

# Canadian policy perspectives on promoting physical activity across age-friendly communities: lessons for advocacy and action

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## ABSTRACT

Population ageing combined with physical inactivity has critical implications for the public health of communities in the twenty-first century. In the last decade, the World Health Organization launched the age-friendly cities agenda, aiming to address population ageing through whole-systems, rights-based, health equity-focused approaches. An important intervention for age-friendly communities is modifying built environments to support population-level physical activity. Physical activity can help mitigate impacts of chronic diseases and social isolation on older adults. Need for advocacy and action in this area raises questions of how to develop supportive environments for physical activity across age-friendly community types. In Canada, a substantial proportion of older adults live outside large urban municipalities, for which scant research exists on fostering age-friendly built environments. To this end, we conducted qualitative research involving semi-structured interviews with 21 municipal policy influencers in Alberta, Canada to gather perspectives on development and early implementation of an age-friendly policy framework in the small urban and rural context. Our findings are organised by three main themes providing key lessons for advocacy and action, namely *pursuing comprehensive planning*, *promoting public engagement* and *prioritising the needs of older adults*. This research informs advocacy and action priorities in promoting built environment modification for routine physical activity as part of an age-friendliness agenda for small urban and rural regions of Canada and other countries.

**KEY WORDS**—age-friendly cities, built environment, city planning, older adults, healthy public policy, physical activity, social participation.

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## Introduction

Population ageing, coupled with lack of physical activity, presents a significant challenge to improving health status and quality of life for older adults (Hodge 2008; King and King 2010; United Nations Department of Economic and Social Affairs Population Division 2014). Older adults comprise one of the fastest growing population segments worldwide, with attendant challenges for community structure and the stability of health-care systems (United Nations 2013). In the last decade, the World Health Organization (WHO) introduced the global age-friendly communities agenda, advocating for *whole-systems, rights-based, health equity-focused* approaches to increasing the age-friendliness of cities (Lui et al. 2009; WHO 2007). Although a variety of definitions exist, age-friendliness is for the most part concerned with governance and practice to promote and sustain supportive environments for the engagement and participation of older adults pursuing active ageing in their communities (Menec et al. 2011; Public Health Agency of Canada (PHAC) 2012; WHO 2007). Recognising that age-friendliness is more likely to occur in jurisdictions that have established policy frameworks to benefit older populations (Golant 2014), the age-friendly cities movement calls on municipal actors to develop targeted strategies addressing the needs of older adults (PHAC 2012; WHO 2007). These strategies must span the municipal built environment, incorporating urban design, land-use planning and transportation (Rao et al. 2007), and require careful consideration of age-friendliness for housing, pedestrian infrastructure, transit, recreation facilities and spaces, commercial and public services, and health-care organisation (Buffel, Phillipson and Scharf 2012; WHO 2007). To encourage and support the development and implementation of age-friendly initiatives in communities, the WHO created the Global Network of Age-friendly Cities in 2010 (WHO 2017a). Through formal memberships, communities and cities have access to this global platform where experiences and lessons learned can be shared with the purpose of mutual learning and support in the implementation of age-friendly initiatives. Formal membership in the Network requires commitment to four steps, namely engaging older people throughout membership; baseline assessments of community age-friendliness (across all of the Age-friendly City domains, such as transportation, community support and health services, and social participation); development of a three-year municipal action plan; and identification of indicators to monitor implementation (WHO 2017b). Currently, 380 communities are involved with the Network across 37 countries, although there

are only 13 communities registered in Canada, located across the provinces of Ontario, Manitoba and Québec (WHO 2017c).

In Canada, the PHAC and many provinces (which have legal authority over Canadian municipalities) (Sancton and Young 2009) have made age-friendliness a policy priority since the advent of the age-friendliness movement (Edwards and Mawani 2007; Federal/Provincial/Territorial (F/T/P) Ministers Responsible for Seniors 2006; Golant 2014; Menec *et al.* 2011). Building on the WHO Global Network of Age-friendly Cities (WHO 2017a), PHAC (2012) defined Pan-Canadian Age-friendly Communities Milestones to help Canadian municipalities implement the Age-friendly Communities model. PHAC presented its own steps for communities to become more age-friendly, including active engagement of seniors in community advisory groups, formal support of local government, definition and assessment of an action plan, and public reports on progress and outcomes, acknowledging differences in communities' needs and resources (PHAC 2012).

Aligning with an emerging spate of scholarship reconnecting public health with urban planning (Corburn 2004; Koohsari, Badland and Giles-Corti 2013; Raine *et al.* 2012; Rydin *et al.* 2012), many Canadians advocating for more age-friendly communities have adopted a socio-ecological perspective on supportive environments that affords older adults more opportunities for health, participation and security (Menec *et al.* 2011; Milio 1987; Shareck, Frohlich and Poland 2013; United Nations 2002), according to the objectives laid out by the WHO (2002). Within the broader scope of this approach, increasing physical activity levels, especially walking (Golant 2014; King and King 2010; Menec *et al.* 2011; WHO 2007), can reduce the incidence and prevalence of chronic conditions for health and improve social connectedness for security of older adults (Heath and Stuart 2002; Menichetti *et al.* 2016). However, advocates face challenges operationalising the age-friendly communities agenda to create supportive environments for physical activity in Canada (Edwards and Mawani 2007; Golant 2014; Plouffe and Kalache 2011). Many Canadian municipalities are characterised by sprawling land uses, automobile-centric transportation and market-driven housing systems, complicated by daily average temperatures below freezing in most regions during winter (Garvin, Nykiforuk and Johnson 2012; Moore and Pacey 2004). Ensuring supportive environments for physical activity are available and accessible to a growing demographic of older adults may require modifying built environments (Beaglehole *et al.* 2011) and increasing social connectedness (Li *et al.* 2005; Lui *et al.* 2009), necessitating strong political will and substantial public buy-in at the local levels (Fitzgerald and Caro 2014; Keyes *et al.* 2014; Raine *et al.* 2012).

A key research direction for the age-friendly communities agenda is the explication of differences across localities (Fitzgerald and Caro 2014); namely whether the size of a community impacts the degree of local support for age-friendliness interventions (Menec *et al.* 2011). To this point, research on policy development and implementation of supportive environments for healthy ageing (and physical activity) has tended to concentrate on the redevelopment and revitalisation of core areas in large urban municipalities, whereas small urban and rural areas have received less attention (Reeve *et al.* 2015). The majority of Canadians live outside large urban municipal cores (Gordon and Janzen 2013), underlining the importance of these small urban and rural regions to realising the age-friendliness agenda in Canada. The present research gathers municipal policy influencer perspectives on the development and early implementation of an age-friendly policy framework in a Canadian municipality comprising both small urban and rural aspects. Findings provide insight to age-friendly community advocates to adopt and implement policy frameworks that create more supportive environments for physical activity across a substantial portion of the Canadian older adult population. Additionally, research recommendations may be relevant to advocates for improving the age-friendliness of small urban and rural settlements in many other industrialised nations.

## **Background**

### *Benefits of physical activity for the older adult demographic*

In Canada, as in other countries with declining fertility and mortality, the older adult population is growing at a much faster rate than the general population (Moore and Pacey 2004). In 2012, people aged 65 and over comprised 15 per cent of the population, or about 5.2 million people; by 2036, they are projected to account for approximately one-quarter of Canadians (Statistics Canada 2012). Chronic multi-morbidity affects more than 30 per cent of Canadians older than 65, who report one or more diagnoses of arthritis; cancer; respiratory, pulmonary or heart disease; diabetes; and/or dementia (National Seniors Council 2014a). Social isolation further complicates these conditions for Canadian older adults, with estimates for the prevalence of loneliness as high as 90 per cent (depending on the assumptions of the study) (National Seniors Council 2014b).

There is broad consensus that physical activity can significantly contribute to the prevention and management of chronic health conditions (King and King 2010; Tremblay *et al.* 2011). By engaging in regular moderate to vigorous physical activity at least 30 minutes per day, older adults are at a

lower risk for chronic illnesses such as coronary heart disease, hypertension, colon cancer, osteoporosis and non-insulin dependent diabetes (WHO 2009). Physical activity can also benefit older people living with chronic conditions. Research shows that even frail and chronically ill older adults can benefit from exercise, to improve mobility, increase functional ability, and maintain autonomy and independence, reducing the risks of complications in ageing (Heath and Stuart 2002; Menichetti *et al.* 2016). Moreover, physical activity has been shown to reduce depression, anxiety and stress, and is positively associated with increased social support and mental health (Golant 2014; King and King 2010; WHO 2009), serving to address the wider prevalence of social isolation among older adults (Richard *et al.* 2013). Being physically active may also reduce costs of and demand for health and social services (WHO 2010a). Despite all the benefits of a physically active life, however, older adults have a high prevalence of physical inactivity (Hallal *et al.* 2012; WHO 2010a).

The greatest population-level benefits of physical activity for older adults accrue in various settings as part of a daily lifestyle routine, including recreational or leisure-time exercise, walking and cycling for transport, work-related physical activity, and housework (Hallal *et al.* 2012; Oka 2011; WHO 2010a). Supportive environment components permitting the incorporation of physical activity into a daily routine include appropriate housing options (Fitzgerald and Caro 2014; Keyes *et al.* 2014; WHO 2007), improved pedestrian and cycling infrastructure to promote safe active transportation (Borst *et al.* 2008, 2009; Day 2008; Fitzgerald and Caro 2014; Keyes *et al.* 2014; Strath, Isaacs and Greenwald 2007; WHO 2007), increased accessibility to a variety of destinations (Borst *et al.* 2009; Day 2008; Fitzgerald and Caro 2014; Keyes *et al.* 2014; Strath, Isaacs and Greenwald 2007; WHO 2007) and more opportunities for social interaction (Day 2008; Fitzgerald and Caro 2014; Keyes *et al.* 2014; Strath, Isaacs and Greenwald 2007; WHO 2007). Such opportunities for physical activity are limited with the high proportion of older adults living outside large urban municipal core areas in Canada (Hodge 2008), since the establishment of easily accessible, supportive environments for physical activity in small urban and rural areas may require a considerable investment in modifying built environments (Beaglehole *et al.* 2011; Lemmens 2009; Raine *et al.* 2012; Resnik 2010).

### *Barriers to physical activity in Canadian built environments*

Onset of urban sprawl in Canada coincided with the emergence of the so-called Baby Boomer generation at the end of the Second World War (Gordon and Janzen 2013; Patterson *et al.* 2014). Built environments

outside large urban municipal core regions are typically characterised by separated land uses, residentially focused urban design, low-density development, curvilinear *versus* gridded street patterns, and a high degree of automobile dependency (Gordon and Janzen 2013; Grant and Scott 2007; Lemmens 2009; Resnik 2010). These development patterns may not present a supportive environment for older adults due to the high cost of housing, lack of public transportation, scarcity of green spaces, and shortfalls in necessary clinical and other services (Menec *et al.* 2011). The lack of support is concerning, considering that conservative estimates show more than one-third of Canadians over the age of 65 live outside large urban municipal core areas and intend to remain in those areas, or *age in place* (Hodge 2008). Because Canadian older adults are often limited in terms of their household income and physical mobility (Edwards and Mawani 2007), they may be unable to relocate to more age-friendly areas (Patterson *et al.* 2014).

There is a substantial literature examining the relationship between built environment features and physical activity behaviours in general (Ding and Gebel 2012; Durand *et al.* 2011; Saelens and Handy 2008) and specifically relating to older adults (Li *et al.* 2008; Strath, Isaacs and Greenwald 2007; Van Cauwenberg *et al.* 2011). Despite some inconsistency in findings (potentially attributable to methodological issues) (Van Cauwenberg *et al.* 2011), the research literature generally reports that mixed land uses (Durand *et al.* 2011; Grafova *et al.* 2008; McCormack and Shiell 2011; Michael, Green and Farquhar 2006; Saelens and Handy 2008; Van Cauwenberg *et al.* 2011); greater connectivity (Grafova *et al.* 2008; McCormack and Shiell 2011; Michael, Green and Farquhar 2006; Saelens and Handy 2008); mass transit (Durand *et al.* 2011; Michael, Green and Farquhar 2006; Saelens and Handy 2008; Wasfi, Ross and El-Geneidy 2013); street shade, lighting and furniture (McCormack and Shiell 2011; Saelens and Handy 2008); and higher residential densities (Durand *et al.* 2011; Grafova *et al.* 2008; McCormack and Shiell 2011; Michael, Green and Farquhar 2006; Saelens and Handy 2008) create more walkable neighbourhoods, and may increase physical activity across generations. A number of these features are lacking in the Canadian context outside large urban municipal core areas (Grant and Scott 2012). The overall consensus on modifying built environments for older adults' regular physical activity (*i.e.* as part of an active lifestyle) is that it will require greater attention to adequate and affordable housing, easier access to commercial and health-care service destinations, urban (re)design to encourage active and recreational walking, and expanding transportation options beyond the private automobile (Fitzgerald and Caro 2014; Menec *et al.* 2011; WHO 2007). Because these aspects of the built environment tend to fall under local

jurisdictions, municipal governments are emerging as a key driver in the success or failure of operationalising the age-friendly communities agenda in Canada (Plouffe and Kalache 2011; Raine *et al.* 2012; Reeve *et al.* 2015).

### *Engaging the perspectives of municipal policy influencers*

Municipal governments in Canada are responsible for the provision of land-use planning, zoning, development controls, subdivision, commercial development and transportation systems under the authority of their respective provinces (Sancton and Young 2009). In the context of a local age-friendly agenda, policy influencers can be defined as individuals and groups inside and outside government with a scope of action to advocate for strategic institutional or programmatic policy change (Nykiforuk, Wild and Raine 2014). Municipal policy influencers thus have the potential to play a major role in the development, implementation and evaluation of age-friendly initiatives in Canada (Plouffe and Kalache 2011; Reeve *et al.* 2015). As opposed to individual-level interventions promoting physical activity (which may work for a small group of people but have effects that dissipate over time) (Heath and Stuart 2002), municipal strategies that aim to create supportive environments for physical activity may have a greater population-level impact, including a positive influence on older adults (Rose 2009; Sugiyama and Thompson 2007). Nevertheless, finding the political will and consensus of municipal policy influencers for health equity-focused initiatives has sometimes proven difficult (Collins and Hayes 2013; Goins *et al.* 2013). Research shows that the priority accorded to public health issues (such as age-friendliness) by policy influencers reflects a convergence of many ideological factors, such as belief in the relative proportion of individual *versus* societal responsibility for health problems (Nykiforuk, Wild and Raine 2014), the impact of the political climate and media coverage (Tan and Weaver 2009), and perception of the values and will of constituents (Dodson *et al.* 2013; O'Connell 2009; Tung *et al.* 2012). By examining the convergence of municipal policy influencer perspectives, it may be possible to strengthen intersectoral advocacy and action on age-friendly initiatives with the aim of increasing the physical activity levels of older adults across community types.

## **Methods**

### *Study context in Alberta, Canada*

The current research presents an analysis of semi-structured interviews with policy influencers about the development and early implementation of an

age-friendly policy framework in a municipality in Alberta, Canada combining governance of both small urban and rural aspects. This municipality was selected for its status as an early adopter of the age-friendliness mandate provincially (although it was not a member of the WHO Global Network of Age-friendly Cities), and moreover for exemplifying many of the challenges in promoting routine daily physical activity for older adults outside core areas in large urban municipalities. Due to the relatively small population of policy influencers in the study municipality, it was necessary to anonymise the location in order to protect the confidentiality of the research participants. Therefore, the location of the study is referred to as the Municipality, and all research participants have been identified by pseudonyms, as a condition of formal ethical clearance for the study. Nevertheless, some broad outlines of the Municipality can be highlighted without compromising confidentiality, characterising features of the study context with potential transferability to other regions. Although it is one of the demographically youngest provinces in Canada, moderate estimates for Alberta predict 1.18 million people will be over the age of 65 by 2041 (approximately 19% of the total population), more than double the current number (Government of Alberta 2015). The proportion of older adults is expected to similarly rise in the Municipality. Like many other parts of Alberta, the Municipality experiences cold and snowy Canadian winters, with an automobile-centric transportation culture typical of a low-density prairie settlement (Garvin, Nykiforuk and Johnson 2012). Experiencing high population growth overall in the past ten years, the most recent 2011 Canadian Census data show that Municipality residents are more affluent, less demographically diverse and more likely to live in single detached housing than in other Alberta municipalities (Statistics Canada 2011).

An emerging awareness of social and environmental responsibility in the Municipality has fostered a number of new sustainability-focused initiatives by the municipal government. Among such initiatives, the Municipality released an age-friendly policy framework intended to lay the foundations for supportive environments through improving strategies, programmes and services, and specific activities and products in its small urban and rural context. The age-friendly policy framework proceeded through an extensive consultation stage, in which older adults provided their input and feedback on the proposal. Further consultation was conducted across government departments in the Municipality, and local media provided coverage focused on dissemination to older adults. The policy framework included provisions for housing, transportation, urban design, learning- and health and wellness-oriented programmes and services, volunteer activities, social gatherings, and recreation facilities and spaces focused on the



needs of older adults. In illustration, housing strategies included promoting mixed-use communities (providing services for older adults within residential walking distance). Transportation strategies aimed to increase mobility and accessibility to destinations by improving the local transit system and commercial services (e.g. partnerships with taxi companies to provide discounts to older adults). Strategies to improve access to recreation facilities and spaces included offering free classes or programmes to socio-economically disadvantaged older adults, as well as undertaking the adaptation of specialised physical activity equipment to accommodate their functional abilities. Together, all of these strategies had the ultimate goal of maximising physical and social opportunities for older adults to lead an active, independent and happy life.

### *Sampling and data collection*

For this research, policy influencers consisted of government representatives and employees as well as members of the local media in the Municipality. Potential interviewees were identified through an environmental scan, including review of the Municipality's age-friendly policy framework, providing a maximum variation sample (Starks and Brown Trinidad 2007), based on Municipality departmental or media affiliations. All contacted parties were provided with an e-mail introduction letter and invited to take part in the study. Interviewees were requested to provide additional contacts to participate, a process known as *snowball sampling* (Coyne 1997), with additional e-mails sent to those individuals. During the recruitment process, 21 of 25 contacted individuals agreed to participate in the study. Representation included interviewees from the Municipality's land-use planning, transportation, engineering, transit, housing, sustainability, seniors and social services departments, as well as municipal counsellors, members of the community's seniors' advisory committee (including older adults) and the media.

Participant recruitment and semi-structured interviews were completed in May and June 2010. The research team obtained written prior informed consent for all the interviews, which stipulated that study results would be anonymised at the reporting stages. As well, ongoing verbal consent was obtained from interviewees, while assuring them that their participation was voluntary. The interviews lasted between one and one and a half hours. With permission, all interviews were digitally audio-recorded and then transcribed verbatim. Interviewees were offered an opportunity to review their own transcript, and to have any data they wished to exclude removed from the final version for analysis. Additionally, all members of the research team signed and adhered to a data confidentiality agreement.

The semi-structured interviews employed an epistemic lens (Brinkmann 2007; Caelli, Ray and Mill 2003), that is, the interviewer engaged interviewees in the co-generation of knowledge about creating supportive environments for physical activity as part of an age-friendly policy framework, based on interviewees' own knowledge and experiences. The semi-structured interview guide included, but was not limited to, open-ended questions and planned and unplanned probes regarding interviewees' familiarity with the Municipality's age-friendly policy framework; barriers and facilitators to implementing its built environment goals (specifically focused on sustainability in land-use and transportation planning); factors affecting the implementation of healthy public policy in the community; roles and responsibilities of different local departments and levels of government; the process of including seniors' perspectives; and the public response and media coverage on the plan.

### *Data analysis*

Interview data underwent both primary and secondary analysis (Szabo and Strang 1997). The primary analysis was conducted concurrently with the interviews, allowing for verification and exploration of emergent themes with subsequent interviewees. At this stage, the research team developed an initial list of codes using a deductive approach based on the work of key policy implementation theorists (Bowen and Zwi 2005; Hogwood and Gunn 1984; Mazmanian and Sabatier 1981). Emergent ideas that did not fit with one of the *a priori* codes were used to form new codes, as appropriate. Following this work, secondary analysis re-examined the data and the primary analysis inductively, with attention to emergent ideas about age-friendliness advocacy and action. In both cases, memos were used to keep track of coding decisions and any changes in the development of codes. Using elements of analysis derived from grounded theory (Charmaz 2004; Hallberg 2006), but not adhering to the formal structures of that methodology, overarching concepts and ideas were organised from the interviews by abstracting the codes into categories and aggregating these categories into themes (Caelli, Ray and Mill 2003). Thematic content analysis of the interview transcripts was conducted using NVivo 8 qualitative data analysis software (QSR Software 2014). The analysis resulted in emergent themes interpretable according to the whole-systems, rights-based and health equity-focused approaches advocated by the global age-friendly communities agenda (WHO 2007), although these conceptualisations of age-friendliness were not specifically included in the interview guide.

### *Qualitative rigour*

Reflexivity, validity and reliability were the key measures of qualitative rigour in the study (Kuper, Lingard and Levinson 2008; Malterud 2001; Mays and Pope 1995). Since qualitative research in health promotion conventionally employs techniques such as journaling, regular debriefing, memos, member checking and re-examination of data to help reduce bias, the research team employed the following strategies. To maintain reflexivity (Kuper, Lingard and Levinson 2008), observational journal notes were recorded during the interviews with thoughts on key themes, significant body language and any participant discomfort in answering. To ensure validity of interpretation of the interview content (Malterud 2001), interviewees were provided with their interview transcripts for review and revision prior to the analysis stages. Regular debriefing sessions with the research team throughout the coding process and primary and secondary analysis of the data verified reliability of the analysis, with consensus on the coding process allowing further reflection to minimise researcher bias (Mays and Pope 1995; Onwuegbuzie and Leech 2007; Szabo and Strang 1997).

### **Results and discussion**

Three main themes that were developed through secondary analysis of the interviews with policy influencers in the Municipality highlight important activity areas for advocates of age-friendly initiatives tasked with fostering supportive environments for physical activity: *pursuing comprehensive planning*, *promoting public engagement* and *prioritising the needs and aspirations of older adults* (Table 1). Each theme is comprised of two distinct, but complementary sub-themes that provide guidance for action. Subsequent sections provide illustrative quotes from the interview transcripts and relevant evidence from the small, but growing, research literature on implementing the age-friendly communities agenda.

#### *Pursuing comprehensive planning*

The *pursuing comprehensive planning* theme as an activity area aligns with the whole-systems approach to creating supportive environments for physical activity, as envisioned by the socio-ecological framing of the age-friendliness movement (Menec *et al.* 2011; Milio 1987; Shareck, Fröhlich and Poland 2013; United Nations 2002; WHO 2002, 2007). The whole-systems approach to age-friendliness contends that all aspects of municipal jurisdiction influence supportive environments (Fitzgerald and Caro 2014; Menec

TABLE 1. Themes and sub-themes for age-friendly advocacy and action identified from thematic content analysis of policy influencer interviews in the Municipality

Themes	Sub-themes
Pursuing comprehensive planning	Contest municipal responsibility for health and wellbeing Incorporate age-friendliness into sustainable development initiatives
Promoting public engagement	Gather input on age-friendliness in dialogue with older adults Alleviate tensions between social responsibility and commercial development
Prioritising the needs and aspirations of older adults	Address the obstacles for older adults within community-level interventions Target vulnerable segments within the older adult population

et al. 2011; Rydin et al. 2012). As has been noted in the research literature on implementation (Buffel, Phillipson and Scharf 2012; Menec et al. 2011), a further implication of this approach is the potential for realising cross-sectoral synergies by integrating age-friendly strategies with other municipal initiatives, such as efforts to promote sustainable development.

*Contest municipal responsibility for health and wellbeing.* Within the whole-systems approach activity area of *pursuing comprehensive planning*, the most pressing guidance for action is for advocates to assert a strong justification for local, collective approaches to age-friendliness and to *contest municipal responsibility for health and wellbeing*. Framing discussion of the age-friendly policy framework, each interviewee expressed a unique opinion on how the Municipality's policies might impact the health and wellbeing of older adults. A small minority of interviewees considered older adults to be primarily responsible (as individuals) for their levels of physical activity and social isolation.

I think that [the Municipality] can't make you sick, nor can they make you well. How can you hold them responsible? (Frances)

This minority of interviewees from the Municipality demonstrated what the literature has termed a residualistic perspective (Abel and Frohlich 2012), asserting individual responsibility for health and wellbeing. These residualist standpoints echo similar views found in research conducted with older adults in the province, in which older adults expressed the need to adapt themselves to built environments rather than expecting municipalities to

modify it to meet their needs (Garvin, Nykiforuk and Johnson 2012). In Alberta, some policy influencers and many of the older adults they serve may emphasise individual responsibility over collective action; nevertheless, the majority of interviewees in the Municipality perceived the influence of built environments as settings for collective decision-making that provide opportunities and barriers for age-friendliness.

[H]ealth is so dependent on our environment, and how we interact with our environment. If you are going in and zoning a place that is going to allow certain uses, those uses are going to impact the people that are going to be there. (Jonas)

Interviewees also considered policy interventions at the municipal level to be better tailored to the local context than efforts by other tiers of government. This emphasis on the local context for health echoes perspectives gaining momentum across the health promotion research literature, where municipal settings have become preferred targets for advocacy and action (Raine *et al.* 2012; Reeve *et al.* 2015; Rydin *et al.* 2012). Indeed, interviewees expressed support for the government of the Municipality to assume greater responsibility for age-friendliness.

I think that municipalities should lead the way and take the primary responsibility for healthy ageing of their residents ... because we are closer to our residents. We are the first level of government. (Bonnie)

Despite this, interviewees also pointed out that because health falls constitutionally under federal and provincial jurisdiction in Canada, the role that municipalities can play is limited, or at least, quite complicated.

[O]ur mandate under the Municipal Government Act is not to look after health for people ... that's not our responsibility. [However,] we realise we have a social responsibility to our community, and therefore we do undertake to be involved in some social advocacy ... and provide some levels of service to them. (Charles)

In other studies, lack of political will, inadequate staff and funding levels, and poor co-ordination between governments and government departments have been identified as potentially undermining municipal initiatives to create supportive environments for physical activity (Filion *et al.* 2015; Goins *et al.* 2013; Grant *et al.* 2010). Interviewees in the Municipality felt that the province had downloaded responsibility for health and wellbeing on to municipalities without appropriate funding and support, and expressed frustration about bearing the costs to promote age-friendliness in the Municipality.

[H]ealth care is a provincial responsibility, not a municipal responsibility ... the municipality ends up picking up costs which it shouldn't. (Joan)

Framing health and wellbeing as a societal rather than individual responsibility will require concerted messaging and communication in the public sphere that emphasises mutual responsibility and interpersonal interconnection (Sun 2014), consistent with the WHO global age-friendly communities movement and PHAC recommendations for addressing ideological barriers to action (PHAC 2012; WHO 2007). For example, it may be necessary to engage champions with expertise in inter-governmental relations who can spearhead agenda-setting exercises in order to secure a mandate and budgetary support from upper levels of government to sustain age-friendliness as a municipal-level health and wellness initiative. This type of strategy could be integrated into the step of ‘securing formal support from local governments’ as recommended by the PHAC Pan-Canadian Age-friendly Community Milestones (PHAC 2012).

*Incorporate age-friendliness into sustainable development initiatives.* Within pursuing comprehensive planning as an activity area, another important guidance for action is that advocates should work to understand where age-friendliness that supports physical activity intersects with prioritised policy, programme and project opportunities in order to *incorporate age-friendliness into sustainable development initiatives*. In qualitative research with planners in the Canadian city of Toronto (a large urban municipality), researchers reported that sustainable development has been established as an overall priority in municipal planning activities (Filion et al. 2015). In the small urban and rural setting of the Municipality, interviewees expressed more comfort with the idea of pursuing comprehensive planning to increase environmental, social and economic sustainability, rather than to address the physical activity needs of older adults specifically.

Certainly, sustainability is huge. I mean the population is definitely going to age, but you also need to make sure those goals are sustainable [and] that you can carry them through. (Barry)

Sprawling land uses have been shown to increase the cost and environmental footprint of providing electrical, water, waste and transit services to communities in Canada (Vojnovic 1999), as well as limiting the social capital of neighbourhoods (Leyden 2003). Conversely, compact, high-density, walkable neighbourhoods (more typically found in the core areas of large urban municipalities) contribute to long-term environmental benefits, lower economic costs and provide opportunities for older adults to access supportive environments for physical activity (Leyden 2003; Plouffe and Kalache 2011; Vojnovic 1999). Interviewees explained that part of the impetus for sustainable development stemmed from a recognition that the lack of compact development had produced many negative

consequences for the Municipality, and that modifying the built environment could reduce economic costs.

[L]ooking at things that were happening out in [the Municipality] ... subdivisions that were occurring haphazard[ly] ... looking at the economics of actually servicing some of this ... It just made sense in a lot of cases to start going down that road [of sustainable development] economically, socially, philosophically, environmentally ... being a little bit more progressive than what they had in the past. (Kevin)

Interviewees noted that built environment modifications intended to produce more sustainable development would also support principles of age-friendliness and improve opportunities for physical activity among older adults, paralleling similar conclusions presented in the literature (Buffel, Phillipson and Scharf 2012; Golant 2014; Rydin *et al.* 2012; WHO 2007).

[W]hen we are looking at trying to minimise our urban footprint, again there comes the sustainability aspect. There comes the opportunity for a broader range of housing, and housing types. There comes the opportunity for a greater feasibility of transit. (Maria)

Previous research has shown that modifications supporting both age-friendly physical activity and sustainable development include increased densification of residential housing (improving residential affordability) (Filion *et al.* 2015), zoning mixed land uses (increasing the accessibility of destinations) (Li *et al.* 2008), enabling non-motorised transportation networks (enabling active transportation and leisure walking) (Oka 2011), promoting urban design to foster social capital (reducing social isolation) (Leyden 2003) and providing mass transit options throughout non-urban municipal core areas (fostering independence) (Durand *et al.* 2011).

Further, intersectoral collaboration is a critical component for developing, implementing and evaluating age-friendly communities (Plouffe and Kalache 2011; Keyes *et al.* 2014); such ongoing dialogue is also a common feature of sustainable development initiatives (Rydin *et al.* 2012). Interviewees described how conversations about sustainable development fostered greater networking and co-ordination between policy influencers in the Municipality, who otherwise would be working in relative isolation from one another.

[W]e get people from all the departments around the table, and I think it is new for a lot of people ... economic development staying at the same table as [social services], as assessment and tax ... you see these interdisciplinary groups more. (Alma)

Aligning built environment modifications for age-friendliness with sustainable development initiatives in municipalities will require advocates to understand the intersection of such aims when leveraging policy,

programme and project opportunities, and potentially drawing on work to develop baseline assessments of community age-friendliness, as part of the WHO Global Network of Age-friendly Cities four-step cycle (WHO 2017b). At the same time, advocates should promote conceptual understanding of age-friendliness for older adults' physical activity as part of initiatives to increase awareness and build capacity around the sustainable development table, perhaps by linking information from age-friendliness baseline assessments, monitoring indicators, and public reporting on progress and outcomes in the WHO and PHAC recommendations to similar data obtained for sustainable development goals.

### *Promoting public engagement*

The *promoting public engagement* theme as an activity area evokes a rights-based approach (WHO 2007) to recognise and empower older adults for increasing the age-friendliness of their communities through deliberative decision-making processes, as has been outlined in the literature (Golant 2014; Resnik 2010). At the same time, a rights-based approach must contend with competing political, economic and social interests known to confront older adults in public engagement forums (Barnes 2005; Menec et al. 2011; Phillipson 2015), by working to channel those interests towards age-friendliness objectives that support the creation of built environments supportive of physical activity.

*Gather input on age-friendliness in dialogue with older adults.* Within the rights-based approach activity area of *promoting public engagement*, a key guidance for action is to help enable participation in both informal and formal aspects of community decision-making to *gather input on age-friendliness in dialogue with older adults*. Participation has been recognised in the literature as a key component of creating age-friendly communities (Menec et al. 2011; Plouffe and Kalache 2011). Interviewees described how older adults have taken an active role in the civic and social life of the Municipality.

[W]e have 80 year olds out there now who are volunteers, they are driving miles and miles in a day to pick up stuff for the [Municipality] Jamboree ... they are active in the library ... they are still going strong. (Frances)

Research shows both that older adults have the most complete knowledge of how the built environment impacts on their physical activity and consequently on their health and wellbeing (Barnes 2005; WHO 2007), and that the quality of decisions improves when interested and affected stakeholders participate in decision-making (Beierle 2002). Interviewees



emphasised the importance of formally engaging older adults in participatory governance, fostering collaboration across development, implementation and evaluation of the age-friendly policy framework.

[P]ublic participation, I can think of [that as] a respect aspect, because that is certainly something that impacts seniors. (Barry)

Interviewees echoed the research literature (Barnes 2005) in stressing that respectful and inclusive dialogue with older adults was a critical component in developing the age-friendly policy framework. They described how two-way communication between the policy influencers and age-friendliness stakeholders from the initial stages of policy formulation could increase community uptake of the Municipality's policy framework.

Communication, I think that is a really big one. You can write down on paper all you want about what you would like to happen, but unless people know it's going on, all the stakeholders are aware of the plan, then it won't be fully utilised. (Jack)

In the research literature, governance processes that recognise older adults' role in identifying and operationalising supportive environments for physical activity (and do not consider them as merely beneficiaries of age-friendly initiatives) will produce more equitable outcomes overall (Buffel, Phillipson and Scharf 2012; Lui *et al.* 2009). Beyond development of the age-friendly policy framework, interviewees described how successful policy implementation and evaluation would require ongoing dialogue with older adults in the community.

[K]eeping everybody involved in what is happening, in the progress, what initiatives are happening ... letting the seniors know ... [getting] their buy in, that they understand where it is headed, that they have that input. Because [the age-friendly policy framework] is evolving, it's not sitting on the shelf. We need to keep that information flow going. (George)

Promoting full and equitable inclusion of older adults in their communities requires a shift in thinking across municipalities (and all of society) to ensure older adults' involvement and contributions to their communities are valued and encouraged. This aligns with both the WHO and PHAC guidelines for promoting the participation of older adults as members of advisory committees in developing policy frameworks for age-friendly communities (PHAC 2012; WHO 2007). Formal processes necessary for continuing engagement and dialogue with older adults should be integrated within municipal governance and institutions (including advisory committees, public hearings, and other opportunities for input and feedback) in line with the WHO Global Network of Age-friendly Cities step of engaging older people throughout the age-friendliness implementation cycle (WHO 2002, 2007).

*Alleviate tensions between social responsibility and commercial development.* Another important guidance for action in the activity area of *promoting public engagement* for age-friendliness that supports older adults' physical activity is contending with influence from competing political and economic interests to *alleviate tensions between social responsibility and commercial development*. This is a challenge faced broadly by Canadians, where, over at least its first 20 years, health promotion in Canada has been accorded a lower priority than economic growth (Jackson and Riley 2007). Interviewees echoed this challenge and expressed a wariness of economic forces in the Municipality, assuming a heightened political priority compared to age-friendliness objectives.

[O]ften things get talked about in economic terms ... if it doesn't meet economic sustainability, well then it's off the board! Whereas you wouldn't say that [if] it is not socially sustainable ... or it is not environmentally sustainable, therefore we are not doing it ... [but] if it doesn't make sense in terms of dollars and cents ... we won't do it! (Alma)

In considering how to promote supportive environments for older adults' physical activity, interviewees suggested raising the economic and political profile of age-friendly initiatives. Despite recognising the pressing societal need to address both population ageing and physical inactivity, interviewees still perceived great utility in reframing the 'age-friendly issue' in terms of developers' profit margins and constituents' demands in Municipality.

[U]ntil providing for older adults becomes profitable or trendy, you often won't see the initiative for us to change our ways, or it will just be in minute steps ... If we don't start thinking differently about developing our communities to accommodate this demographic, it is just going to be a larger struggle ... that includes the developers as a stakeholder, as well as the Municipality. (Paula)

The interviewees were quick to point out the role of developers as disproportionately influential on how the Municipality's age-friendly policy framework could be implemented to modify the built environment.

[D]evelopers right now are more inclined to look at how much money they can make out of a development ... I think there has to be a little more education to the fact that ... along with making a profit, there is some responsibility to society in general ... that has to be brought forward and I don't think we've put that vision across to them yet. (Joseph)

However, the interviewees also considered that policy influencers could have a potentially balancing effect on the influence of developers, provided they recognised the need for age-friendliness, and took action on behalf of their constituents.

The classic case ... a politician that requested a sidewalk to be constructed so that people could walk from the Seniors' Centre to the Medical Centre ...

there was money made available, that was done, but it is only one sidewalk ... until it is supported by the community and the politicians, it doesn't happen. (Mark)

There are multiple studies in which municipal policy influencers and higher-level legislators have drawn upon perceptions of their constituents' will to drive their policy positions (Dodson *et al.* 2013; Goins *et al.* 2013; Tung *et al.* 2012). In the same regard, the importance of public support was emphasised by interviewees, who made comparisons between the implementation of the age-friendly policy framework and other initiatives drawing upon grassroots activity in the Municipality.

Because there was so much participation [and] public support, that is why we did it [built a recreation facility] ... I think the seniors have to get involved and ... their children have to get involved and say, 'Okay, we need these facilities! We need these things for our parents!' Because if they are not there, who is going to look after them? (Joseph)

The WHO and PHAC have some useful recommendations in this regard, such as how to identify stakeholders in age-friendliness initiatives, and what to do in cases of conflict (PHAC 2012; WHO 2007). Although it is difficult to develop recommendations dealing with competing economic forces on a case-by-case basis, Canadian municipalities do have regulatory powers such as zoning, building codes and bylaws to embed countervailing incentives for age-friendliness within municipal action plans. Similarly, while advocates cannot manufacture grassroots public support for age-friendliness, policy influencers can help create more responsive governance within municipalities that enables residents to voice their concerns and more effectively influence decision-making.

### *Prioritising the needs and aspirations of older adults*

As an activity area, the *prioritising the needs and aspirations of older adults* theme presents a health equity-focused approach to age-friendliness, which posits that municipal initiatives should address inequities in health and wellness (Rose 2009). Inequities in health and wellness refer to avoidable and unfair disparities in health outcomes based on socio-demographic, economic or political differences; that is, individuals given a higher status are more likely to be healthy (Rose 2009). Spatial and decision-making processes that unduly disadvantage older adults can produce or worsen health and wellness inequities (Phillipson 2015), as can disparities in status within the older adult population (Kosteniuk and Dickinson 2003). This dual health equity focus reverberates with proportionate universalism as an emerging concept in health equity research (Benach *et al.* 2013; Carey

and Crammond 2014). Proportionate universalism calls for universal rather than selective interventions, as well as increasing the intensity of interventions proportionate to the scale of disadvantage within a selected group (Benach *et al.* 2013; Rose 2009).

*Address the obstacles for older adults within community-level interventions.* The health equity-focused activity area of *prioritising the needs and aspirations of older adults* provides guidance for action in that age-friendliness advocates should work to ensure that broad-based initiatives *address the obstacles for older adults within community-level interventions*. There are several areas of municipal policy that are potentially relevant to establishing supportive environments for the physical activity of older adults, such as providing appropriate housing options, mass transit, pedestrian infrastructure, mixed land uses, green spaces, and accessibility of destinations and services (Ding and Gebel 2012; Koohsari, Badland and Giles-Corti 2013; Sugiyama and Thompson 2007). The interviewees described several initiatives within the Municipality intended to modify the built environment, which, despite not being focused on the particular needs of older adults, would nevertheless benefit age-friendliness.

[T]here are huge studies being done on how we can make our roads safer, not just for older drivers, but for any driver. (Rose)

In addition to aspects of the built environment, extant literature provides many examples of municipal planning movements that could potentially align with age-friendliness. Values within planning movements that could be selectively extended to consider obstacles for older adults within broader community interventions include New Urbanism's promotion of socially sustainable communities (Rodríguez, Khattak and Evenson 2006), Smart Growth's emphasis on walkability (Durand *et al.* 2011) and Universal Design's furtherance of equity in built environment access (Gray, Zimmerman and Rimmer 2012). Interviewees provided examples of these values within planning movements in relation to age-friendly objectives.

I think there is going to be more and more emphasis on, not only seniors, but [the] universal design aspect, accessibility aspect, creating more of a holistic community rather than [a] suburban kind of development. (Missy)

Using a proportionate universalism (Benach *et al.* 2013; Carey and Crammond 2014; Rose 2009) lens lends a theoretical basis for understanding how broadly based municipal sustainability and access initiatives may contribute to supportive environments for the physical activity of older adults. Interviewees echoed the research literature in stating that

interventions must be proportionate to the needs of older adults (Phillipson 2015) as part of these initiatives.

[W]hen we are talking about affordable housing, particularly for older people ... some councillors may have the view, 'Oh, well, we need a building that is going to have 40 housing units in it, and they are all going to be affordable, and therefore that will be something [for] seniors' ... but that is only one component ... [when] you reach certain ages ... you are looking for a social situation that meets your needs ... we want to be able to provide for those [needs], but we still want to be able to broaden the range [of] what we provide. (Maria)

Age-friendliness advocates working at the municipal level must ensure that universal interventions are proportionate to the needs and aspirations of older adults, for which the work of both the WHO and PHAC are instructive (PHAC 2012; WHO 2002, 2007). The WHO guidelines describe social inequalities for older adults in their communities and discuss political strategies like promoting leadership and volunteerism to promote equity (WHO 2002), furnishing additional guidance to age-friendliness advocates seeking to accommodate the priorities of older adults within municipal settings. The PHAC milestones provide further momentum for shifting societal values towards age-friendliness by emphasising the importance of promoting inter-generational respect and interaction to fostering social inclusion (PHAC 2012).

*Target vulnerable segments within the older adult population.* Prioritising the needs and aspirations of older adults as an activity area also requires consideration of a spectrum of need within the ageing population so that the creation of supportive environments for physical activity will *target vulnerable segments within the older adult population*. Research has associated inequities of health and wellness for older adults' both with common features of later life (such as retiring from work or cessation of driving) (Vrkljan and Polgar 2007; Lowry, Vallejo and Studenski 2012) and with personally relevant challenges (such as inadequate financial planning or lack of a social network) (Golant 2014; Keyes *et al.* 2013). Interviewees described a range of individual impacts in the transition to older adulthood, compounded by the lack of supportive environments within the Municipality.

[T]he risk of isolation ... words like independence, and dignity ... the distances involved suddenly become a massive barrier, and then you end up relying on your children, or your neighbours ... more seniors in [the Municipality] are doing that right now. (Roy)

According to the Government of Canada, the most vulnerable older adults live in poverty, many of whom are ethnic minorities or individuals with developmental disabilities (National Advisory Council on Aging 2005).

Applying the theoretical perspective of proportionate universalism would necessitate that these vulnerable individuals receive an even greater intensity of municipal age-friendliness interventions than other older adults. Such interventions might include addressing needs identified in the literature for financial support (Golant 2014), cultural sensitivity (United Nations 2002) and universal access despite disabilities (WHO 2002). A number of interviewees expressed the Municipality's commitment to supporting the more vulnerable older adult population, some also noting the importance of increasing the decision-making agency of socially disenfranchised older adults.

I think there really is that commitment to the vulnerable population, specifically vulnerable seniors, to really help them out. (George)

Some interviewees highlighted principles reflecting proportionate universalism in policies and initiatives for vulnerable low-income, minority and disabled older adults. Other interviewees described how limited funds tapered their ability to act on their perceived social responsibility for health equity-focused age-friendliness.

[W]e provide some volunteer services [and] give \$100 grants [to] low-income [older adults] ... and we just spent [several] million to build a Seniors' Residence [for] low-income seniors. We accept the fact that we have a social responsibility and to the best of our ability ... we do it. But it is limited by funds. (Charles)

Attention to areas in communities with lower connectivity has also been identified as an important issue for the age-friendliness movement (F/T/P Ministers Responsible for Seniors 2006), as an issue directly concerned with equitable accessibility of services. Further, overweight and obesity, as two indicators of lower physical activity, tend to cluster in more rural areas (Penney *et al.* 2014), where older adults experience poor walkability, challenges accessing services and destinations, and fewer, if any, mass transit options (Edwards and Mawani 2007; Frost *et al.* 2010). A number of interviewees characterised the Municipality's older adult population in the most rural reaches as experiencing the least supportive environments for physical activity.

[L]ots of seniors are still in the [more rural areas] ... it's tough to maintain that level of service ... locally our transit system doesn't give us the transportation options ... links within [the Municipality] are not ideal. (Paula)

The WHO (2002) recognises the unique needs of proportionately more vulnerable older adults, as well as challenges for implementing age-friendliness in small urban and rural regions, globally. At the same time, the Canadian government released a set of guidelines for Age-friendly Rural and Remote Communities in the last decade, with recommendations across each of the

eight age-friendliness domains to help communities develop their own municipal action plans, including strategies to improve health-care services access in rural communities (F/T/P Ministers Responsible for Seniors 2006).

### *Key lessons*

Notably, the Municipality was not a member of the WHO Global Network of Age-friendly Cities; thus, key lessons from this analysis can be considered to complement and strengthen recommendations within national and international age-friendliness guidelines, as well as highlighting some novel approaches. Within the *pursuing comprehensive planning* theme activity area, age-friendliness advocates should work to promote dialogue across communities that frames health and wellbeing as a societal rather than individual responsibility (Abel and Frohlich 2012; Li *et al.* 2005; Nykiforuk, Wild and Raine 2014). When possible, advocates should try to act in partnership with municipal governments to provide clarity and garner support from higher levels of government in recognition of the important municipal role in health and wellbeing as a key aspect of quality of life (Goins *et al.* 2013; Grant *et al.* 2010; Raine *et al.* 2012). As suggested by Buffel, Phillipson and Scharf (2012), age-friendliness advocates should strive to align initiatives for age-friendly physical activity with parallel sustainable development aims. As Plouffe and Kalache (2011) have suggested, advocates should aim to build ongoing capacity within municipal settings by engaging in intersectoral collaborations for sustainable development with the potential to be mobilised for age-friendliness.

Within the *promoting public engagement* theme activity area, advocates should strive to promote full and equitable inclusion of older adults in the informal civic and social life of their communities (Plouffe and Kalache 2011; Menec *et al.* 2011), spanning the range of leadership positions, volunteer activities and social gatherings. As the research literature indicates (Barnes 2005), formal processes for continuing engagement and ongoing dialogue are needed to ensure all segments of the older adult population are meaningfully consulted in shaping the content and objectives of age-friendliness policies and their implementation. Concurrently, advocates should look for ways to channel economic forces towards improving the age-friendliness of commercial developments (Lemmens 2009; Raine *et al.* 2012). Similarly, advocates should seek grassroots public support from municipal constituents and strengthen their voices (Edwards and Mawani 2006; Resnik 2010) in demanding supportive environments for physical activity. Participation in local healthy public policy processes, like that of municipal age-friendly initiatives, can be

aided by evidence-based tools such as the Policy Readiness Tool (Nykiforuk 2014).

Within the *prioritising the needs and aspirations of older adults* theme activity area, age-friendliness advocates should strive to address inequities of health and wellness (Rose 2009) among older adults, who have been shown to be disadvantaged by spatial and decision-making processes in small urban and rural communities (Phillipson 2015). Advocates can draw upon proportionate universalism as an emerging theory in the research literature (Benach *et al.* 2013; Carey and Crammond 2014) to help them generate designs for supportive environments for older adults within broader community initiatives. Age-friendly advocates should also recognise the importance of applying proportionate universalism principles to support an increasing population of socially disenfranchised older adults within the general population (National Advisory Council on Aging 2005). Further, advocates should consider intensifying interventions for older adults living in more poorly connected areas, where physical activity infrastructure and resources may be deficient (Penney *et al.* 2014). Finally, advocates should seek dedicated funding within universal interventions to target the vulnerable proportion of populations specifically (Plouffe and Kalache 2011).

#### *Study limitations and directions for future research*

Conducted with municipal policy influencers in a small urban and rural region of Alberta, Canada, this study provides critical insights around the successful development, implementation and evaluation of an age-friendly policy framework. As the researchers were the instruments of qualitative analysis, study findings may be limited by the potential for disciplinary or experiential bias to impact study results. The researcher who conducted all of the interviews with policy influencers was a long-term resident of the Municipality. While this facilitated rapport during the interviews, it may have also led to preconceptions about the built environment (land use, urban design and transportation) and potential for age-friendliness in the community to enter into the data analysis. However, awareness and reporting of this potential source of bias can go a long way to mitigate its effects (Polkinghorne 2006), as can employing the measures of qualitative rigour (reflexivity, validity and reliability) carefully chosen by the research team and used throughout the study (Kuper, Lingard and Levinson 2008; Malterud 2001; Mays and Pope 1995). Areas for additional research prompted by this analysis include evidence of effectiveness for interventions shifting public opinion from individualistic perspectives towards endorsing collective solutions, finding novel ways to incentivise economically age-friendly developments and pursuing theoretical development to support



built environment modification as a population health intervention strategy for age-friendliness. Such research could help to inform municipal policy frameworks as the age-friendly communities movement gathers increasing momentum across Canada, and in other parts of the world.

## **Conclusion**

Drawing on empirical research with a small urban and rural community working to develop and implement an age-friendliness policy framework (but not part of the WHO Global Network of Age-friendly Cities), this study contributes to a growing body of research, with a particular focus on establishing and maintaining age-friendly supportive environments for physical activity. According to this analysis, successful age-friendly initiatives to support older adults' physical activity will require advocates to help frame health and wellbeing as a societal rather than individually oriented issue. Obtaining clarity and support from other levels of government with authority for health and wellbeing may provide advocates with greater leeway to pursue built environment modification as an age-friendliness intervention in municipalities. Additionally, age-friendliness advocates can work to align their objectives with sustainable development initiatives, engaging intersectoral collaboration around sustainability to stimulate a higher priority for age-friendliness. Older adults engaging fully in the civic and social life of their communities is considered to be an important aspect of age-friendliness. At the same time, advocates should also seek formal opportunities for older adults' public participation and ongoing two-way dialogue in decision-making forums, fostering more collaborative governance. Given the multitude of (likely divergent) viewpoints from different stakeholders, it is critical to ensure the participation of a wide representation from public and private sectors and the community, and across the population of older people. The process of age-friendly decision-making should be iterative, ensuring collaborative efforts include economic proponents in working towards a healthy, active built environment. Seeking grassroots support and demand for age-friendly policies can further strengthen advocates' age-friendliness position against forces that promote sprawling developments. Age-friendliness advocates should address inequities in health and wellness using proportionate universalism principles; moreover, proportionate universalism – and dedicated funding – can be applied at greater intensities to address health inequities for the vulnerable older adult population. Advocates should also seek to address the lack of supportive environments for older adults' physical activity in more distal or rural areas, where need may be the greatest. The need for action is clear. Older adults represent one of the fastest

growing demographics in the Canadian population, and around the world. This necessitates decisive, collaborative and visionary action on the part of municipal policy-influencers and public health officials to create and sustain viable, supportive community environments for older adults' health and wellbeing.

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