

# RESEARCH ROUNDUP

## Small Home Long-Term Care Housing Models



NATIONAL INNOVATION HUB • CENTRE NATIONAL D'INNOVATION

## Introduction

At APPTA, we strive to find relevant and timely research that has the potential to influence policy decision making for the aging population. One way of doing this is through our Research Roundup series. Our team devotes time to reading and prioritizing academic papers and grey literature, and investigates programming that fosters innovation related to how we care for older adults. We then summarize that information for a quick and consumable product. These periodical documents will summarize evidence based on relevant policy topics that are discussed through our ongoing stakeholder engagement.

If there are particular topics of interest you would like us to investigate, please let us know by emailing Daniel Smiley, Research & Logistics Specialist, at [daniel.smiley@dal.ca](mailto:daniel.smiley@dal.ca).

For this roundup, we are looking at *small home long-term care housing models*.

## Literature Review

### The Small House Model to Support Older Adults in Long-Term Care

Longstaff, W.; Filkowski, J.; & Severn, M.

2022, Canada

[Link to Article](#)

Produced by the Canadian Agency for Drugs and Technologies in Health (CADTH), this is a literature review of material published from 2016 to 2021 analyzing small house models of long-term care. Although some differences exist between the characteristics of these models (e.g., number of residents, degree of resident freedom, facility design), there are 3 recurring components: functional units with a small group of residents, replication of familiar domestic routines, and some form of decentralized staff. The key philosophic difference between the small house model and the traditional LTC model is the heavy focus on person-centred care. This approach to care in the small house model is firmly rooted in freedom of choice and autonomy for the residents.

Small house models eliminate the strict delineation of roles; staff at all levels are included in the decision-making process. Self-managed and universal work teams are prominent features of the small house model. Frontline staff with strong interpersonal skills are essential for successful implementation.

No strong trend emerges from the literature with respect to the impact of the small house model on resident-centred outcomes compared with more traditional models of LTC. This is likely due to lack of consistency in the outcomes that are measured and variability among the different small house models. Canadian literature on this topic is limited. The majority of identified studies used data from the US or European jurisdictions, which potentially limits its application to the Canadian context.

### COVID-19 case and mortality rates lower in green houses compared to traditional nursing homes in New York state

Young, Y.; Shayya, A.; O'Grady, T.; & Chen, Y.-M.

2020, US

[Link to Article](#)

In this article, the authors did secondary analysis of data from NY State, comparing Green Home (GH) small LTC facilities versus traditional nursing homes (NH) COVID-19 case and mortality rates. Green Homes are small homes that house 10-12 residents, each having a private bedroom and bathroom while sharing a kitchen, dining room, and living room. Despite Green House residents being older and sicker than traditional nursing home residents, the authors found COVID-19 case rates in GHs were half that of NHs and COVID-19 mortality rates in GHs were less than half that of small NHs.

They attribute these results to GH residents being shielded from COVID-19 exposure due to facility size (10-12 beds). GH's care model and efficient communication may have contributed to the positive outcome as well.

## Literature Review (continued)

### Clustered domestic residential aged care in Australia: fewer hospitalisations and better quality of life

Dyer SML, E.; Gnanamanickam, E.S.; Milte, R.; Easton, T.; Harrison, S.L.; Bradley, C.E.; Ratcliffe, J.; & Crotty, M

2018, Australia

[Link to Article](#)

This article compares the quality of life (measured with EQ-5D-5L), medical service use, and health and residential care costs of clustered domestic and standard Australian models of residential aged care across 17 facilities. A facility is defined as providing a clustered domestic model of care if it meets five of the six following criteria: small size living units, consistent allocation of staff to living units, accessibility to outdoor areas, meals cooked within the living unit, opportunity for self-service of meals, or opportunity for residents to participate in meal preparations. There were 541 participants, which included those with and without cognitive impairment residing in a residential aged care facility for at least 12 months, not in palliative care, and with a family member willing to participate on their behalf if required.

After adjusting for patient- and facility- level factors, individuals residing in clustered models of care had better quality of life, lower hospitalization rates, and lower emergency department presentation rates. It was also estimated that there is a saving of \$12,962 per person per year in residential care costs.

### The Physical Environment of Nursing Homes for People with Dementia: Traditional Nursing Homes, Small-Scale Living Facilities, and Green Care Farms

de Boer, B.; Beerens, H.C.; Katterbach, M.A.; Viduka, M.; Willemse, B.M.; & Verbeek, H.

2019, Netherlands

[Link to Article](#)

This article analyzes how physical environment impacts LTC residents with dementia. Innovations in nursing home design often focus on small-scale and home-like care environments. This study investigated: (1) the physical environment of different types of nursing homes, comparing traditional nursing homes with small-scale living facilities and green care farms; and (2) how the physical environment was being used in practice in terms of the location, engagement and social interaction of residents. Two observational studies were carried out.

Results indicate that the physical environment of small-scale living facilities for people with dementia has the potential to be beneficial for residents' daily life. However, having a potentially beneficial physical environment did not automatically lead to an optimal use of this environment, as some areas of a nursing home (e.g., outdoor areas) were not utilized. This study emphasizes the necessity of nursing staff to provide residents with meaningful activities and stimulate residents to be active, allowing them to use the physical environment to its full extent.



## Literature Review (continued)

### Homelike Models in Long Term Care: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines

Gray, C. & Farrah, K.

2019, Canada

[Link to Article](#)

Produced by the Canadian Agency for Drugs and Technologies in Health (CADTH), this literature review looks at 'home-like models of care', which overlaps with small-home LTC, but can also be applied within larger LTC facilities. The report summarized evidence from 2014-2018 regarding the clinical effectiveness, cost-effectiveness, and guidelines regarding home-like models of care for residents of long-term care facilities.

The study did not offer consistent results and limited quality. Overall, it suggests there was little difference between home-like and traditional models of care with respect to depression or affective state, and findings were inconsistent for cognitive functioning, quality of life, neuropsychiatric outcomes, social engagement, and functional status. No evidence regarding cost-effectiveness or relevant evidence-based guidelines were identified.

## Program Review

### Butterfly Model of Care

Meaningful Care Matters

Est. 1995

UK

The Butterfly Model of Care is a long-term care philosophy that emphasizes the creation of small, home-like environments for seniors. It generally houses 8-10 residents. The model is based on the idea that a small and intimate setting can help residents feel more at home and encourage meaningful relationships with caregivers and other residents. The model also emphasizes the importance of social and recreational activities, focusing on providing opportunities for residents to engage in meaningful and purposeful activities that promote well-being and quality of life. Overall, the Butterfly Model of Care seeks to create a warm and supportive environment that promotes the dignity, autonomy, and well-being of seniors that require long-term care.

### Schlegel Villages Model

Schlegel Villages

Est. 2004

Ontario

Schlegel Villages is a family-owned and operated long-term care and retirement home organization in Ontario, Canada. They are dedicated to providing compassionate and person-centred care to older adults in a home-like environment. Schlegel Villages was founded by Ron Schlegel in 2004, who had a vision of creating a new model of care for seniors based on the principles of relationship-centred care. This model focuses on building meaningful relationships between residents, team members, and families, and empowering residents to live life to the fullest. Today, Schlegel Villages operates many long-term care and retirement homes across Ontario, providing a range of care and support services, including memory care, rehabilitation, palliative care, and more. In addition to their focus on providing high-quality care, Schlegel Villages is also committed to innovation and research in the field of aging. They have partnered with a number of universities and research institutions to study and improve their care practices, and are recognized as leaders in the industry.

### Eden Alternative Model

The Eden Alternative

Est. 1994

United States

The Eden Alternative Model emphasizes creating a more vibrant and engaging living environment for seniors by integrating plants, animals, and children into the community. This model often involves small, home-like settings that encourage social interaction and meaningful activities. The Eden Alternative is a model of care for seniors that was developed in the United States in 1994 by Dr. William Thomas. It is a philosophy that emphasizes the importance of creating a living environment that promotes the well-being of seniors through meaningful social connections, companionship, and engagement in everyday activities.

## Program Review (continued)

### The Hogeweyk

Be Advice

Est. 2009

Netherlands

The Hogeweyk is the world's first 'dementia village,' a type of residential community designed specifically for people with dementia. The village is a self-contained neighborhood that provides a safe and secure environment for individuals with dementia, while also promoting independence and autonomy. The Hogeweyk and other similar villages typically feature a range of facilities and amenities, such as shops, restaurants, gardens, and communal spaces, all designed to resemble a traditional village or small town. The village may also include specialized care facilities, such as memory care units or assisted living apartments, as well as medical services and social activities. The goal of a dementia village is to create a supportive and engaging environment for individuals with dementia, while also providing them with opportunities for socialization, stimulation, and a sense of purpose. The village model has gained popularity in recent years as an alternative to traditional institutional care settings, which can be isolating and disorienting for individuals with dementia.

### The Green House Project

Center for Innovation, Inc.

Est. 2001

United States

The Green House model, developed by geriatrician Dr. Bill Thomas in the early 2000s, aims to provide individualized and home-like care for residents in long-term care settings. These homes typically house 10-12 residents, with private bedrooms and bathrooms, communal living spaces, and 24/7 care provided by certified nursing assistants and other healthcare professionals. The Green House model has been shown to improve residents' quality of life and reduce staff turnover rates.

The Green House® Project was created in 2001 and gained momentum in 2005 with a grant from the Robert Wood Johnson Foundation to develop 50 projects across the United States. In 2015, the Center for Innovation, Inc. (CFI) assumed operations of GHP, and in 2019 rolled out Green House 2.0, an initiative intended to broaden the reach and deepen the impact of the organization by expanding services beyond the traditional Green House model. GHP was highly effective in mitigating the impact of COVID-19 on elders, as shown by the project's [research](#).