



CONNECTING MEMORIES WITH NATURE

OPPORTUNITIES FOR RESIDENTS
OF LONG-TERM CARE FACILITIES
IN MID-SIZED CITIES

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INTRODUCTION: DEALING WITH AN AGING POPULATION IN MID-SIZED CITIES

Canada, like other Western countries, is facing the challenge of providing care for an increasingly large elderly population. Indeed data suggest that the Canadian elderly population will double by 2036 (Statistics Canada 2006). In Ontario, this means that the population of people over 65 years old may increase from 1.8 million in 2009 (i.e., 13.7% of the population) to 4.2 million or 23.4% by 2036 (Ontario 2009). Society encourages elderly people to stay in their homes for as long as they can, but this often becomes impossible unless constant personal care can be provided by a parent or personal caretaker. The current economic and time constraints facing children of

elderly people make it difficult for them to be able to consider full-time care of an elderly parent. In most cases, and especially for individuals suffering from dementia, placement in a long-term care (LTC) facility is often the only solution. While residents in some of these facilities may have gradual levels of independencies, in many of them residents have limited mobility. Residents in LTC facilities have a decreased sense of well-being compared to their counterparts living in other types of housing, such as their own homes or retirement facilities (Cummings 2002).



de Boer et al. (2017) state that “[r]esidents in traditional nursing homes spend a substantial part of their days doing little or nothing while remaining in a lying or sitting position, without social interaction, and they are rarely engaged in meaningful activities” (p. 41). This leads to additional mental and physical health problems that could have been avoided if these residents had greater levels of stimuli in their daily lives. One stimulus found to be highly beneficial is nature. As Rodiek et al. (2016) argue, “outdoor space can provide important health-related benefits for older adults, especially in long-term care settings where residents seldom leave the facility” (p. 222). Connecting with nature can thus result in an overall greater sense of well-being, which has been linked to better health and longevity (Edmans 2012).

Unfortunately, LTC facilities are generally not designed for the purpose of connecting elderly people to nature. In large cities, limited space means that many facilities are built with very little consideration for green spaces. As land is at a premium, intensification is a priority and facilities are built mainly to accommodate as many residents as possible over a small surface area. There are advantages to people living in these facilities—they are closer to medical centres and hospitals, for instance. In small rural communities, the challenge is exactly the opposite. While land is available, health services may be far and inaccessible for elderly patients who require rapid interventions.

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Mid-sized cities (MSCs) are uniquely positioned to be the sites of LTC facilities: they usually have an array of health services; they are often close to larger centres where more specialized services are offered; and they have a larger potential pool of elderly people who will require LTC facilities. Indeed, as most of the communities may have more flexibility in their municipal plans, due to their generally having less development pressure than larger centres, they can afford to design more nature-friendly and attractive LTC facilities that would have greater health benefits for residents. In this paper, we discuss the advantages and opportunities for MSCs to develop a positive and attractive system of long-term care facilities that can enhance quality of life for residents and elicit the longer-term benefits that such planning can bring to these cities. We also provide a case study on the Woodlands of Sunset Long-Term Care Facility in Welland and how having this connection with nature can help boost the morale of residents.

ACHIEVING QUALITY OF LIFE FOR ALL

Previous studies have shown that residents living in places where they have the potential for connection to nature tend to be more active and engaged than those living in conventional residences (de Boer et al. 2017). It has been suggested that physical activities and social interactions help residents maintain their mental, intellectual and physical capacities to a higher level than in inactive conditions. This has direct impacts on their quality of life, as well (Wood et al. 2009). Dijkstra et al. (2006) report that having access to nature or the outdoors—and, if possible, even spending some time outside—is important for residents in long-term care facilities. Such conditions have been found to help reduce stress and improve emotional and mental conditions.

Connecting new establishments such as long-term care facilities with access to nature is generally more easily accomplished in MSCs than in larger cities. There are several tools that can help support communities to design long-term care facilities that are more appropriate for elderly residents. Rodiek et al. (2016) underline the importance of evaluating outdoor environments as an integral component of the residential environment of long-term care facilities, and they describe several of these tools—in particular, the Seniors' Outdoor Survey – to assess preferences and potential uses of the outdoors by residents. Under their Smart Growth Program for small and mid-sized cities, the EPA (2016) emphasizes the importance of maintaining and promoting green spaces for all ages, including elderly people. However, while younger people are more mobile, and can travel to have access to green spaces, proximity is a much more important consideration for the elderly and, therefore, for the establishment of new long-term care facilities. In the United States, seniors tend to retire in mid-sized cities and then gradually move into neighbourhood long-term care facilities due to quality of life considerations. Other considerations that have been suggested as important in MSCs are issues of community affordability and safety, two aspects that can also increase the attraction of elderly people to move to such areas. Therefore, the design and planning of mid-sized cities smart cities should take into consideration these opportunities to retain and grow their populations.

PLANNING IN MSCS FOR AN AGING POPULATION: A WINDOW OF OPPORTUNITY

MSCs that aim to retain their current population and attract new residents should give thoughtful consideration to their land use planning policies. In the case of long-term care facilities, and given the arguments made earlier in this paper, this might include ensuring that the municipality's official plan and zoning bylaws have strategically designated locations for “institutional” lands (typically the land use category under which long-term care facilities fall) adjacent to those classified under open space, natural heritage, or other natural environment-related categories. The site planning process, during which the specific layout of buildings on the property and other on-site development-related decisions are made, should also involve a focused effort to maximize residents' views of the outdoors, particularly in the direction of the most significant natural features. In other words, priority should be given to minimizing the number of rooms and common areas that face parking lots and busy roadways, while instead maximizing the number facing more natural and aesthetically-pleasant settings (Wolf and Housley, 2016). At the same time, the site design may incorporate features such as walking paths, benches, and other accessible infrastructure that would facilitate the *outdoor* enjoyment of the property. Paths should be wheelchair accessible to give opportunities to all residents of the facility.

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Figure 1: Woodlands of Sunset and Surrounding Natural Environment.

Source: Google Maps, 2018.

Woodlands of Sunset is a long-term care facility managed by the Region of Niagara (see Figure 1). The facility is ideally situated on a property that includes a provincially-significant wetland, and is part of the Draper's Creek sub-watershed within the Welland River—a major tributary to the Niagara River. It is a system of two interconnected wetlands covering about 8% of the total 41,000 m² area of the property, which is surrounded by forested areas.

The location of the Woodlands of Sunset enables residents, staff and visitors to view a natural setting when looking out windows to the north, west, and south. Since 2015, the Family Council and the staff of this LTC facility have been collaborating with Brock University to enhance the sustainability of the property's features through community actions and research, with the end goal of improving quality of life for the residents and the neighbourhood. Conserving and enhancing the ecology of the property is essential to the integrity of the watershed and provides a rich opportunity to enhance the lives of the residents, many of whom have limited mobility. The built-up portion of the property is classified in the City of Welland's *Official Plan* as "Institutional" while the surrounding

landscape is categorized as part of the City's "Core Natural Heritage System" (City of Welland, 2017).

Views of these natural settings have been shown to increase well-being in seniors (Kearney and Winterbottom, 2006). In the case of Woodlands of Sunset, with the help of Brock University, bird watching was introduced to the residents as a means of increasing their connection to nature. Indeed, such activity encourages residents to look out windows and view nature irrespective of any physical or cognitive impairment they may have. To explore the effect bird feeders had upon resident's well-being, two bird feeders were placed outside two large viewing windows. Within weeks the bird feeders became a focal point for many residents, some watching the birds several times a day. Seeing the birds brought up childhood memories and made them feel happy. Many found it relaxing to watch the birds and found that it brought up childhood memories or gave them a sense of hope.

Bird watching is an activity residents can do year-round with family members, visitors, and other residents. Most noticeable is the impact upon residents with dementia and Alzheimer's; focusing on the birds

can distract and calm them, de-escalating periods of agitation. The feeders have also attracted small animals, such as squirrels, that many residents are delighted to see. These animals moved more slowly and were easier for many residents to observe. Staff also enjoy watching the birds, finding it a relaxing and calming activity. Also, the feeders have acted as a destination point during therapy sessions where residents can rest and focus on the outside world.

Placing bird feeders in a visually accessible space is a simple action that had only positive impacts for the nursing home residents, their families, and staff. The cost of the feeders is usually under \$100, with bird seed being the only ongoing cost. Many more activities of this nature can enhance cognition in residents and help maintain their physical and mental health. Similarly, Detweiler and Warf (2005) suggest that gardens and horticultural therapy have been shown to reduce stress in dementia patients. Such activities again demonstrate the importance of facilitating access to nature through strategic planning and design. As shown here, MSCs have this potential advantage, making them attractive in the long term for all spheres of the population.

Figure 2: Bird feeder from a viewing window at Woodlands of Sunset in Welland.



Credit: Samantha Morris



CONCLUSION

MSCs may have one of the best opportunities to attract a more stable population by attracting a more senior population if aspects such as community affordability, safety, presence of amenities and health care can be adequately planned. This has to include the presence of vibrant LTC care facilities that can maintain their linkages with an active life and nature. It has been argued that the concept of cradle-to-grave planning and development may be an effective way for MSCs to continue attracting a population that want to remain there for quality of life reasons, which would automatically include facilities that are connected to a natural environment that is also safe and accessible. We demonstrate that when LTC facilities are well planned, they can become a hub for more than just elderly people.

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