **cultural dimension** is constituted by the extent to which diverse values, norms and ways of living are accepted and respected. At one point along this dimension diversity is accepted in all its richness and at the other there are situations of stigma and discrimination (see the following section on respect and non-discrimination).
4. The **economic dimension** is constituted by access to and distribution of material resources necessary to sustain life (e.g. income, employment, housing, land, working conditions, livelihoods, etc.) (see the following section on combating social exclusion).
5. The **environmental dimension** is constituted by the perception of inclusive and supportive environments. Described as “neighbourhood exclusion” in the literature, it relates to the bond between people and their surrounding environment and the feeling of being able to influence changes affecting the community (see the following section on combating social exclusion and the chapter on domain 1: outdoor environments).

Sources: 1–4: SEKN (2008); 5: adapted from Scharf, Phillipson & Smith (2005b).

The consequences of social exclusion can be severe and contribute to wide gaps in morbidity and mortality – such as from cancer and cardiovascular disease – emergencies, hospital admissions and re-admissions and mental health consequences (such as depression) among older people (WHO Regional Office for Europe, 2013b). The pathways between social exclusion and health consequences can be direct – for instance, through inequalities in access to health and care systems – or indirect, through social exclusion processes. These can even stem from experiences early in life, such as poor nutrition, working conditions or similar, creating a vicious circle (WHO Regional Office for Europe, 2010).

Poverty or economic exclusion is only one (albeit a central) element of social exclusion. The risk of older people in Europe facing poverty is influenced by existing social services and social protection. In some countries of the EU older people are at higher risk of poverty and deprivation than the rest of the general population. In contrast, in some countries older people face lower poverty and social exclusion rates compared to other age groups. In most countries women face a greater risk of poverty and severe material deprivation than men; this gap is far greater for the generation aged over 65 years than for younger people (Eurostat, 2015d).

Key facts

- Some evidence exists that urban environments may place older people at a heightened risk of isolation and loneliness (Scharf & De Jong Gierveld, 2008).
- The social situation of older people varies widely between countries. According to Eurostat, the statistical office of the EU, in 2013 the risk of people aged 65 years and over living in poverty or social exclusion ranged from 6.1% in the Netherlands to 57.6% in Bulgaria. Older women and the highest age bracket cohorts tend to face substantially higher risks in some countries (Eurostat, 2015d).
- Social exclusion in rural areas and deprived inner cities poses specific challenges (Scharf & Bartlam, 2008).
- Social cohesion and social capital among neighbours can result in higher degrees of social organization, including instrumental support to neighbours, contributing to higher levels of well-being in older people (Cramm, van Dijk & Nieboer, 2013).
- WHO estimated in 2011 that 4 million older people in the European Region have experienced physical abuse; 29 million mental abuse; and 6 million financial abuse. The prevalence of elder abuse in the WHO European Region is high (3%) and levels among people with disabilities, cognitive impairment and dependence can be as high as 25% (Sethi et al., 2011).

Social isolation and exclusion in older age are often linked to processes of exclusion throughout the life-course, such as disadvantages and structural inequalities experienced in early life and during working age. Policies in cities often address “excluded” groups, but a better understanding of the dynamic processes that lead to inequalities and the potential agency of marginalized people can inform more sustainable policies. These focus on addressing the generative processes embedded in social relationships and on supporting genuine and full participation of those most marginalized by identifying challenges, developing interventions and transforming relationships (SEKN, 2008).

Research in these areas still has many gaps, however: older people and populations who are vulnerable to multiple disadvantages have been underrepresented in much of the literature (Levitas et al., 2007). Research on implementation and evaluation of corresponding age-friendly interventions is only now emerging.

The following sections synthesize some of the pathways that have been explored in the literature, followed by practice examples from cities aspiring to become more age-friendly. They bring together main approaches and initiatives that researchers, practitioners and age-friendly action plans have identified as relevant for tackling social exclusion, challenging negative stereotypes of older people and combating economic exclusion, as well as recognizing the varied needs of different groups within the ageing population, strengthening resilience in individuals and

neighbourhoods and fostering intergenerational activities and spaces. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

Respect and non-discrimination

About a quarter of older European citizens sometimes or frequently experience discrimination because of their age (van den Heuvel & van Santvoort, 2011). Large differences between countries, however, show that ageism is not inevitable but rather amenable to cultural, political and social contexts and interventions (Eurostat, 2015d).

Ageism is “stereotyping and discrimination against individuals or groups on the basis of their age; ageism can take many forms, including prejudicial attitudes, discriminatory practices, or institutional policies and practices that perpetuate stereotypical beliefs”.

WHO (2015b: 226)

Ageism and stereotypes can cause barriers for older people to accessing services and to realizing their full potential; they can even lead to violations of human rights, neglect of care needs or maltreatment. Discrimination in the form of ageism obscures the understanding of ageing processes and shapes patterns of behaviour in both older people and society at large, which have a negative influence on healthy and active ageing (WHO, 2015b).

Ageism is common, widely accepted and largely overlooked (Abrams et al., 2011). Consequences of ageism include negative impacts on the sense of self and mental health of older people, age segregation, cardiovascular stress, early institutionalization, loss of autonomy and the most devastating: elder maltreatment (WHO, 2015b).

Promoting more positive images of older people and ageing is one of the most frequently used strategies by local authorities to promote respect and combat ageism.

It is a crucial task for age-friendly environments to dispel the myths of ageing and the negative views of older people (Ritsatakis, 2008). Older people are a great resource for local communities and neighbourhoods and are also very diverse. It is important to increase awareness of the diversity of older people, and to value their rich experience and the contributions they make to society in general (WHO, 2015b). Social marketing and promoting the role of the municipality in setting good examples for combating age discrimination and stereotypes of ageing are critical.

Negative stereotypes are not necessarily a conscious or deliberate exclusion of older people but can simply be a product of how people categorize other people. Discrimination on the basis of age is often subtle and can arise from well intended yet patronizing expressions or lack of awareness.

Data from the European Social Survey revealed that older people (over 70 years of age) in participating countries were least likely to be perceived as competent, among other characteristics, and were viewed as having the lowest social status compared to other age groups. The survey also showed that people aged over 70 years were more likely to be viewed with pity than other age groups, but were also almost equally likely to be viewed with admiration (Abrams et al., 2011). The English Longitudinal Study of Ageing found that specific sociodemographic characteristics such as older age, lower household wealth, higher education and being retired or not working were associated with perceived age discrimination in older age (Rippon et al., 2014). To combat ageism, other stigmas that can exist alongside it have to be addressed, such as the stigmas of dementia or incontinence, which can affect different age groups (WHO, 2015b).

Conventions and charters adopted at the international and national levels promote the principles of equity and protect the rights of citizens.

The Second United Nations World Assembly on Ageing recognized the special needs of older people, which led, among others, to the Toronto Declaration on the Global Prevention of Elder Abuse (WHO, 2002c). In 2010 the United Nations General Assembly established an open-ended working group on strengthening protection of the human rights of older people, comprising all Member States of the United Nations. This group identified existing gaps in protecting the rights of older people, which sparked an ongoing discussion on the development of an international legal instrument to promote and protect the rights and dignity of older people. Against this backdrop, other regional and local charters and frameworks have been developed and can serve as an inspiration for local actors.

A public health approach and evidence-based interventions are needed to prevent and effectively respond to elder abuse, neglect and fraud affecting older people.

A number of local authorities have developed toolkits for elder abuse awareness training and mentorship programmes. For example, the BC Centre for Elder Advocacy and Support developed a three-year project with the aim of helping local communities to create volunteer-driven programmes for older people, enabling seniors to reach out to other seniors about elder abuse (BC Centre for Elder Advocacy and Support, 2012).

A lack of high-quality evaluation studies limits the available evidence on effectiveness of interventions to prevent elder abuse, but some promising programmes exist both at the population level and targeted at victims and potential perpetrators. Approaches for interventions include those designed to reduce risk factors for maltreatment by changing attitudes towards older people, those that improve support for and mental health of caregivers and those that strengthen social support (Sethi et al., 2011; WHO, 2016a). Wherever possible, programmes and interventions should be carefully monitored and evaluated and the findings shared between local governments.

Enabling skills, experience and knowledge exchange – including from the older generation to the younger – can contribute to intergenerational solidarity.

While many interventions for age-friendly environments benefit younger and older population groups at the same time, different generations and different groups within the older population face contrasting issues. It has been argued that the rapid increase in older populations, and increased efforts to accommodate needs of older people, might stoke issues of age bias and generational justice (North & Fiske, 2013). One study also found that pressures associated with gentrification exacerbate divisions between age groups (Lager, van Hoven & Meijering, 2012).

Moreover, age-friendly environments cannot be made responsive to the needs of older people to the detriment of other groups. Contact between different age groups can reduce prejudice, and older people who have positive contact with young people can improve self-worth and are more likely to be buffered from the negative effects of stereotypes against their group (Christian et al., 2014). To create inclusive and sustainable environments, the needs of different generations within local contexts have to be recognized and a better exchange between the different social groups needs to be facilitated.

Combating social exclusion

New and concerted efforts are needed to combat economic exclusion and promote health equity for age-friendly environments.

Age-friendly environments require a response to the highly unequal contexts experienced by older people in their local environments. For instance, older people who live in areas of concerted poverty can experience a wide set of interlocking disadvantages. Partnerships need to be engaged to tackle cycles of exclusion, supported by local authority efforts to understand the spatial dimensions of healthy ageing and actively support empowerment of older people and carers, as well as mobilizing different forms of welfare provision.

Prevention of poverty of older people is crucial, as financial security is a major determinant of functional ability, health and well-being.

Exclusion from material resources and very low incomes can limit the lives of older people and create barriers to healthy ageing. Economic exclusion is closely linked to other forms of exclusion

that concern social relationships, civic participation, services and health care (Scharf, Phillipson & Smith, 2005b). Research has shown that poverty (particularly where combined with ill health or disability) hampers older people's participation in community activities (Barrett & McGoldrick, 2013). Living in poor housing is one possible indicator of material deprivation and has an important impact on health and well-being of older people (see the chapter on domain 3: housing).

Monitoring of people's health and social needs has been proposed in order to broaden assessments of economic exclusion.

Health needs are often lacking from calculations of minimum income. To address this gap, a minimum income for healthy living proposes to take into account the means necessary for a healthy diet and the costs of physical activity (Morris et al., 2000, WHO Regional Office for Europe, 2012b). It also proposes to take account of social norms and expectations by counting costs related to social integration and support networks, such as those for telephone, television and presents (Hartfree, Hirsch & Sutton, 2013).

Monitoring and understanding inequalities within and across neighbourhoods helps policy-makers target action at groups of older people most in need of supportive environments.

Older people in deprived areas may be particularly at risk of social exclusion in several dimensions (Day, 2008). *Fair society, healthy lives: the Marmot Review* highlighted the fact that 45% of those living in the most deprived areas of England had either some or a severe lack of support; this compared with 35% in the least deprived areas (Marmot Review Team, 2010).

Evidence is growing that exclusion tends to be spatially concentrated in localities such as disadvantaged inner-city areas (EUROCITIES, 2009). These inequalities need to be monitored and resources made available to avoid worse environmental impacts on older people in socioeconomically deprived areas (Day, 2008; Smith, 2009). Moreover, evidence shows that neighbourhoods' access to transport can be linked to social exclusion. Interventions and policies to improve access and public transport to certain neighbourhoods (see the chapter on domain 2: transportation and mobility) can therefore be highly relevant for addressing social exclusion (Lucas, 2012). This is especially the case for rural or remote areas (Box 13).

Box 13. Healthy ageing and social exclusion in rural areas

An empirical study conducted in 10 rural communities in the Republic of Ireland and Northern Ireland helped to shed light on rural social exclusion. From in-depth interviews and focus groups with community stakeholders and older people, five intersecting dimensions were identified that characterize social exclusion in old age in rural areas:

- social connections and social resources;
- services;
- transport and mobility;
- safety, security and crime;
- income and financial resources.

The community itself can also act as a source of exclusion; this can be amplified through austerity-related cuts in spending, reduced services and demographic pressure, which are challenges of age-friendliness. Exclusion can be mediated by individual capacities (sense of agency and independence), however, and informal support and service provision in the community can partially counterbalance the lack of formal services by drawing on close links and cooperation between all possible actors.

Sources: Walsh, O'Shea & Scharf (2012); Walsh et al. (2014).

Fast social and economic changes in the neighbourhood, however, or negative experiences both in and beyond the home can be turning points that can undermine the confidence of older people in their neighbourhoods (Scharf, Phillipson & Smith, 2005a). These findings reflect the attachments older people have to their neighbourhoods but can also be linked to a feeling of inability to influence the type of changes affecting their communities (Smith, 2009) – relating to the environmental dimension of social exclusion.

Urbanization and social change can create additional environmental pressures, resulting in fast turnover of residents, changes in housing prices and closure of amenities and local services; these may affect older people in particular. Again, there is evidence of an overlap between socially excluded people and socially excluded places (Forrest, 2004).

Older people may often have lived in a neighbourhood for many years – as revealed in different studies in western Europe – and develop attachments to it. Pathways to neighbourhood exclusion can hence be viewed in relation to individuals' life-courses. Older people who have lived in their communities for many years are especially sensitive to the perceived deterioration of their local environment or of other social change more generally, such as gentrification or other change of the social composition in their neighbourhood. These can manifest in slowly emerging negative perceptions of the neighbourhood.

Research to understand the effects of social change in the neighbourhood, experiences of inclusion and exclusion and the needs of older people ageing in disadvantaged communities is only in its infancy, however. More needs to be done to understand the complex dynamics between exclusion, ageing, participation and health.

Neighbourhood exclusion can not only affect those people that grow older in deprived areas but also be a consequence of income inequalities within neighbourhoods. A Dutch study showed that discrepancies between individual income and neighbourhood status matter: low-income older adults who lived in high-status neighbourhoods had poorer physical functioning and were more lonely than low-income adults who lived in low-status neighbourhoods (Deeg & Thomése, 2005).

Targeted action for individuals in vulnerable situations

Strategies need to be developed and targeted at different groups within the older population (Buffel, Phillipson & Scharf, 2013). To tackle social exclusion, local authorities have to find out which groups of older people are at increased risk of social exclusion in their communities. Understanding their specific needs and assets, as well as increased community participation in finding solutions, have been suggested as approaches to tackle this issue. Policies can support and stimulate the process of local negotiation between the interests

of representatives from different groups in the population. A mediating role might also be needed to ensure that the voices of those with limited opportunities or less experience in speaking up are heard, and their agency promoted.

Vulnerable groups in communities include those experiencing some degree of frailty and those experiencing issues of mental health.

Frailty develops as a consequence of cumulative physiological decline over the life-course and manifests itself as age-related greatly increased vulnerability to endogenous and exogenous stressors that expose an individual to a higher risk of negative health-related outcomes” (WHO 2015b; see also Glossary). Frailty is a practical concept that diverts attention from having one specific disease to a more person-centred assessment of a holistic state of vulnerability.

Although correlated with age, frailty can be a useful indicator to assess older people’s risks and vulnerabilities (Duarte, Paul & Martin, 2013). Frailty increases the risk of adverse outcomes such as falls, worsening mobility, disability, hospitalization and death (Fried et al., 2001). Many community-dwelling older people have some symptoms of frailty; about 1 in 10 people aged over 70 years and 1 in 4 people aged over 85 years experience a noticeable degree of frailty, including all five indicators of unintentional weight loss, self-reported exhaustion, low energy expenditure, slow gait speed and weak grip strength (Clegg et al., 2013).

Several approaches to reduce frailty have been investigated in clinical trials, among which are complex interventions based on comprehensive geriatric assessment delivered to older people in the community, including home-based and group-based exercise programmes. Such interventions can increase the likelihood of continuing to live at home and reduce falls (see Introduction for a broader discussion on measures of falls prevention).

Age-friendly communities face the challenge of understanding dementia and raising public awareness to foster social inclusion for people living with dementia and their caregivers.

Between 70% and 90% of people living with dementia live in their own homes in the community, mostly receiving care from a female family member/caregiver (WHO, 2012b). As people living with dementia often feel safest in the close surrounding of their home, a major area of work

has emerged across Europe around “dementia-friendly neighbourhoods”. The body of literature emerging on this topic is very dynamic and can provide more specific guidance for community efforts. WHO has launched a global dementia observatory to provide an entry-point for further information exchange (WHO, 2015d).

Building community social capital and inclusive community institutions and capacity can be important points of synergy where age-friendly communities can ensure that people with dementia are not excluded. Dementia-friendly communities can also benefit, however, from the broader approach of age-friendly communities to ensure they receive the benefit of actions for the larger ageing population and value the contribution every citizen makes, including combating stereotypes about dementia (Box 14). This includes the need to consult people living with dementia in order not to exclude them from giving their opinions and to enable them to continue to contribute towards society. Gatherings of people living with dementia and their families and friends at an Alzheimer’s café are an example of action that can contribute to destigmatization through community engagement.

Dementia-friendly communities are “communities that show high levels of public awareness of dementia and are able to offer support and understanding to people living with it, as well as their caregivers. These communities are ultimately more inclusive to people living with dementia and help them to preserve independence and control in their lives.”

Haggarty et al. (2013: 3)

Key dimensions for making a difference to people with dementia are the physical environment, local facilities (see domains 1–3), support services (see domain 8), social networks and local groups (see domain 4) (Crampton, Dean & Eley, 2012). Many types of intervention that promote dementia-friendly communities, however, so far lack systematic evaluation (Keady et al., 2012).

Migration greatly affects how people age and is still poorly understood, in both the ways ethnic diversity of older people creates different needs and the geographical patterns of migration of different age groups and their effects on the demography of age-friendly environments.

Ethnic and cultural diversity in ageing populations are important issues for many urban areas in the European Region and there is scope for better reflecting on the different experiences of ethnic and cultural groups among older migrants. Older people (from a range of

Box 14. Dementia-friendly communities combat stereotypes about dementia

Cities and communities can have an important role in combating stereotypes, myths and negative views associated with dementia. They can help with raising awareness and understanding of dementia among the general population in order to improve inclusion in the community of people living with dementia, making them feel more fully part of the community. In Scotland, United Kingdom, for example, Alzheimer Scotland organizes Dementia Awareness Week each year to work towards reducing stigma and raising awareness of this condition.

Information on dementia needs to be targeted to address the involvement and concerns of the entire community, including health professionals, caregivers, families and the general public. This increasingly includes customer service training, offered to service providers and businesses in the community such as banks, libraries and shops. Employees are trained to recognize symptoms of dementia and to be respectful and responsive to people living with dementia.

In Bruges, Belgium, for example, the symbol of a knotted handkerchief is displayed in the windows of local businesses to indicate to those with dementia that they will receive empathic reception. In the United Kingdom specific guidance has been assembled to strengthen the role of local councils in making areas better places to live for people with dementia.

Sources: Alzheimer's Society (2013); Alzheimer Scotland (2014); Alzheimer's Disease International (2013); Local Government Association (2015).

ethnic groups) may experience migration in different ways (Phillipson, 2015):

- as first-generation migrants growing old in their second homeland (Burholt, 2004);
- as migrants moving “back and forth” between families living across different continents (Lager, van Hoven & Meijering, 2012; Victor, Martin & Zubair, 2012);
- as a group left behind, coping with the loss of younger generations (Vullnetari & King, 2008);
- as people involved with the management of transnational caregiving (Baldassar, 2007);
- as “return migrants” moving back to their first homeland (Percival, 2013).

Migration patterns of different age groups can result in specific local patterns and challenges of social exclusion.

Some geographical areas see specific migration patterns of people. For example, there are specific challenges in rural areas where young people have moved away, resulting in higher concentrations of older people. On the other hand, a number of older people, as they approach retirement age, move out of cities into smaller attractive communities for retirement, creating so-called “naturally occurring retirement communities”. Some of those older migrants might risk social exclusion and social support gaps when they become frail or more vulnerable (Hall & Hardill, 2014).

Remaining older populations tend to be poorer and risk social exclusion. Migration of older people also occurs from the country and suburbs into the city. When children have left home and family homes and gardens become too big and tiresome to maintain, older people may be attracted to move into city centres with easier access to various services, where they are more independent without using a car and closer to family and amenities. Again, the influences on an older person's desire to age in place or to move are not yet well understood (Smith, 2009); nor is how this influences those older people staying behind in certain suburbs or smaller towns.

Diversity among older people, including gender differences, shapes opportunities for healthy ageing that need to be better understood.

Encouraging socially inclusive approaches to urban space needs to take account of the different experiences of men and women and different ethnic groups – migrant and non-migrant. Gender dimensions bring to light differences in needs and opportunities for healthy ageing, as well as differences in use and experiences of local spaces. For instance, being a caregiver for both the young and the old generations is traditionally a woman's role; this places women throughout the life-course at greater risk of economic exclusion (see the chapter on domain 8: community and health services).

Despite changing gender roles and greater participation in the workforce, the gap in financial security between women and men persists into old age. Finding sustainable models of care that do not increase the pressure on women and put them at risk of social exclusion is therefore an important policy challenge.

Moreover, urban space can create social barriers to participation that differ for men and women. This can be illustrated by research on migrants from different ethnic groups living in Brussels and Manchester, which highlighted that older women developed strategies of navigating space on the basis of their perceptions of safety or danger (Buffel & Phillipson, 2011; De Donder et al., 2012). Older women's fears in public space were based primarily on feelings of vulnerability to unknown men, "strangers" or groups of youths who were perceived as "intimidating". Victor, Martin & Zubair (2012), in a study of south Asian communities in the south-east of England, suggested that the gendered use of space could place women at greater risk of isolation in middle and later life. Qualitative interviews with different migrant groups in England and Brussels also noted differences between men and women in terms of the use of public space (Buffel, Phillipson & Scharf, 2013). For example, older migrant men tended to have more informal gatherings with friends outdoors than migrant women.

Some research is emerging on the different needs and experiences of ageing in lesbian, gay, bisexual and transgender older adults (McCann et al., 2013) but the topic remains underexplored. A qualitative study in Manchester focused on older people (aged 50 years and over) in the lesbian, gay and bisexual communities, highlighting areas in the city centre where people had experienced homophobic hate crimes. More positively, respondents also noted areas and venues (such as arts and cultural centres) that were more accepting of different lifestyles and identities (LGBT Foundation, 2015).

Social capital and neighbourhood cohesion

Social capital has an important role to play in supporting age-friendly environments, as well as in the prevention and mitigation of the detrimental effects of social exclusion. A common theme in the literature is social cohesion, which considers the extent to which communities with strong norms of trust and reciprocity promote increased levels of social participation; this leads

to a higher quality of life and improved mental and physical well-being (Rocco & Suhrcke, 2012).

It is important for policy-makers to take into account not only the socioeconomic characteristics of individuals but also the contexts of their everyday lives and the strength of community ties.

A WHO review of mental health, resilience and inequalities reported that high levels of social capital can buffer some of the effects of stress or adversity (Friedli, 2009). At the same time, deprivation and inequalities erode the resources needed for good mental health and social relations. Being socially excluded and isolated can be a continuation of longstanding difficult relationships with other people or a consequence of particular life events, onset of chronic ill health or age-related losses (such as becoming a widow or loss of close friends).

A study from Rotterdam found that although single and poorer older people reported lower levels of well-being than those who were better off and married, this was mediated by neighbourhood characteristics, with community services, social capital and social cohesion acting as a buffer against the adverse effects of poverty and limited social ties. Good social relationships and engagement in community life are necessary for positive mental health (Cramm, van Dijk & Nieboer, 2013).

Efforts to reach out to excluded and isolated individuals need to be carefully coordinated between different social actors and services and can benefit from evaluation.

Involuntary exclusion from social relations and loneliness can have a major impact on people's quality of life. Significant life events such as the loss of a partner and other forms of bereavement can increase the risk of becoming socially excluded. Bereavement has also been shown to be an important risk factor for depression among older people living in the community. Social isolation often comes with other forms of disadvantage, generating multiple exclusions.

Many local initiatives or voluntary programmes try to reach out to older individuals who are at risk of social exclusion or isolation (see the example of initiatives under the Milan City Welfare plan, Box 15), but many age-friendly communities report difficulties in reaching disadvantaged and isolated older adults. Moreover, evidence is mixed on whether more targeted or

Box 15. Combating loneliness and reaching out to those people most at risk in Milan, Italy

As part of the Milan City Welfare plan, a 2012 initiative developed actions aimed at combating loneliness and improving services for older people. This built on the existing Hot weather plan, a service whose goal was to monitor and provide assistance during the summer to those older people identified to be a high-risk group.

By connecting services and interventions and developing a neighbourhood culture, a coordinated and continuous programme was created. In particular, this included a model to create local, neighbourhood-based safeguards capable of monitoring the most vulnerable citizens on a daily basis. The model also contributes to building supportive communities, having at its root the idea that social connectedness acts as social protection. It now includes a large number of places for socializing and connecting to existing activities, thus allowing NGOs and individual citizens to enjoy places to foster relationships or through social projects. By 2012, more than 40 NGOs were involved in the initiative.

Source: Belfast Healthy Cities (2014).

broader population-based initiatives are more apt at addressing social exclusions and loneliness (Cattan et al., 2005; Dickens et al., 2011). Interventions for age-friendly communities can create added value if they monitor carefully the effect on societies and vulnerable and isolated individuals, paying special attention to not widen the equity gap.

neighbourhoods are not easily established, at least in part because of the different time geographies of both groups, with younger residents out at work. In Czechia, Temelová and Slezáková (2014) noted the potential for conflict between young and old in relation to the use of public space in housing estates.

The research raises issues of how to create an urban environment that acknowledges the equal rights of older people with other age and social groups to a “share” of urban space. This is especially important to implement at a local level, with a particular focus on improving the quality of urban design and promoting safety and inclusion as key features of urban living (Gehl, 2010; Mehta, 2014).

New models are needed that counteract age segregation.

Vanderbeck and Worth (2015: 4) suggest that “patterns of age segregation have been both produced and reinforced by approaches to urban and regional planning that have contributed to the production of spaces – such as city centres – that can prove relatively inaccessible and unwelcoming to people at particular life stages”.

Puhakka et al. (2015) examined issues relating to the age-friendliness of living environments by examining spatial usage and place attachment in Lahti, Finland. Drawing on quantitative datasets covering children and adults, the research examined how and where older and younger people spent their leisure time and the importance of different kinds of urban locations for them. A major conclusion from the study was that

The original WHO global guide (2007a) promoted intergenerational interactions as a key dimension of promoting inclusion. This was more recently supported by Lager, van Hoven and Huigan (2015: 95), who concluded that it is important for older adults to develop “bridging social capital” with younger generations in order to “secure continuity of social and instrumental support” (see also Gray, 2009). Furthermore, recent research has extended this theme, examining intergenerational dimensions relating to spatial aspects of inclusion or exclusion and patterns of age segregation.

Holland et al. (2007: 39), in an observational study of an English urban town, conclude that “a striking finding is the extent to which older people involved in this study as interviewees or through observation, either perceived themselves as excluded or actively excluded themselves from public space for large stretches of the time”. Lager, van Hoven and Huigan’s (2015) qualitative research of social contact between different age groups, set in a neighbourhood in the northern Netherlands, observed that trusting relationships between older and younger people in

“the lives of children, young and older people have been largely segregated and urban places directed for certain age groups” (Puhakka et al., 2015: 78). Examples of such age-segregated environments range from playgrounds, houses, bars and clubs to concert halls – these are all often highly age-segregated, even though they could belong to all generations. Even virtual spaces tend to be tailored to specific age groups.

Policy interventions and initiatives by action area and objective

Table 5 follows the structure of this chapter’s proposed directions for interventions and objectives and adds examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 5. Practice examples for social inclusion and non-discrimination from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Respect and non-discrimination (cross-cutting with domain 7: communication and information)	Combating ageism	● Awareness and education campaigns challenging the representation of ageing in the public, media, local businesses and in communications and publications from local government and service providers ● Identifying and combating age discrimination of service providers, media and employers ● Intersectoral collaboration to develop a charter of rights of older people and quality standards in long-term care ● An international conference to combat ageism
	Promoting a positive image of ageing and increasing awareness of ageing issues	● Striving for positive representation of older people and activities in the media ● Promoting positive role models ● Putting ageing issues on the political agenda ● Promoting awareness among the business community, agencies and service providers about access barriers older people face and how they can be overcome (e.g. age-friendly assessment of all services)
	Strengthening prevention of elder abuse, neglect and fraud	● Creating awareness of different forms of elder abuse (awareness day) ● Education and capacity-building programmes, including an elder abuse manual and a fraud awareness toolkit ● Installation of a post of elder abuse officer ● Collaboration with the police force to enforce persecution of suspected perpetrators of elder abuse ● Intersectoral collaboration to help victims ● Educational programmes to inform older people of their rights and protect them from scams and exploitation (peer educators) ● Strong quality control of home care providers (e.g. home health worker registry to include those terminated for reasons of abuse and fraud)

Table 5 contd

Action area	Objective	Examples of policy interventions and initiatives
	Enabling skills, experience and knowledge exchange between generations	● Enabling older members of the community to be speakers or trainers ● Activities in different areas and fields led by older people either for peers or for all generations ● Promoting intergenerational work teams
Social exclusion (cross-cutting with domain 4: social participation, domain 6: civic engagement and employment and domain 8: community and health services)	Preventing economic exclusion	● Financial and social assistance for those in need (food aid, clothing aid, fuel subsidies, subsidized lunch, monthly financial aid etc.) ● Monitoring and regulating the real estate market and housing subsidies ● Providing services and activities free of charge ● Discount schemes ● Case manager or volunteer support in filling in forms for financial and social assistance
	Focus on equity between and within neighbourhoods	● Neighbourhood regeneration programmes ● Assessment of inequalities and gaps in health across and within neighbourhoods ● Linking community action with neighbourhood regeneration projects (comprehensive rehabilitation plans of areas with specific problems)
	Preventing loneliness and isolation	● Anti-solitude plan; strategy/action to prevent isolation ● Adequate mental health care and counselling for coping with loss ● Increasing social participation, particularly in districts with many people who live alone ● Information about existing and development of new opportunities for volunteering
	Support for carers and families with dependent older people	● Financial aid to families with dependent older people ● Extending concessions and discount schemes to people accompanying functionally limited seniors ● Providing possibilities for temporary and periodic accommodation of older people in existing residential care homes or day centres ● Internet forums, newsletters and social media networks for trusted information and peer support ● Banks for temporary loans of technical aid and equipment (wheelchairs, crutches, bed lifts etc.) ● Volunteer temporary host families ● Providing psychosocial counselling and support for carers ● Capacity-building programmes and training ● Administrative support for steps after the death of a partner

Table 5 contd

Action area	Objective	Examples of policy interventions and initiatives
Targeted action for individuals in vulnerable situations	Reaching out to excluded and isolated individuals	● Installing a telephone hotline and referring to tailored services and social activities ● Registries of frail or vulnerable people living alone (or those that have asked for volunteer visits or support) ● Coordination of volunteer visiting networks and services ● Regular telephone chains to those at risk of isolation ● Financial support/calls for community-based projects to reduce the health impact of social isolation ● Including isolated and or bed-bound older people in participatory processes and consultations (e.g. via telephone links)
Social capital	Strengthening community ties	● Neighbourhood networks ● Small grants programmes to promote social inclusion ● Systematic strategies to promote neighbourhood ties and social capital
	Encouraging interaction between neighbours	● Providing community facilities ● Community-based initiatives to promote health and well-being ● Neighbourhood festivals ● Meeting rooms in neighbourhoods ● Neighbourhood awareness and community alert initiatives
Intergenerational spaces and activities (cross-cutting with domain 4: social participation)	Increasing intergenerational contact, understanding and exchange of values, skills and experiences	● Intergenerational activities (most prominently computer courses and cooking courses) ● Intergenerational tournaments – for instance, literature competition and prize for intergenerational relations uniting residents from residential homes and schools ● Older community members invited as guest speakers in youth clubs ● Intergenerational learning programmes empowering older people to access teaching and learning activities in third-level educational institutions ● “Volunteer grandma” schemes ● Mentoring programmes ● Collaboration projects between schools, nurseries and residential homes
	Strengthening the role within families	● Awards for families who adequately care for their older member

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Domain 6: civic engagement and employment

Domain 6: civic engagement and employment

Introduction

Staying actively engaged as a personal choice beyond economic necessity has been shown to have a number of benefits for physical and mental health and well-being (von Bonsdorff & Rantanen, 2011; Cattán, Hogg & Hardill, 2011; Anderson et al., 2014). It is also critical for the future sustainability of social trends in ageing societies.

Volunteering supports different aspects of older people's lives, such as leisure activities (culture/sports), social and health care services, political engagement, involvement in education/tutoring and other aspects of community life. In some cases where volunteering has a strong tradition, the engagement of volunteers has become more formalized. For example, in the Nordic countries recruiting volunteers has in some instances become part of the planning process for local services, such as for nursing homes.

This chapter on civic engagement and employment presents the third of three domains of the AFEE framework that address the social dimension of age-friendly communities. This domain corresponds to the “civic participation and employment” domain in the original WHO global guide (WHO, 2007a). It also has links to topics under other domains, such as public support for informal caregiving (see the chapter on domain 8: community and health services) and training and lifelong learning (see the chapter on domain 4: social inclusion and non-discrimination).

Strategic directions for policy interventions

The goal of interventions in this domain is to make better use of the potential of ageing societies by creating more and better opportunities for older people to engage in political, economic and public life and to increase employment, social engagement and volunteering opportunities for older people.

Large differences exist between European countries in their cultures and traditions of engagement in volunteering activities at various ages. Differences are also wide in employment rates for people aged 50 years and over and in other aspects of civic engagement, such as engagement in politics and local governance. Both are topics monitored by the Active Ageing Index (UNECE & European Commission, 2015).

“Civic engagement means working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes.”

Ehrlich (2000: vi)

Compared to countries with the highest commitment to continuing active engagement, both as volunteers and in paid work or political activities, many countries have a large untapped potential for more civic participation

and employment for people aged 50 years and over (Zaidi et al., 2013).

In some parts of Europe older people lead active working lives as long as they can – many of them in agriculture – in order to contribute to the economy of their families or for their own subsistence (European Commission, 2013a). This is illustrated by relatively high labour force participation of higher age groups in countries like Cyprus, Estonia, Portugal and Romania. Self-employed people may lack adequate retirement income or have traditional roles in agriculture. When they live in rural or remote communities, they may face additional challenges of access to services that help them to stay healthy and allow them to continue their working lives (Hatfield, 2015). For them, community actions to support them can be crucial but may frequently be lacking.

The following sections review the role of local authorities and of age-friendly initiatives to foster civic engagement and employment of older people. Because these initiatives and relative actions are central to both local government and the macroeconomic concerns of ageing societies, many have been studied extensively in European projects and research. A table at the end of the chapter provides practical examples that show how local governments have operationalized corresponding areas for action into their action plans.

Engagement in political life and decision-making

Political participation of older people and their influence on local government activity has been growing in Europe over the past few decades. The level of older people's influence on political decision-making at the local and

regional levels on issues that are of concern for age-friendly environments differs widely, however. There are also variations between urban centres and rural or remote places, or the “hinterland” of larger metropolitan areas.

Political participation of older people can take various forms (Sidorenko, 2012):

- direct involvement and participation;
- indirect involvement by selecting representatives among groups and associations;
- political involvement by elected representatives;
- information-based involvement by sharing information (for example, gathered via participatory research);
- virtual involvement via social networks.

Organizations of older people have taken on more formal roles over time.

Seniors' organizations have become more influential over time as a result. These include both civil society organizations and official senior councils, whose roles may be regulated by national or subnational law. Besides this, many older people may choose to stay politically active in organizations not specifically designated as being for older people. For example, many choose to continue membership of a trade union after their retirement, for which they can be valuable supporters, such as by donating their time as volunteers (FERPA, 2015).

Senior councils aim to empower citizens to have a voice and take an active role in decision-making.

In line with the trends stated above, many local authorities have changed political structures in order to institutionalize older people's voices and advisory roles.

Key facts

- In the EU around 9% of the population aged 55 years and over reported providing unpaid voluntary activities through organizations such as community and social services or cultural and sports associations at least once a week. This ranges from 1.2% to 20.6% between European countries (UNECE & European Commission, 2015).
- In 2014, around 17% of the population aged 55 years and over in the EU participated in the activities of a trade union, a political party or political action group, with a range between 5.3% and 43.8%. The proportions were 20.5% for men and 14.6% for women (UNECE & European Commission, 2015).
- Employment rates in the EU in the age range 55–64 years increased from 46% in 2010 to 52% in 2014 (Teichgraber, 2015).
- The proportion of inactive population aged 50–64 years in selected United Nations Economic Commission for Europe (UNECE) countries ranges from around 15% to over 60% (UNECE, 2012).
- Engagement in formal volunteering activities is more prevalent in early older age groups, particularly among women and people with higher educational attainment (Archibald, 2014).

One or several commissions or councils are in many instances in place that involve older people in all relevant policy-making at the local level. Elected senior councils often hold such executive power, with an official mandate to be consulted on any decisions that concern the lives of older people by the local authority. In this role they are champions of the rights of older people.

For larger regional entities, these may be replicated at various local government levels – for example, in the form of either a city council or neighbourhood councils that involve older people both individually but also as representatives of NGOs and senior associations. In addition, special interdisciplinary working groups on specific tasks related to age-friendly environments usually involve older people to jointly plan, lead and implement actions, such as those on a neighbourhood scale.

Beside their advisory function, senior councils command their own resources to varying degrees; this allows them to undertake a range of activities, such as organization of participatory events; leadership workshops looking at challenges and developing solutions for specific community issues; and community forums to influence planning and prioritization of interventions.

Many communities have developed new forms of participatory mechanisms.

As well as senior councils, which have overall coordinating and leadership roles, groups of older people in a number of other stakeholder alliances can influence policy development and implementation of age-friendly environments either directly or indirectly. This can include special tasks for pilot testing interventions, with community involvement in steering groups as a form of participatory evaluation. Other participatory forums that involve a broader public are roundtables, panels and public discussions to present findings from assessments and enable participation in future planning.

Various forums involve older people in the definition of problems and actions needed.

Focus groups and community forums play an important role in participatory age-friendly assessments of neighbourhood and community environments, as well as needs assessments to identify gaps in services or local policies for older people, for example. Traditionally, this has been in the form of public information and consultations. Participatory qualitative and quantitative research for community diagnosis is a relatively new form of involving older people, their families

and other stakeholders in community planning, monitoring and assessment. This can take the form of interviews, street audits, questionnaires or surveys (AFE-INNOVNET, 2015b).

Economic life and employment

In many European countries the workforce is ageing quickly. This is the case not only for EU countries but also for Commonwealth of Independent States countries outside the EU (Sidorenko & Zaidi, 2013). This trend is driven by different factors:

- demographic change, with an increase in the median age of those of working age (traditionally defined as those aged between 20 and 65 years);
- changes in pension policy, with higher mandatory or effective retirement ages;
- the economic necessity for many pensioners to complement their retirement income with paid employment;
- the wish of many older people in middle- or high-income countries to stay active, including as a way of staying socially connected (WHO, 2007a).

Beyond the economic incentives, staying active in paid employment can help older people to stay connected, play an active role in their communities and continue to contribute in different ways. WHO's *World report on ageing and health* (WHO, 2015b) identified a number of factors that facilitate the ability of older people to stay active, with a focus on employment and pension policies (Box 16; see also OECD, 2006).

Many of the policy measures listed in Box 16 require policy changes at the national level, but local authorities can contribute to increasing the opportunities for older people to remain active in employment in various ways. An example is employment programmes for older people in Israel (Shnoor, 2011).

Local governments usually play an important role as one of the largest employers in their communities; they are therefore well placed to adopt sound age management in their role as employers. Moreover, perhaps more than for other domains, advancing the social goals of domain 6 calls for cross-sectoral engagement across community departments and reaching out to other stakeholders, including private initiatives and the business sector. Collections of case studies illustrate the important role of initiatives to promote the health of an ageing workforce that have been implemented by local

Box 16. What works in facilitating older people's ability to stay active in employment

Policies to facilitate older people's ability to work and volunteer in ways that promote healthy ageing should:

- challenge ageism and create inclusive work environments that embrace age diversity;
- abolish mandatory retirement ages;
- reform pension systems that incentivize early retirement or penalize a return to work;
- support gradual retirement options and flexible work arrangements;
- consider incentives that encourage employers to retain, train, hire, protect and reward older workers;
- help older adults plan for the second half of life and invest in lifelong learning;
- invest in health and functioning by improving occupational health interventions for older workers.

Source: adapted from WHO (2015b: Chapter 6).

authorities at various government levels (Meggeneder & Boukal, 2005). Local authorities thus have an important role in creating flexible work arrangements, retraining older workers or investing in improved occupational health measures relevant to older people.

At an organizational level a number of benefits of including older workers have been identified. For example, older employees can be important for passing on "institutional memory" in an organization: their networks, knowledge and experience are important capital. Retaining them can result in lower costs for hiring and training new staff, who may also have a higher turnover than older employees (Federal/Provincial/Territorial Ministers Responsible for Seniors, 2012). In order to reap these benefits, however, a number of misconceptions or outdated views have to be addressed, such as those that older workers are less productive or that investing in their continuous training is not cost-effective and is more difficult to achieve than for other employees (WHO, 2015b).

Strategies for age management help to create better employment options for older workers and more opportunities for an age-diverse workforce.

Legal changes to enable people to stay in employment despite reaching retirement age usually concern changes in national legislation (WHO, 2015b: Chapter 6). Local authorities have increasingly become important actors in this field, however. Beside their role as employers, local authorities can contribute by developing initiatives that assist employers in planning support for older workers with the goal to remain in work as long as they wish.

Communities can foster age management in a number of ways (Morschhäuser & Sochert, 2006), for which

numerous tools have been developed. For example, the ESF-Age Network (2015) provides a variety of tools of this nature, including practice examples of age management from EU countries and regions.

Local authorities can also play a role in developing guidelines for age-friendly workplaces and promoting their use. Such guidelines have explored a number of options, including:

- making use of intergenerational work teams;
- vocational training or reorientation programmes that support people aged 50 years and over to get back into work and to work according to their abilities, including those with chronic health conditions;
- more flexible arrangements and employment opportunities for older people (such as temporary and part-time work, working from home and technological support).

New business or entrepreneurial opportunities can be created in various ways.

Communities and local authorities can provide special career guidance services and job search workshops for older people. These can be organized in partnership and cooperation with local employment agencies or in the form of cooperation with the private sector – for example, in the form of age-friendly trade fairs or business forums.

Cities and communities can also support older people to stay active in employment by providing training courses for start-ups and guidance on self-employment to encourage continuation of professional activity after retirement. Examples including the creation of specific small job profiles for older people and opportunities for

professional development and training (such as grandparent babysitters, companions, home helps and information officers).

Engagement in public life: co-creation and volunteering

A number of older people in EU countries are engaged in voluntary work: proportions range from over 40% to under 10%, including both formal and informal engagement. Volunteering is most prevalent in countries including Austria, the Netherlands, Sweden and the United Kingdom and least so in some southern and eastern EU countries. Evidence from some countries shows that the role of public administrations and NGOs has become more important in actively promoting and supporting volunteering engagement, complementing other more informal types of civil engagement and volunteering (Observatory for Sociopolitical Developments in Europe, 2011). Those who have engaged in volunteering before retirement are more likely also to become engaged in later life.

“Volunteering is unremunerated work that older people do for people outside their own household and for the wider community.”

WHO (2015b:189)

The balance of evidence suggests that there is a link between engaging in volunteering and positive health benefits (Heaven et al., 2013; Jenkinson et al., 2013; Archibald, 2014). The physical and intellectual activities associated with volunteering exercise a protective function against functional decline in older age (WHO, 2015b: 189).

Moreover, evidence is growing that the volunteering movement among older people benefits from sound organization and representation in associations (such as pensioners' or seniors' associations and local clubs for older people). These can provide crucial support and be important partners in negotiations with other stakeholders, such as providers of formal services.

Involving older people in the design and delivery of services that affect their lives is an important part of co-creation/co-production of age-friendly environments.

Co-creation or co-production (terms that are often used synonymously (NDTI, 2009)) that involves older people in designing age-friendly environments has been high on the policy agendas of the 2011 European

Year of Volunteering and the 2012 European Year for Active Ageing and Solidarity between Generations (Robertson, 2012; AFE-INNOVNET, 2015b; Council of the European Union, 2012). In a number of countries the role of volunteering is now formally recognized in law and regulations. Examples include social protection of volunteers or the exemption from VAT of donations supporting volunteering.

Volunteering initiatives can reach beyond their traditional roles and become more involved in monitoring the design and delivery of services (such as health and social services) by providing feedback – for example, in the form of complaints gathered from public meetings. New roles for volunteering include training and capacity-building, such as training for trainers to become leaders of activities and collaboration with universities of the third age (see also the chapter on domain 4: social participation). This can include flexible activities and workshops where people can either learn or teach. To make co-production more sustainable, community-driven non-profit initiatives with legal and administrative advice and supportive frameworks play an important role.

Voluntary work has become an important way of promoting social inclusion of older people.

National laws on volunteering have spread in recent years but vary widely in scope and content (Observatory for Sociopolitical Developments in Europe, 2011). Such laws can regulate important aspects that protect volunteering; for example, obligations for social and health insurance.

Traditionally, word of mouth and informal channels (relatives and friends) have been central to creating awareness of the opportunities and benefits of volunteering. A trend is being seen, however, in a number of countries and local authorities of putting more formal structures in place to provide information about volunteering and recruit volunteers. Formal structures support volunteering by covering expenses and providing other recognition of efforts. In addition, they can provide essential services such as help with getting adequate insurance coverage for volunteers and providing training. Older people themselves usually manage these information platforms, which reach out to seniors. In some countries, including Denmark and Sweden, the needs for volunteering are analysed and monitored in cooperation with public service providers that are also engaged in developing new forms of voluntary activities (see Box 17 for an example from the city of Horsens).

An increasing number of programmes in European countries are also organized or co-funded at the national level to support volunteering and to provide help with research and analysis (Observatory for Sociopolitical Developments in Europe, 2011). New forms of networking and information technology support ways of volunteering such as time banks, online information

platforms and volunteer job banks. The question of how best to design volunteering activities has recently been the subject of more systematic research at the local, national and European levels. An example is the “Let us be active!” project implemented in three Baltic countries (Box 18).

Box 17. Actively recruiting volunteers in the city of Horsens, Denmark

The Nordic countries have well developed voluntary sectors that engage in their communities in various roles. In the Danish city of Horsens, the social care sector has managed to build up an important infrastructure of volunteers. Since 2000, the Municipality of Horsens has had a volunteer policy that sets out goals and frameworks for cooperation with associations of volunteers. As of 2016, some 1000 volunteers were engaged in support of older people, many of them seniors themselves.

Coordinated by the Horsens Healthy City Shop, volunteers are engaged in a range of activities. Examples include the following.

- Volunteers support the work of activity centres for older people and of nursing homes – for example, by visiting seniors in nursing homes to join them at lunch time.
- Volunteers act as “Hospital Friends” in cooperation with the biggest local association for senior citizens.
- Other network groups support senior citizens with weak social networks and those at risk of experiencing loneliness.
- Volunteers staff 14 ICT clubs for older people, offering ICT support for senior citizens.
- A mentoring system has been set up in which older people help younger citizens who experience difficulties in the employment sector.

Source: Horsens Healthy City (2016).

Box 18. Let us be active! Social inclusion of older people through volunteering in three Baltic cities

Initiatives under the project entitled “Let us be active! Social inclusion of older people through volunteering in Estonia, Latvia and Finland” promote social activity and inclusion among older adults, with the participation of seniors as volunteers. These address social exclusion and loneliness through volunteering opportunities in three Baltic cities: Pärnu (Estonia), Riga (Latvia) and Turku (Finland).

Older people in each of the cities were invited by health care professionals and social workers and through other relevant organizations to participate in the project. It developed volunteer activities for older adults, applying a number of participatory approaches, including:

- surveys and interviews of older people to find out how they could be involved in volunteering actions;
- development of workshops and training courses with older adults and social workers;
- consulting with relatives of older adults;
- providing comprehensive information on existing volunteering activities by creating information and support systems for older adults.

Examples are a call centre in Riga and online platforms in Pärnu and Turku. The volunteer activities were shared between cities to better develop support systems for older adults.

Source: EU Central Baltic Programme (2014).

Policy interventions and initiatives by action area and objective

Table 6 follows the structure of this chapter's proposed directions for interventions and objectives and adds

examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 6. Practice examples for civic engagement and employment from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Engagement in political life and decision-making (cross-cutting with domain 4: social participation and domain 5: social inclusion and non-discrimination)	Empowering citizens to have a voice and take an active role in local decision-making	● Changing structures and institutionalizing older people's voices and legal powers ● Special interdisciplinary working groups (professionally facilitated) involving older people to jointly plan, lead and implement actions in neighbourhoods (such as a neighbourhood motor group) ● Senior councils with executive powers to be consulted on any decisions that concern the lives of older people in the local authority ● Involvement of older people and their representatives (NGOs and associations) in the city council or neighbourhood councils ● Commissions/councils established as advisory and initiative bodies representing the interests of special groups in the local authorities (such as women, older people, children, young people or people with disabilities)
	Other forms of participatory mechanisms	● Organization of participatory events: leadership workshops looking at challenges and developing solutions; community forums to influence planning and prioritization of interventions ● Roundtables, panels and public discussions to present findings from assessments and enable participation in planning ● Pilot testing of interventions with community involvement in steering groups and participatory evaluation
	Consultation of older people in the definition of problems and actions needed	● Participatory age-friendly assessments and needs assessments, e.g. via focus groups, community forums, participatory research (such as on-street conversations) ● Qualitative research, needs assessments, community diagnosis, e.g. interviews, street audits, questionnaires and surveys ● Public information and local consultations about plans and decisions and opportunities to get involved, oppose or comment for people who want to

Table 6 contd

Action area	Objective	Examples of policy interventions and initiatives
Economic life and employment (cross-cutting with domain 5: social inclusion and non-discrimination)	Employers providing better opportunities for an age-diverse workforce	● Initiatives to support local employers in planning support for older workers to remain in work as long as they wish ● Making use of intergenerational work teams ● More flexible arrangements and employment opportunities for older people (temporary and part-time work; working from home; technological support) ● Adult vocational training or reorientation programmes (support to people aged over 50 years to get back into work; working according to abilities) ● Changing employment practice to enable people to stay in employment despite reaching retirement age ● Development and use of guidelines for age-friendly workplaces
	Creating new business or entrepreneurial opportunities	● Special career guidance services and job search workshops for seniors in local employment agencies ● Creation of specific small job profiles for older people and opportunities for professional development and training (grandparent babysitters, companions, home helps, information officers) ● Provision of training courses for start-up and self-employment to encourage continuation of professional activity after retirement ● Age-friendly trade fairs/business forums
Engagement in public life: co-creation and volunteering (cross-cutting with domain 4: social participation)	Promoting co-creation: involving older people in the design and delivery of services that affect their lives	● A protocol, charter or act on how to involve older people to be followed by agencies ● Reviewing mechanisms of procurement, commissioning and grants to enable asset-based practice and social enterprises guided by social impact ● Involving older people in quality control and evaluation of services targeted at them ● Improving feedback following complaints and after public meetings ● Community grants for small projects with the aim of social integration of seniors ● Opportunities for training and capacity-building, e.g. training for trainers to become leaders of activities, collaboration with universities of the third age ● Flexible activities and workshops where people can either learn or teach ● Facilitating community-driven non-profit initiatives with legal and administrative advice and supportive frameworks ● Involving senior advisors and older people as experts and in mentoring opportunities ● Mutual reciprocal support among older people ("not a one-way street")

Table 6 contd

Action area	Objective	Examples of policy interventions and initiatives
	Promoting social inclusion of older people through voluntary work	● Creating awareness of the benefits of volunteering ● Local volunteer bank and centre for support ● Time banks ● Increasing recognition of existing well functioning programmes and volunteers (e.g. awards, compensations) ● Information platforms to reach out to seniors (managed by older people themselves) ● Online information platforms and volunteer job banks ● Incentives for neighbourhood support and family support ● Covering expenses and recognition of efforts

Resources and toolkits

Afe-INNOVNET (2015). Guidelines for co-producing age-friendly environments with older people. [website]. Brussels: Thematic Network on Innovation for Age-Friendly Environments (<http://afeinnovnet.eu/content/guidelines-co-producing-age-friendly-environments-older-people>, accessed 2 October 2015).

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Domain 7: communication and information

Domain 7: communication and information

Introduction

Activities to improve communication and information aimed at all groups of older people play a key role in closing the gaps in access to services, activities and events, and in reaching out to more vulnerable parts of the population. Domain 7 covers a diverse set of aspects of communication and information: issues of accessibility, technology and the contribution of information to preventing the risk of social exclusion, to name the most important. It recognizes that a reliable flow of information on community news, activities and opportunities that is adapted to the needs and preferences of older people is vital – in particular for those living alone in the community and who may have reduced connections to formal or informal networks.

Communication and information is the first of two domains of the AFEE framework that address the dimension of municipal services for age-friendly communities. Activities in this domain include many events organized by the third sector and supported by volunteering, so it has strong interconnections with domain 6: civic engagement and employment. This domain corresponds to that of the same title in the original WHO global guide (WHO, 2007a).

Community activities for healthy ageing are often attended by groups of relatively healthy older people – they tend to be part of social and family networks that help them to stay connected with community life and informed about the range of activities and services available for them, including their rights and how to access public services. Opportunities to access information are therefore not equally spread among older people.

Among the topics addressed in this chapter, a focus is placed on initiatives that aim to bridge what has been called the “digital gap” (Mason, Sinclair & Berry, 2011) and to foster health literacy among older people, which is crucial for older people to make informed decisions and to manage their health (IROHLA, 2015a; 2015b). Both topics are related: the transfer of health resources and health care by electronic means (eHealth) and health information from the Internet are specific aspects for health literacy of older people (CDC, 2009).

Strategic directions for policy interventions

The goal of interventions in this domain is to assist older adults in accessing timely, reliable, relevant and understandable information about their community, ways of engagement, available services and health topics through word of mouth, general press or the use of information technology.

To reach these goals, age-friendly action plans identify special groups of older people at risk of exclusion from information that can be important for them. Among these are people who live with a limited network of family or friends, who are homebound or who are living with dementia. Different interventions and information channels are needed to address these different needs. For example, information provided by formal or informal caregivers can help people living with dementia remember scheduled activities and events and maintain their active participation in the community. The right information can have a protective function and contribute to a feeling of being safe and connected.

Tailored information can also protect older people from abuse, such as financial abuse.

Seniors' NGOs play a key role in many cases, reaching out and talking directly to older people in the community who would not easily be reached by other means of communication. This is the case both for relatively wealthy communities and for resource-constrained settings.

Modern information technology is seen as a promising way to help older people to stay connected and provide them a range of support, including when they are living with reduced mobility. Access to technology is currently very uneven, however, including basic access to the Internet. Rates of Internet use are relatively low for the highest age groups. This fact and the special challenges posed by the spread of the Internet as general portal for accessing services – such as eGovernment systems – are discussed in this chapter.

Communication and information are indispensable for staying socially connected. It is vital for accessing services covered under other domains, such as domain 2: transport and mobility. This domain also has links to training and lifelong learning (see the chapter on domain 4: social inclusion and non-discrimination), which contribute to helping older people adapt to new technologies and ways of communication. The opportunities and challenges for older people to access information and to benefit from advances in modern communication technology receive special attention. This is an area that is currently actively researched but many challenges remain, not least the issue of how to ensure

that older people find health information on the web that is accurate and safe (Moore, 2005).

Moreover, this domain has links to domain 8: community and health services, as those providing home help or other services, for example, can also act as sources of reliable information for older people. The same is the case for day care and other community centres for older people.

The following sections describe the range of interventions that communities have developed for better reaching out with information and communication to older people, families and other stakeholders in order to create more age-friendly environments. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

Age-friendly information

Examples of deficits of formats and design of information and communication that are not age-friendly are still widespread. Listening to older people, such as in the context of focus groups has helped to reveal them.

Awareness is growing that communities and local authorities have an important role in ensuring that information about local activities and services reaches older people. This is increasingly seen as a cross-sectoral concern and has led to the development of communication strategies tailored to the needs of older people. These include a broad range of communication media – such as free local newspapers for pensioners – but

Key facts

- Regular information events or “fairs” where older people can get involved and receive information about the broad spectrum of community activities available to them have in many cases become celebrations of healthy ageing (such as “senior days” or “positive ageing weeks”).
- Health literacy – the ability to access and comprehend health-related information – is limited in every second older person (Sørensen et al., 2015). This presents a challenge for healthy ageing.
- Internet use among those aged 55–74 years has been growing quickly over the last 10 years in most EU countries. Changes over time have favoured those with middle and higher education more than those with lower formal education in most countries (Eurostat, 2011; Rodrigues, Huber & Lamura, 2012).
- There remain large differences between countries in Internet use among those aged 55–74 years, ranging from just over 5% in Turkey to over 70% in Iceland and Norway (Eurostat, 2011; Rodrigues, Huber & Lamura, 2012).
- Regular Internet use is much lower among people aged 75 years and over compared to other age groups.

also points of contact, where older people receive support with information they need. This requires work across service providers and cooperation between public services, private providers and volunteering activities.

Age-friendly information ensures quality and accessibility of information for older people.

The use of more age-friendly formats is now supported in a growing number of countries by national or subnational guidelines on accessible information to ensure quality and accessibility of information for older people. Among the common elements are clear, concise formats and use of easy language; large print versions (for example, of forms, manuals and directories); and better legibility of LED signs and displays. Where communities use automated telephone information systems or call routing systems, it is worth testing their user-friendliness with older users, including in pilot schemes.

Local authorities can make use of a variety of dissemination channels.

Local authorities and communities have direct information channels that they can use to disseminate information that reaches out to older people and their families and friends. These include broadcasts on local television and radio; tailored information material produced as leaflets, brochures or maps; newsletters; poster campaigns; and message boards (for example, in libraries, churches, public meeting places and neighbourhoods). An accessible way of informing a broad public about age-friendly initiatives is the publication of illustrative personal stories of older people (see, for example, Manchester City Council, 2016). More investment, however, may be needed in some cases to make existing municipal websites more accessible, both for structure and easy navigation and by making use of web content accessibility guidelines (W3C, 2008).

Public events are important information sources for older people.

Those communities with longer traditions of age-friendly initiatives often make use of senior weeks or days: these are given various titles, such as “positive ageing weeks” or annual “festivals of the third age”. These events provide opportunities to share information between activities and initiatives, and to learn about and try out the broad range of existing and new activities and services available in the community. Other publicly organized information sources

include public lectures, seminars and discussions on gerontological topics or conferences on healthy ageing issues.

A clearing house for health- and ageing-related information

For older people it can be challenging to access the information that is needed to stay healthy and active. When information is fragmented or inaccessible for older people they might miss existing opportunities to stay actively connected with the community and may simply not be aware of the range of publicly or privately available services and activities (such as volunteering). The Internet is increasingly the main hub for publicly available information: while this offers good opportunities, it also creates a barrier for many older people who do not use the Internet.

Many communities have responded to the needs of older people for comprehensive and reliable information by establishing single entry-point information services.

Single entry-points for comprehensive information come in different forms, such as walk-in information centres and telephone hotlines linked to call centres. Such services provide a “one-stop shop” for older people to receive reliable core information and answers to frequently asked questions, together with guidance on how to access further information if needed.

Comprehensive information refers to both publicly organized services and information and guidance on broader community activities, as well as opportunities for social participation and volunteering. Among core information frequently requested is:

- information on health and social services;
- information regarding (other) entitlements and rights of older people;
- financial advice, including age-friendly banking services;
- information on community life and activities.

One-stop shops have, for example, been linked to senior day centres, in the form of information desks or rooms. In addition, 24-hour telephone services are available in many cases – a strategy that can be used for communities at all income levels (Box 19).

Besides their information function, walk-in centres have been designed in ways that offer basic services, such

Box 19. Silver Line helpline for older people in the United Kingdom

The Silver Line is a free confidential helpline in the United Kingdom. It provides information, friendship and advice to older people and is open on a 24/7 basis throughout the year. The helpline disseminates information about services and activities that people can access in their communities.

The Silver Line supports vulnerable older people, including those who want to remain anonymous. Information is offered on both services and community actions and projects. Callers can, however, also get help by addressing loneliness and isolation, and in situations of abuse and neglect. Moreover, the helpline can organize regular friendship calls. Around two thirds of the calls are received at night and during weekends. The majority of callers live alone and say they have no one else to speak to. The Silver Line works with volunteers (around 3000 in 2016) that are trained to act as “telephone friends” (or “letter friends”).

Source: The Silver Line (2017).

as initial sociomedical assessments (see the chapter on domain 8: community and health services). They can also provide help with intersectoral services, such as filling in administrative forms and service requests or accessing eGovernment services (see the section on addressing the digital gap below), by allowing assisted access to computers and online content.

Information can also be provided on volunteering organizations that can help with these issues or offer related support. One-stop shops can build up expertise over time on the range of information that older people need. Focus groups or other means of participatory research with older people as participants can help in evaluating and improving the quality of services rendered in this way.

Improving health literacy

Health literacy is one of the success factors for healthy ageing, enabling people to cope with the demands of different health situations and maintain quality of life. Understanding age-related changes in health, the role of good nutrition and sufficient physical activity can make a difference for health trajectories in older age (WHO, 2015b). Knowing how to communicate effectively with health and social care professionals is critical in order to navigate complex health and social systems.

Health literacy levels vary greatly in the population; they are lower among older age groups (Swedish National Institute for Public Health, 2006; Zamora & Clingerman, 2011). This is a special concern in regard to geriatric patients, who often have only marginal health literacy

levels, with risks for their health outcomes and cost of services (Cutilli, 2007). Older people with less education, lower incomes or poor mental and physical health can be at higher risk of marginal or inadequate health literacy. Those older people with poor health, who are therefore most in need of health literacy, have been found to have lower health literacy levels than other groups of older people (Oldfield & Dreher, 2010). Numerous national health promotion and disease prevention programmes therefore specify older people as special target group and aim at promoting and supporting implementation at all levels of government, including cities and communities (Box 20).

Health literacy is “the degree to which an individual has the capacity to obtain, communicate, process and understand basic health-related information and services to make appropriate health decisions.”

IROHLA (2015a: 5)

Enhancing the competencies of health professionals and care providers is an important component towards achieving better health literacy.

To address gaps in health literacy capacity and communication, training is required for health and social care staff to improve their knowledge and awareness of how to communicate better about health and ageing topics with older clients. Special translation services for people from ethnic minority groups among health and social service users also become more urgent when people with migrant backgrounds enter higher age groups.

Box 20. Local initiatives in Germany to implement the national action plan IN FORM

In German, a national action plan for 2008–2020 is called “IN FORM: Germany’s initiative to promote healthy diets and increased physical activity”. It has led to the development of a range of information brochures on nutrition tailored to older people and disseminated in various ways, including over the website Fit im Alter [Fit in old age].

As well as guidelines to increase awareness and health literacy among older people and their families, quality standards and nutritional guidelines were developed and published for nursing homes and homes for older people, meals on wheels, hospitals and rehabilitation facilities.

IN FORM is a joint initiative between the federal Ministry of Health and Ministry of Nutrition and Agriculture. It is implemented in close cooperation and coordination with federal states and local governments, including those of cities and communities, many of which use the nationally developed guidelines and brochures for local distribution, health education and promotion activities at the community level. For this purpose, guides for cities and communities have been developed on how to use and disseminate the national guidance in local initiatives with older people.

Sources: German Association for Nutrition (2017); Federal Ministry of Food and Agriculture (2017).

Empowering older people, their families, social networks and communities by increasing general communication skills and knowledge of ageing and health-related issues can be effective.

Better information and training for older people and their families is needed. Increasing general awareness of ageing-related health issues can be beneficial, in particular, to people with low health literacy and those suffering from multiple diseases (IROHLA, 2015b).

Capacity-building to support self-management is important to increase health literacy in a broader sense (Findley, 2015). This is a central goal of many interventions organized for older people at the local level. These comprise lecture series and talks on health-related topics; workshops and skills training; training to use assistive technologies; and training to monitor information (from the use of step counters to the monitoring of blood pressure or blood sugar levels).

eHealth refers to the use of information and communication technologies in support of health and health-related fields.

mHealth is a subdomain within eHealth. It refers to the use of mobile and wireless technologies to support the achievement of health objectives.

(WHO, 2015e)

Older people may need support with eHealth literacy interventions in order to improve their health in new ways.

eHealth literacy has been defined as the ability to seek, find, understand and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem (Norman & Skinner, 2006). eHealth and mobile health (mHealth) provide new opportunities for older people to find health information over the Internet or the mobile phone and to engage in an exchange with others to communicate on health interests and challenges. Specific interventions may be needed to assist older people to access, find their way around and use new technologies to their full benefit (Watkins & Xie, 2014). Among those most in need of such interventions are older people in poorer households and other vulnerable older adults – in particular, those that are homebound (Choi & Dinitto, 2013).

Addressing the digital gap

Improving computer literacy and access to the Internet allows older people to access a range of information sources on healthy ageing in their communities. Among these are:

- Internet portals and platforms on activities and support services;

- publications on “healthy ageing profiles” and healthy ageing observatories for cities, communities or regions;
- access to age-friendly strategies and action plans;
- online expert forums and consultations (such as “Ask your geriatrician”);
- websites for family caregivers with information on available support and opportunities for an exchange with peers.

Not all information available from these sources may be easily accessible, however, and its quality can vary. It is often posted without professional quality checks, such as those into whether information is adequate or safe, in particular in the case of online health communities.

In order to address a digital gap among older people, information technology and computer courses can aim specifically at learning how to access information relevant to older people (and those in rural areas). These courses therefore need to be tailored to the diverse needs – for example, for those who want to use social media, communication technology (such as Skype) or email, or for those who want to find information online or search for employment. Publicly accessible computers with Internet access in libraries or senior centres support those without equipment and connections at home.

In order to navigate eGovernment systems, some older people need special guidance and support.

In societies where more and more information is disseminated electronically and the Internet has become a key gateway to the world, many older people are at risk of being left behind if they are computer illiterate. Among United Nations regions, the European has the highest development of eGovernment (UN DESA, 2012:29). Where eGovernment legislation aims at fully switching to electronic forms for communication with public administration, however, special attention needs to be paid to

ensure that older people are not excluded. Social networks and face-to-face contacts are among the means of support for older people to foster their adoption of eGovernment services (Righi, Sayago & Blat, 2011).

Action at the community level is crucial to help older people both become computer literate and learn how to use modern technology for their own communication, such as for staying connected with family and friends. Intergenerational activities where younger people help older people to overcome this barrier have become popular models in some cities; they are also popular in the context of more resource-constrained settings, such as in eastern European countries. Where electronic devices such as computers or tablets are still too costly for older people, community centres or clubs can be hubs to provide access.

Computer literacy is, however, only one precondition to overcoming barriers of access to information. Finding one's way around the Internet can be challenging for a number of other reasons. Webpages are too often not designed with older people in mind. Even where following web standards of accessibility has become the norm, the way information is presented and the navigation between pages can still be confusing, and older people may still need help from families or volunteers to access and navigate online information.

Policy interventions and initiatives by action area and objective

Table 7 follows the structure of this chapter's proposed directions for interventions and objectives and adds examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 7. Practice examples for communication and information from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Age-friendly information (cross-cutting with domain 4: social participation and domain 5: social inclusion and non-discrimination)	Increasing accessibility of information	● Better information on activities and services, particularly in rural areas ● Free local newspapers for pensioners ● Making existing municipal websites age-friendly ● Ensuring maintenance of face-to-face services and service counters ● Senior citizens' centres at the neighbourhood level (see the chapter on domain 4: social participation) ● Working across service providers to agree on guidelines for accessible information to ensure quality and accessibility of information for older people ● Developing communication strategies and making sure that older people are not excluded through web-only services
	Ensure effective dissemination of information	● Regular information broadcasts for older people on local television and radio ● Tailored information material: leaflets, brochures and maps ● Sections on healthy ageing in local newspapers ● Newsletters, poster campaigns and message boards (in libraries, churches, public meeting places and neighbourhoods) ● Avoiding automated telephone information systems or call routing systems, or testing their usability with older people ● Encouraging word of mouth among older people ● Regular information on home care and home service providers and general practitioners ● Reliable information points for all issues concerning older people
	Age-friendly formats	● Pilot testing of promotional materials with older people ● Use of the web content accessibility guidelines of the World Wide Web Consortium (W3C) ● Better readability of LED signs and displays ● Clear, concise formats and use of easy language ● Large print versions (e.g. of forms and manuals and directories) ● "Browse aloud": reading aloud services of web content and documents

Table 7 contd

Action area	Objective	Examples of policy interventions and initiatives
Clearing house for health-related information (cross-cutting with domain 4: social participation and domain 5: social inclusion and non-discrimination)	One-stop shops for information for older people, their families and carers	● Creation of information centres: single entry-points for comprehensive information about ageing, matching of opportunities for social participation and volunteering, switchboard for local age-friendly services ● Reception for first orientation and sociomedical assessments ● Intersectoral special consultation services, including help with filling in forms and applications ● Telephone hotline and call centre ● Places to allow assisted access to computers and online content ● Places of reflection and laboratories for ideas
	Capacity-building to support self-management	● Lecture series and talks on health-related topics ● Workshops and skills training ● Assistive technologies and training to monitor information (e.g. step counters) ● Articles and reports concerning older people's health and well-being in local media ● Information leaflets distributed through health and medical centres ● Library and media/video library for ageing topics
	Providing the range of information that older people need	● Information regarding entitlements and rights of older people ● Financial advice, including age-friendly banking services ● Information regarding community life and activities ● Clear information on health and social services ● Register of reliable and trusted services and age-friendly businesses
Health literacy (cross-cutting with domain 4: social participation, domain 5: social inclusion and non-discrimination and domain 6: civic engagement and employment)	Making sure that information provided reaches older people	● Surveys of health literacy in the local population and analysis of barriers to access information ● Simplified bureaucracy and administration procedures ● Capacity-building and communication training for health care and service providers ● Talk and translation services for ethnic minority groups using health services ● Training and campaigns to increase capacity to understand health-related information ● Cross-agency coordination of information provision through a network of service providers to assist in contacting harder-to-reach older people ● Training for trusted community and home care workers to give reliable information on support services

Table 7 contd

Action area	Objective	Examples of policy interventions and initiatives
Public events	Providing opportunities to learn about and try out existing and new activities and services	● Senior weeks/positive ageing weeks ● Public lectures, seminars and discussions on gerontological topics ● Annual festival of the third age as an information-sharing platform for older people at the national level ● Conferences on healthy ageing issues
Digital gap (cross-cutting with domain 4: social participation, domain 5: social inclusion and non-discrimination and domain 6: civic engagement and employment)	Providing websites /Internet platforms for older people	● Centralized indicator and monitoring system: database and profile of healthy ageing/healthy ageing observatory ● Making age-friendly strategies and plans accessible ● Online expert forum and consultation ("Ask your geriatrician") ● Internet portal and platform on activities and support services ● Website for carers: information, available support and forum to exchange with peers ● Development of more user-friendly smart phone applications to improve information and security of seniors (but with awareness that access is not universal)
	Decreasing the digital gap	● Information technology and computer courses that aim specifically at accessing information relevant to older people (particularly those in rural areas) ● Tailoring courses to diverse needs, e.g. for those who want to use social media, communication technology (such as Skype) or email, or for those who want to find information online or search for employment ● Providing publicly accessible computers with Internet access (at libraries or senior centres) ● Building digital connectivity in cities that can be used for good access to assistive technologies in the home

Resources and toolkits

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**Domain 8:
community and
health services**

Domain 8: community and health services

Introduction

This chapter presents the eighth domain – community and health services – of the AFEE framework. This is the second of two domains that address the dimension of municipal services for age-friendly communities. Following the example of the original WHO global guide (WHO, 2007a), this domain brings together a broad range of services.

Countries in Europe differ widely in the degree to which local authorities are responsible for financing, organizing and providing health and social services – services for which older people are often major, if not the main, users. To decide on the roles of communities and other local authorities in providing and improving health, social and community services, it is therefore essential to consider the division of labour and different responsibilities across levels or tiers of governments in Europe. This calls for strategies and action plans to be adapted to the situation of the community or region in question. In general, however, communities have an important role in empowering patients, older people in need of social support and their formal and informal caregivers, in a number of ways outlined in this chapter.

Strategic directions for policy interventions

Communities can contribute greatly to increasing the well-being of older people and the quality and efficiency of health and social services by acting on some of the broader social determinants of health-seeking behaviour and inefficiencies. For example, there is evidence of “bed-blocking” in hospitals and unnecessary admissions to residential care that result from social

causes rather than the health and functional status of older people (Leichsenring, Billings & Nies, 2013). Introducing or expanding respite care services and discussing with hospital managers ways to improve discharge procedures for older people can contribute to a more seamless continuity of services (Colombo et al., 2011).

The goal of interventions in this domain is to promote and provide older adults with a broad range of well located, easily accessible health and community services. These include preventive, nutritional guidance and mental health services, affordable meals and help with everyday activities, home care arrangements and person-centred health services and residential care facilities.

In most countries a divide (financial, legal, organizational, professional and in responsibilities) between health and social care leads to inefficient allocation of resources and is particularly felt by older people in need of different types of care (and their carers). It can lead to delays, uncoordinated service delivery, lack of information, financial burdens, long waiting times and reactive – rather than preventive – service approaches.

Older people prefer to stay at home as long as possible, in many cases with their partner or another family member caring for them. Nevertheless, such care arrangements need to be facilitated by professional health and social care services, and sometimes also by residential care facilities and primary care structures, for which local governments often have an important coordinating role. The development of community care

Key facts

- Public spending on long-term care differs widely across Europe, ranging from more than 2.5% of GDP in a few countries to less than 0.5% of GDP in many countries (OECD, 2015).
- Private contributions in the form of out-of-pocket spending for long-term care are usually large, especially for those living in residential care, requiring older people to use a large share of their pension income to cover costs. Public expenditure may also be means-tested, and there are filial obligations for shared funding in some cases. Local communities may have to contribute out of social assistance budgets for those not able to cover their private share (OECD, 2011).
- In all countries informal care, often given by family members, supplies a large share of the support and care needed by older people with disabilities. Most informal caregivers are women, many still of working age, but up 10% are both men and women aged 75 years and older (Rodrigues, Huber & Lamura, 2012).
- Older people are disproportionately affected by disasters. For example, 56% of those who died during the Japanese tsunami in 2011 were aged 65 years or over, while older people accounted for 23% of the local population (HelpAge International, 2015).

has been a great success in many countries, reducing the proportion of older people having to move to care homes; however, reform of long-term care is ongoing, with new methods of quality assurance, integrated delivery and funding, posing challenges to communities in charge of these services.

The uptake of modern eHealth support for older people is one of the emerging policy areas in Europe and there are still gaps in knowledge about its success factors and outcomes. Addressing these gaps is a major concern of recent initiatives in the EU and is covered in a separate section at the end of this chapter.

The following sections describe a range of interventions that communities have developed to provide better adapted, affordable and accessible community and health services as part of more age-friendly environments. These ensure more seamless provision and coordination of the core health and social services that many older people need, in particular the oldest age groups. A table at the end of the chapter provides practical examples that show how local governments have operationalized areas for action into their action plans.

Community action for coordination and integrated care provision

Communities and other local authorities can play an important role in the coordination of services across providers and branches of social protection. This may include, for example, providing information services to older people, their families and carers on service availability, rights and responsibilities and supportive

local services, including volunteer action (see also the chapters on domain 4: social participation and domain 6: civic engagement and employment).

Better coordination and integration of services, in particular at the boundary between health and social services for older people (including long-term care), has been identified as critical to improving the efficiency and effectiveness of these services (WHO Regional Office for Europe, 2015c; 2016c). Deficits in the coordination of services are still widespread in Europe, although much has been learnt in recent years from practice examples of improving coordination of care, or moving more fully to integration (Osborn et al., 2014). While some evidence from successful examples shows improved care, less evidence is available on whether this can lead to overall cost savings (see, for example, Øvretveit, 2011).

Among core strategies and notable practice examples for local government initiatives are the following (see also WHO Regional Office for Europe, 2012a: 13):

- public information systems to monitor and evaluate the living situation, health and well-being of older people living in the community – these can be supported by a number of existing and emerging technologies (see also the chapter on domain 7: communication and information and the section on ambient assisted living and “ICT for ageing well” services below);
- one-stop shops of information and empowerment for older people and their families (see the chapter on domain 7: communication and information);

- day care and respite care facilities (the former services can be an integrated part of residential facilities);
- information systems at the community level to monitor and control adverse events in care institutions;
- local adaptations/development of quality standards for geriatric concerns across all types of provider;
- initiatives to improve health literacy and empowerment of older people, their relatives and voluntary support networks, as well as self-management programmes such as “expert patients” or “patients like me” (see the chapter on domain 7: communication and information).

Providing a seamless continuum of support for people with dementia remains a challenge in many instances, and in particular for community services.

Issues include raising awareness and understanding of the needs of people with dementia, both for families providing informal care and among health and social care providers, and informing and educating a broader public, including front-line staff of local businesses and services (WHO, 2015b: Chapter 5; OECD, 2015).

People with dementia need access to a full range of risk reduction strategies that include, for example, maintaining social interaction, nutrition and physical activity. Broader use should be advocated for dementia care pathways, with a focus on primary health care and early screening and diagnosis (WHO, 2012b; Alzheimer’s Disease International, 2015).

Health services, including health promotion and prevention services

Barriers to access to affordable, high-quality health and social services are still a reality for too many older people in Europe. This includes cases of age discrimination and age rationing (see Huber et al., 2008; WHO Regional Office for Europe, 2012a: 11–12; WHO, 2014b). Inequalities in health care utilization are common in many countries: those with better education and those in the higher income groups tend to be less likely to be excluded from needed care (Terraneo, 2015).

More could also be done in many cases to prevent further functional decline and the onset of frailty (see the action group on frailty prevention under the EIP on AHA). Examples of proactive approaches aim at the

early identification of people at risk of functional decline and the provision of support for independent living at home (see Box 21).

Health and social care settings themselves can pose important, but often preventable, health risks for older people (Benjamin et al., 2014). Among these are hospital-acquired infections, malnutrition and falls, and people living with dementia are often most at risk (OECD, 2015; WHO, 2012b). Older people in residential care often have inadequate access to essential services, such as dental care or foot care (Huber et al., 2008). The primary care sector is often not adequately equipped or trained to coordinate care for older people across providers, in order to prevent adverse effects, such as from harmful over-medication.

People living with dementia have special needs of enhanced community-based services and support to continue to age in place. Similarly, service providers need to be adequately trained to care for people with cognitive impairments (WHO, 2012b; Alzheimer’s Disease International, 2015). Moreover, when people face high co-payment or out-of-pocket payments they may forgo essential preventive services, such as monitoring and control of high blood pressure or regular control of visual health, with the risk of potentially unnecessary or early health and functional decline.

Among notable practice examples of interventions at the community or local authority level are the following (see WHO Regional Office for Europe, 2012a; WHO, 2015b: Chapter 4):

- focusing community- and population-based public health services on the issues of older people;
- supporting community supplies (such as on a rental basis) of assistive devices, including modern technology for mobility;
- preventive health services, including vaccinations and home visits;
- improved access to mental health services for older people in the community;
- addressing gaps in rehabilitation and palliative care for older people.

Home care and support for informal care

Where communities are in charge of home care they have an important responsibility for monitoring it and improving access and quality, as well as for providing

Box 21. Services of early support to promote independent living in Kuopio, Finland

The city of Kuopio, Finland, developed proactive measures and early support to promote independent living at home for older people. To this end, collaboration was cultivated between primary health care staff, specialists and other stakeholders (including NGOs) and geriatric and gerontological expertise of staff was fostered.

As a result, the Early Support of Older People in their Daily Lives (VAMU) project developed a care model that provides tools for early identification of risks, assessment of service needs and follow-up planning. A team of experts trained and supported project staff in early observation to promote proactive skills of staff in geriatric and gerontological care.

The project helped to improve practices across administrative and professional boundaries. This has become part of jointly agreed annual personal development plans for all service providers involved. As a result, the available resources are better able to meet the service needs of older people. In addition, older people's own active involvement was fostered, as well as empowerment of their families and friends.

Source: European Commission (2015).

support for informal care (OECD, 2013). Communities can provide these services with a focus on a continuum of care choices.

A basic package of publicly funded support for informal caregiving (including self-care) is vital in order to make informal care offered by family members and friends sustainable. This public support can be provided in coordination with and supported by volunteer action (see also the chapter on domain 6: civic engagement and employment). It both contributes to improving the health and well-being of those in need of care and protects the health and well-being of informal caregivers. This public support includes the training of older adults in self-care and the training of informal caregivers.

Where communities are responsible for home care, they also have an important role and mandate to improve quality and access to care provided by professional services. This includes attracting appropriate skill mixes of staff with sufficient general knowledge and awareness of gerontological and geriatric issues. Quality issues in the care of people with dementia are particularly severe and widespread in many cases; awareness is growing of the need to address these (WHO, 2012b).

Carers or families with dependent older people are the largest source of care and support in the WHO European Region; they need to be supported to continue playing this important role.

Caring for an older family member, spouse or friend can have an important impact on the lives of families

and the person who takes over the primary care role. The unpaid care role can result in significant physical, emotional and economic strain for the care provider and can even put the carer at risk of ill health (WHO, 2015b: Chapter 5). Carers need to be supported to enable them to continue this role. Support includes adequate information, skills to assist caring, financial support and respite to enable some freedom to engage in other activities (WHO, 2012b).

A range of programmes have been developed to assist informal carers, many of which have well proven effects for both the carer and the care recipient. Carer respite services and home-based support for carers are important interventions and can help reduce the burden of caring (Colombo et al., 2011).

For carers for people with dementia, psychoeducational interventions should be offered to family and other informal caregivers at the time the diagnosis is made. Training of carers involving active carer participation can support carers who are coping with behavioural symptoms in people with dementia (OECD, 2015). Furthermore, psychological strain of carers should be addressed with support, counselling and cognitive-behaviour interventions, with particular attention to carers who develop depression, which should be managed according to depression guidelines (WHO, 2012b). The WHO iSupport website is an online training programme to support caregivers for people living with dementia (WHO, 2017b).

Residential care facilities

A number of trends in good practice within residential care have emerged in Europe and can be used as checklists for communities that are in charge of providing residential care (OECD, 2013; Leichsenring, Billings & Nies, 2013). They include the following strategies:

- providing a continuum of choices between independent living in one's own home and living in homes (or departments within homes) that care for those with intensive long-term care needs;
- de-institutionalization of residential care by providing an “everyday” living environment for as long as possible, with individualized living space, including (and in particular) for those with dementia – this can include shared apartments with integrated care services, embedded in community life (much has been learnt in this respect about the importance of integrating residential facilities in the community and avoiding placing homes at the outskirts of cities – examples are flat-living communities in Austria, Germany and the Netherlands (OECD, 2015: 44));
- supporting the creation of health-promoting residential care facilities that provide a comprehensive range of services, including for health promotion and disease prevention (such as adequate physical activity, high-quality nutrition and improved falls prevention) – examples include “health-promoting nursing homes” in Vienna (see the chapter on domain 3: housing, Box 8);
- creating incentives for training and retaining staff with sufficient skills in gerontological and geriatric issues and reducing staff turnover (WHO, 2015b: Chapter 5);
- fostering cooperation with the health care sector to avoid preventable admissions to residential care – for example, by providing adequate nutrition and care to prevent the onset of pressure ulcers in hospitals that may result in the need for intensive long-term care;
- putting in place quality-of-care strategies and continuously monitoring their implementation, including with the participation of local organizations of older people, and giving more attention to the psychological and well-being aspects of those living in residential care (WHO, 2015b: Chapter 5; Willemse et al., 2015).

Ambient assisted living and “ICT for ageing well” services

This section reviews the roles that ICT, ambient assisted living (AAL) and e/mHealth and care technologies can play in creating more age-friendly environments, with a focus on their applications for AAL and “ICT for ageing well” services. These are seen as important for the future development of efficient long-term care systems in Europe (European Commission, 2013b; Carretero, 2015), as well as for the integration/better coordination of services (see WHO, 2015b: Chapter 5).

Compared to the topics covered in the other parts of this chapter, this area of interventions is more experimental in many instances. Moreover, few European overviews are currently available that comprehensively review the lessons learnt in order to support municipalities to identify and implement ICT/AAL policy solutions that can enhance older people's quality of life while simultaneously strengthening municipal service accessibility, effectiveness and sustainability. This remains the case, despite the fact that ICT and AAL solutions and services are making an ever-increasing contribution to how older people experience their lives in cities and communities throughout Europe. While the technology market is growing and changing rapidly, these developments are often fragmented and unequally distributed across countries and between population segments within countries (European Commission, 2007; 2014c; 2014d).

Although ICT/AAL solutions are often cross-cutting and support applications and services across all eight domains of the AFEE framework, they play a particularly important role within the cluster of domains addressing municipal services: domain 7: communication and information and domain 8: community and health services.

To foster discussion of this complex topic, this section presents a three-dimensional conceptual model (Fig. 6) that helps with visualizing the application landscape for many ICT/AAL solutions, to provide insight into relevant questions of ICT/AAL policy development and implementation. This conceptual model aims to provide an overview of ICT/AAL applications, for which a common taxonomy is still broadly lacking in the literature (AALA, 2015).

In line with widespread policy and service design principles, the citizen/service user is situated at the centre (or origin) of Fig. 6, and the areas of application expand outward and around, in three axes or dimensions. Rather than explicit gradients, each axis represents a continuum of support to enhance older people's functioning in a city's social and environmental ecosystem.

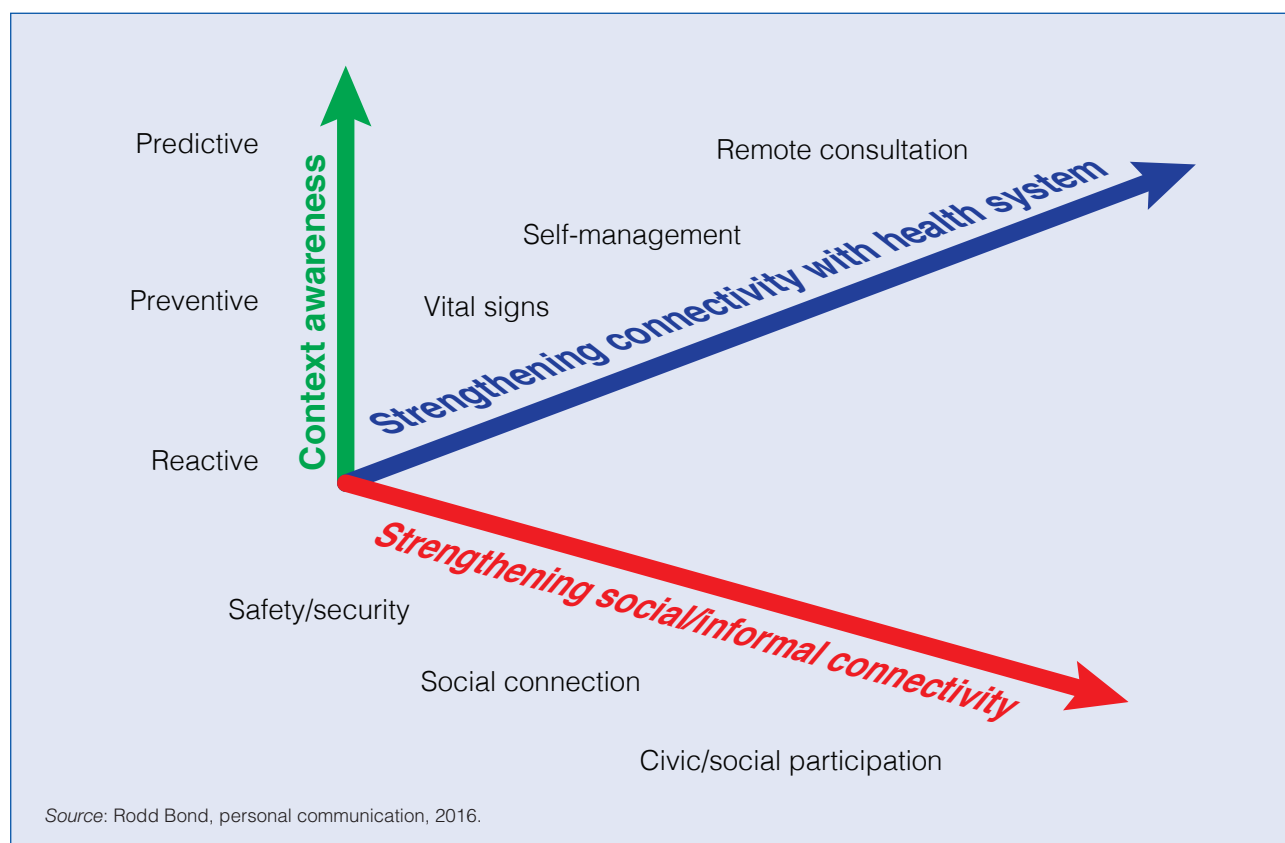
The red axis is characterized as a continuum where ICT/AAL provides applications and services that incrementally strengthen older people's social and informal connection to their community. This is generally the municipal policy area of social care and community development. At the most immediate level, this addresses application areas such as those that reinforce older people's sense of safety and security at home. These tend to be oriented towards alarm and emergency response – where sensors trigger alarms for breaches of property (intruder alarms, door and window closures), personal accident pendant alarms (for incidents such as falls) and warnings of environmental risks (smoke detectors, gas leaks and water overflows). Sensors usually trigger a voice call connection to a call centre, where an adverse event can be managed, including direct connection to relevant emergency service providers (see Box 22).

Extending along this continuum are social connectivity support services; these may include websites for service/event awareness, senior helplines (such as “good morning call services”) and social networks around areas of common interest. Many of these types of service are directed at combating social isolation; promoting awareness of services and entitlements; encouraging physical, social and cognitive activity; and connecting and engaging with social groups and activities.

Further along this axis of informal community connectivity are proactive services that encourage and support greater participation of older people in the civic and economic life of the city or community – whether through formal employment (full time or part time) or volunteering. Applications in this area range from portals providing seek/search services for work engagement, opportunities to contribute for limited amounts of time, time-banking/social credits, mentoring services, intergenerational activities, online skills development and lifelong learning.

The blue axis is characterized as a continuum where ICT/AAL provides applications and services that incrementally strengthen connectivity with the health system. This is generally the municipal policy area of health, primary

Fig. 6. A conceptual model for ICT/AAL applications



Box 22. Telesupport at home: improving access to services and combating social isolation in Maltepe municipality, Turkey

To increase access to health care services for older people who live alone in their own homes and to support those at risk of isolation, Maltepe municipality in Turkey has introduced a telesupport system in the form of a wireless device with a call button to wear or place in the home. The call button is linked to a call centre run in partnership with a private provider. Pressing the button connects older people directly to someone they can talk to. This can be used as emergency call system, but it is also used by older people who miss having someone to talk to or who have questions about health concerns, for which they can receive basic information on prevention and healthy living and be referred to services including home care, health and psychological counselling services.

In the case of emergency, or if the person calling for support does not respond, an alarm is triggered and the location from which the call was placed is registered and sent to the emergency and ambulance services. This service is part of a reorganization of community services in Maltepe that was finalized in 2013, with the aim of increasing quality of life of older people.

This telesupport service is part of a package of home-based care interventions that aim to increase quality of life, offer support to families and improve access to health care. Services include support for leading healthy lives for those over the age of 65 years, including dietitian advice and psychological counselling, and are available free of charge around the clock.

Source: Marmara Ambulans (2013).

and long-term care services. A broad range of technology area definitions are used along this axis including telehealth, eHealth, mHealth, connected health, eCare and telemedicine. With its more clinical/medical data focus, health professional involvement, public health system orientation and procurement models, the area of eHealth is sometimes differentiated from ICT/AAL as a market segment. From an older person's perspective, however, living at home and using ICT both to interact within the social and environment milieu and to manage health conditions presents significant overlaps in terms of technology acceptance, usefulness and costs.

The most immediate level along this continuum is home-based vital signs monitoring, where older people use a range of devices to gather personal physiological information about chronic conditions at home. Typical devices include scales, blood pressure cuffs, heart rate monitors, respiratory and breath analysis flow meters and blood glucose-level analysers. At a minimum, these data are recorded manually and shared with a doctor or nurse at scheduled meetings/visits. More automated processes support the transfer of these data to remote telehealth call services via phone, text message or Internet services, where they are monitored and where alarms can be triggered and responses initiated if values transgress thresholds agreed between service recipients and providers.

A natural extension of these devices is to provide a richer range of services around these regular home-based data gathering and upload activities to support greater individual empowerment to self-manage health and well-being. These self-management enhancements involve applications on interactive devices such as iPads and smartphones, which can record additional qualitative health assessment inputs; locally analyse and display trends in symptoms, behaviours and condition management knowledge; provide motivational messages; and channel multimedia educational, learning and training material.

Additional sensors to monitor movement, gait, sleep quality and activity levels are augmenting the range of devices and services now on the market. While some of these additional services have evolved from a health and clinical service perspective (such as sleep quality monitoring) there is now a growing range of pervasive health monitoring devices (such as fit-bit wrist bands, activity physiology monitoring watches and similar devices). These are directly aimed at the personal consumer-oriented health and wellness market and will increasingly become available to older people.

Applications and services further along this axis of strengthened connectivity to the health system can be characterized by ICT/AAL that can significantly improve

patient-centred screening and assessment, consultations and clinical decision-making in terms of diagnostic information quality, timeliness and multidisciplinary team participation. Applications in this area build upon data gathered through monitoring and call centres but bring the client into direct online contact with their clinical team, who may be distributed in multiple locations.

The green axis is characterized as a continuum where ICT/AAL provides applications and services that are incrementally more sensitive to and aware of a person's individual, social and environmental context. This axis is oriented towards the current and future quality and ambition of ICT/AAL applications. It is closely linked to innovation and design advances in the components and systems architecture of ICT/AAL platforms, as well as the ability of organizations – both individually and operating in cooperative ecosystems – to exploit these advances effectively and ethically.

This axis has some similarities with the “three generations” model of telecare systems, where higher generations involve more advanced systems with larger amounts of data to support proactive care service interventions (Kubitschke & Cullen, 2009). ICT/AAL developments along this axis are characterized by their ability to manage risk better in the “orange zone” – where older people, carers and health and social care professionals can jointly mediate and negotiate risk – through greater insight, awareness and responsiveness.

The starting-point of this axis is ICT/AAL systems that are very reactive to events and that trigger alarms and emergency responses based on predefined protocols. First and second generation telecare systems are of this type. They are primarily designed to reduce anxiety among older people and their carers, and they may reduce the use of primary health care services (Department of Health, 2009; Beale et al., 2010).

Further along this continuum are systems that gather and analyse additional information in many formats from older people and their surrounding social and physical environments. These data can be stored over time in order to analyse changes in health status, behaviour and levels of activity. Trends can be displayed and insights into changes can be extracted by looking at patterns in the information over time.

An objective of these systems is that the additional “contextual data” and feedback that are part of these solutions can improve awareness and understanding of

conditions. They can encourage and empower preventive actions, proactively managing risks at home and reducing pressures on health systems. While there are some early commercial implementations of solutions with these ambitions, considerable ongoing research and innovation activity is continuing into these types of system. Evidence of their efficacy and impact on health and well-being outcomes is still underdeveloped, however.

Emergency planning and disaster preparedness

Older people are among the most vulnerable groups during disasters and conflicts, but their special needs and roles have often not been addressed sufficiently by emergency programmes or planners (Hutton, 2008; WHO, 2015b; Dodman et al., 2012). A number of guidance documents and case studies have been published in recent years that propose awareness-raising strategies about older people in disasters and emergencies, analyse factors that affect them and provide examples of policies and practices to address vulnerability and health concerns for older people in emergencies (Box 23). The need to protect older people in emergencies is illustrated by the experience with (natural) disasters and emergency situations in Europe in recent years, which points to gaps in current emergency planning at the local level (Vandentorren et al., 2006; Åström, Forsberg & Rocklöv, 2011).

Governments in Europe usually have emergency and disaster plans in place, with detailed planning for the case of emergencies or (natural) disasters, including at the regional and local levels. Cities and communities differ in the ways they have adapted them to their local contexts, however, and in how they pay special attention to the risks to which vulnerable older people might be exposed. This has to take into account that some risks – for example, from extreme weather conditions (extreme high or low temperatures) – pose substantially greater health risks for older people than for the population at large.

A special challenge of emergency situations is how to reach out to vulnerable older people who may live alone, without family or community support, and who are thus more difficult to reach to inform about adequate measures or provide rescue. In this respect a number of lessons can be learnt from recent emergencies in Europe, with a focus on natural disasters such as earthquakes, flooding and extreme weather conditions

Box 23. Guidance on helping older people in emergencies

Recognition of the importance of planning for disaster preparedness with a special focus on older people is growing. The topic of older people in emergencies has therefore received increasing attention over the last 10 years, as documented by a number of guides and studies (Hutton, 2008; WHO, 2008; Pan American Health Organization, 2012; WHO, 2013). *WHO's World report on ageing and health* gives a list of topics and examples for action (WHO 2015b: Table 6.1).

Moreover, HelpAge International has developed a number of guides with a focus on resource-constrained settings and for humanitarian aid (HelpAge International, 2015). These can also serve as resources for designing emergency plans with the specific vulnerabilities of groups of older people in Europe in mind (see also the reviews of the Inter-Agency Standing Committee (IASC) Working Group on the inclusion of older people in humanitarian action) (IASC, 2015).

and the current state of play of contingency plans for heatwaves and cold weather (see, for example, Kovats & Ebi, 2006). A final aspect to consider in emergency preparedness is the role older people can play themselves in sharing information in times of emergency. Again, older people should be seen not only as a vulnerable population but also potentially as contributors and helpers in an emergency situation.

Policy interventions and initiatives by action area and objective

Table 8 follows the structure of this chapter's proposed directions for interventions and objectives and adds examples from existing age-friendly strategies, action plans and case studies. Interventions and initiatives mentioned may be projects already implemented in local contexts or those designed for implementation in an age-friendly action plan.

Table 8. Practice examples for community and health services from local age-friendly action plans and assessments

Action area	Objective	Examples of policy interventions and initiatives
Coordination of care and integrated care provision (cross-cutting with domain 4: social participation, domain 6: civic engagement and employment and domain 7: communication and information)	Facilitating access to seamless service delivery for those in need of health, social and long-term care	● Doctors' referrals to physical or social activities for older people (gentle fitness, walking groups, theatre etc.) ● Health and social care workers with the task of improving the integration of health and social care for patients with complex and multiple needs ● Multiservice centres for older people and case workers that connect the different services available ● Local information and coordination centres ● Developing a local service providers forum to enhance collaboration between different agencies
Health services, including health promotion and prevention services (cross-cutting with domain 4: social participation)	Including prevention and health promotion in health services	● Health checks and effective interventions to control and manage chronic diseases and follow-up care ● Tobacco cessation advice and counselling ● Mental health promotion and memory training in health centres and community centres ● Promotion of physical activity in group setting or at home ● Information and activities to promote healthy diet ● Screening and vaccination services (e.g. mobile screening service campaigns in neighbourhoods)

Table 8 contd

Action area	Objective	Examples of policy interventions and initiatives
Home care and support to informal care (cross-cutting with domain 4: social participation and domain 6: civic engagement and employment)	Provide home care services	● Home improvement agencies tasked to provide services that enable people to remain independent at home as long as possible ● Improvement of availability and accessibility of in-home medical and social help ● Cleaning and personal hygiene services at home ● Food services
	Support to carers and families	● Differential financial aid and support programmes for families with dependent elders ● Family assistance at home: ability to get help with maintenance, personal hygiene, household help for the older person in the family ● Providing day care services ● Online information platforms for carers ● Psychological support services also for carers ● Funeral support services ● Emergency services ● Telephone assistance services ● Temporary loan of technical equipment (walking frames, wheel chairs etc.)
Residential care facilities (cross-cutting with domain 4: social participation and domain 6: civic engagement and employment)	Ensure long-term care services of good quality for those in need	● Increasing the availability and affordability of sheltered housing for those in need ● Improving and monitoring quality of care ● Ensuring a seamless continuum of care after release from hospital ● Health promotion and prevention services in residential care setting
AAL and “ICT for ageing well”		● Remote security alarms ● Technological solutions for communication from home to nurse, doctor or hospital ● Remote sensors of activity ● Virtual ward to develop new services (e.g. Hospital at home project)
Emergency planning and disaster preparedness		● Designing protocols and programmes to reach out to vulnerable old people in case of an emergency ● Making emergency plans for extreme weather events and emergencies ● Monitoring system through a registry of vulnerable and frail older people ● Ensuring arrangements are in place locally to respond effectively to infectious outbreaks

Resources and toolkits

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Glossary and references

Glossary

This glossary contains definitions of key terminology and concepts in active/healthy ageing. The definitions are primarily drawn from existing international documents. They are quoted verbatim from these sources and detailed references are provided to enable the reader to refer to the complete source document to obtain further information or context. The citation provided relates to the source from which the definition was extracted for inclusion in this glossary; it should be noted that this may not necessarily be the source in which the definition was first coined. Where a more recent source confirms a prominent earlier one, in some cases both have been listed.

Accessibility

This describes the degree to which an environment, service or product allows access by as many people as possible, in particular people with disabilities (WHO, 2011; 2015b).

Accessibility standards

A standard is a level of quality accepted as the norm. The principle of accessibility may be mandated in law or treaty, and then specified in detail according to international or national regulations, standards or codes, which may be compulsory or voluntary (WHO, 2011).

Activity limitations

In the International Classification of Functioning, Disability and Health, these are the difficulties an individual may have in executing activities. They may range from a slight to a severe deviation in terms of quality or quantity in executing the activity in a manner or to the extent that is expected of people without the health condition (WHO, 2011).

Active ageing

This is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age (WHO (2002b; 2015b).

Age-friendly cities and communities

These are cities or communities that foster healthy and active ageing (WHO, 2015b).

Age-friendly environments

These are environments (such as in the home or community) that foster healthy and active ageing by building and maintaining intrinsic capacity across the life-course

and enabling greater functional ability in someone with a given level of capacity (WHO, 2015b).

Ageism

This refers to stereotyping and discrimination against individuals or groups on the basis of their age. Ageism can take many forms, including prejudicial attitudes, discriminatory practices or institutional policies and practices that perpetuate stereotypical beliefs (WHO, 2015b).

Ambient assisted living (AAL)

This is a combination of intelligent systems of assistive products and services, integrated in the preferred living environment, to constitute “intelligent environments” to compensate predominantly age-related functional limitations and support an independent, active and healthy course of life (European Commission, 2013).

Assistive technology (or assistive devices)

This refers to any device designed, made or adapted to help a person perform a particular task; products may be generally available or specially designed for people with specific losses of capacity. Assistive health technology is a subset of assistive technologies, the primary purpose of which is to maintain or improve an individual’s functioning and well-being (WHO, 2015b).

Communication

This includes languages, display of text, Braille, tactile communication, large print and accessible multimedia, as well as written, audio, plain-language, human-reader and augmentative and alternative modes, means and formats of communication, including accessible ICT (United Nations, 2006).

Determinants of health

These are the conditions in which people are born, grow, live, work and age, including the health system. The circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities – the unfair and avoidable differences in health status seen within and between countries (WHO Regional Office for Europe, 2013a).

Digital divide

This refers to the gap between individuals, households, businesses and geographical areas at different socio-economic levels with regard to both their opportunities

to access information and communication technologies and their use of the Internet for a wide variety of activities (WHO, 2011).

Disability

This is an umbrella term for impairments, activity limitations and participation restrictions, denoting the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors) (WHO, 2001; WHO, 2015b).

Functional ability

This refers to the health-related attributes that enable people to be and to do what they have reason to value. It is made up of the intrinsic capacity of the individual, relevant environmental characteristics and the interactions between the individual and these characteristics (WHO, 2015b).

Functioning

This is an umbrella term for body functions, body structures, activities and participation. It denotes the positive aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (WHO, 2001, WHO, 2015b).

Health literacy

This refers to the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand and use information in ways that promote and maintain good health (WHO Regional Office for Europe, 2013a).

Health equity

Equity is the absence of avoidable, unfair or remediable differences among groups of people, whether those groups are defined socially, economically, demographically or geographically. "Health equity" or "equity in health" implies that ideally everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that no one should be disadvantaged from achieving this potential (WHO Regional Office for Europe, 2013a).

Healthy ageing

This is the process of developing and maintaining the functional ability that enables well-being in older age (WHO, 2015b).

Informal care

This refers to unpaid care provided by a family member, friend, neighbour or volunteer (WHO, 2015b).

Institutional care setting

This refers to institutions in which long-term care is provided. These may include community centres, assisted living facilities, nursing homes, hospitals and other health facilities; institutional care settings are not defined only by their size (WHO, 2015b).

International Classification of Functioning, Disability and Health (ICF)

This is the classification that provides a unified and standard language and framework for the description of health and health-related states. ICF is part of the "family" of international classifications developed by WHO (WHO, 2001).

Life-course approach

This suggests that the health outcomes of individuals and the community depend on the interaction of multiple protective and risk factors throughout people's lives. The life-course approach provides a more comprehensive vision of health and its determinants and a focus on interventions in each stage of their lives (WHO Regional Office for Europe, 2013a).

Long-term care

This consists of a range of medical and personal care services that are consumed with the primary goal of alleviating pain and suffering and reducing or managing the deterioration in health status in patients with a degree of long-term dependency (OECD, 2011). It refers to the activities undertaken by others to ensure that people with a significant ongoing loss of intrinsic capacity can maintain a level of functional ability consistent with their basic rights, fundamental freedoms and human dignity (WHO, 2015b).

Quality of life

This is individuals' perceptions of their position in life in the context of the culture and value system in which they live, and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept, incorporating in a complex way a person's physical health, psychological state, level of independence, social relationships, personal beliefs and relationship to salient features in the environment. As people age, their quality of life is largely determined by their ability to maintain autonomy and independence (WHO, 2002b).

Supportive environments for health

These offer protection from threats to health and enable people to expand their capabilities and develop self-reliance in health. They encompass where people live, their local community, their home and where they

work and play, including people's access to resources for health and opportunities for empowerment (WHO Regional Office for Europe, 1991; 2013a).

Universal design

This refers to the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. It should not exclude assistive devices for particular groups of people with disabilities where this is needed (United Nations, 2006; WHO, 2015b).

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The WHO Regional Office for Europe

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