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Evidence Snapshot

Models of residential aged care services

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Background

The Centre for Clinical Effectiveness was requested by Operations Director Residential Services/Director of Nursing, Kingston to undertake a review of literature to inform the residential aged care services task force.

Objectives

The aim of the evidence snapshot is to outline contemporary and innovative models of care in residential aged care (RAC) services both nationally and internationally. The information will help the RAC task force to identify current service gaps within Monash Health residential aged care facilities and potential changes to be embedded.

Scope

The scope of this evidence snapshot includes profiles of models of care in RAC facilities. This broadly includes how services are delivered in RAC facilities.

It excludes models focusing only on specific areas of aged care (i.e. chronic care, end-of-life-care, rehabilitation) or individual services (i.e. general practitioner and hospital services) within RAC. Service models that expand across primary care, community and home care were also excluded.

Google and Google Scholar was searched for relevant literature. Reference mining and hand searching of references on key publications were also performed to identify relevant publications within the scope of the snapshot.

Search strategy

Table 1.

Population	Aged or elderly persons (>65 years)
Setting	Include: International and national residential aged care (RAC) facilities (nursing homes, hostel for aged, residential aged care homes) Exclude: Rural care, community care, home care, primary care (GP)
Intervention	Include: Models of care, models of service delivery or models of delivery of care Exclude: Interventions, strategies, treatments, programs, methods
Outcomes	Include: Peer reviewed publications, white papers, organisation reports, other grey literature
Search terms	Terms related to “nursing home, residential aged care” and “model of care, service delivery model”
Databases	Google, Google Scholar
Dates	2012–2017

Results

Out of the 408 articles from the Google and Google Scholar search, one key scoping literature review [1] was identified. The scoping review [1] includes empirical research and grey literature from 73 articles. It provides a description of different models of nursing home care and reports the effectiveness of the models and their associated modes of service delivery. As the scoping review [1] provides information up till 2014, the remaining grey literature was screened

according to the inclusion and exclusion criteria in Table 1, and six articles published from 2014 onwards, were further identified.

The Summary of Evidence (Table 2) presents data from two main articles [1,2] that describe the philosophy/approach of the models and a description of the components of different RAC models of care. Also included in this description are aspects of staffing; mode of service delivery and effectiveness or outcomes measured about the model of care. Two RAC models described in the scoping review [1] (i.e. GentleCare and Wellspring models) were excluded from Table 2 due to the exclusion criteria in Table 1.

The remaining five articles [3-7] were studies evaluating various aspects of the Greenhouse model published after 2014. The brief outline of the studies are found in Table 3.

Table 2. Summary of models of care in residential aged care facilities [1,2]

Models of Care	Philosophy/Approach/Principles	Description of Components		
		Staffing	**Mode of Service delivery**	**Effectiveness / Outcomes**
Traditional Care [1]	*Approach* • Task-focused • Driven by the routines and efficiencies of the organisation *Layout* • Building design includes centralised nursing stations, a large, centralised dining room, shared bathing areas, limited space for residents' personal belongings, and corridors flanked by single or multi-bed residential rooms • Care providers determine the residents' activities, diets, and schedules, including bathroom routines	Not described	Not described	• Low employee job satisfaction • Emotionally exhaustive • Employees have little autonomy and perceive their work as undervalued • Significant staff attrition and retention difficulties
Alzeimer's Disease and Related Disorders Society ADARDS Model and the Embedded Flexible Assignments [1]	*Approach* • Flexibility towards residents and employees *Layout* • Homes divided into small units, including private resident bedrooms and bathrooms, a kitchen, living room and dining room, around a centralised room • Units function independently during daytime hours but cooperatively during evenings and nights, permitting lower staff-to-resident ratios at night • Residents do not have to adhere to specific schedules and have unrestricted access to secured gardens and pathways connected to the main	• *Extended care assistants (ECAs)* - customise own shift schedules to accommodate their families - average HPRD for ECA is 3.00 - familiar with all residents • *Flexible staffing policies* result in a considerable amount of rotation	• *ECAs* provide personal care, do laundry, cook, clean, and perform other social and domestic responsibilities • *ECAs* permanently assigned to one unit but familiar with all of the building's residents • *Enrolled nurse* responsible for medication administration and on duty 24 hours a day • *Communal meals* enhance social relationships between staff, residents, and family members	• Organisation benefits include - ease of staff recruitment and replacement - reduced staff turnover

	building			
The Eden Alternative®: Neighbourhoods and the Embedded Consistent Assignments [1]	*Philosophy* • American cultural change model and philosophy of care • Restructure of the delivery of care to reduce loneliness, helplessness, and boredom and increase quality of life of residents	• *Individual care aides (CA)* - consistently assigned to groups of residents (called families) - same caregiver frequently works with the same residents.	• *Online access to information* for families, residents, and managers • *Consistent assignments* facilitate familiarity, companionship, and stability for residents, families, and care aide; and also foster a sense of commitment and/or personal responsibility in care aides for the care they provide. • *Independence* is encouraged. Residents help with meal planning social events, and other day-to-day activities to reduce boredom and helplessness	• Managers and administrators benefits include - strengthened organisational principles - improved vision for quality improvements - enhanced programs for quality assurance • Evidence around consistent assignments is not convincing to support the effectiveness of this mode of service delivery
	Approach • Intermediate steps towards quality include the Eden Early Neighbourhood Model	Not described	• *Consistent assignment* of CAs and other departments (housekeeping, dietary) to certain residents • *Flexible* meal times than in a traditional model and residents provided with more food choices	• Empirical support for the Neighbourhood models is less extensive • CAs working in nursing homes that have implemented the early Neighbourhood or Neighbourhood model were not any more able to provide individualised care to residents than those working in nursing homes with no culture change
	Approach • Intermediate steps towards quality include the Eden Neighbourhood Model	Not described	• Everyone belongs to a "*neighbourhood*" • Residents participate in *social* and care planning and eat, sleep, and bathe as they wish • Buffet style meals, continental breakfasts, room service, and open pantries stocked with residents' favourite foods	
The Eden Alternative®:	*Layout* • Nursing home renovated so that	• *Universal or versatile workers*	• *Cross-trained CAs* dispense medications, do laundry,	Not described

Eden Household and the Embedded Universal or Versatile Worker [1]	clusters of bedrooms surround multiple kitchens, dining rooms and living rooms • Nine to 20 residents live in each cluster called a "household"	- cross-trained CAs that provide all services	prepare food, organise social activities and care for the animals, plants, and gardens • *Expansion of duties horizontally* (i.e. dishes, laundry, food service, cleaning), not vertically (i.e. decision-making, leadership, discussions assessments and related judgments)	
The Eden Alternative® Greenhouse Model and the Embedded Self-Managed Teams [1]	*Layout* • Standalone physical structures that house six to twelve residents • Private bedrooms and bathrooms organised around a central living space known as a "hearth" • Residents are encouraged to incorporate their own furnishings and personal belongings into the home • Fireplaces serve as a symbol of home, warmth, and comfort • Family-style kitchens with a single dining table promote active community participation • Access to outdoor space	• *Shahbazim.* - cross trained workers - receive 120 additional training hours - have a wide range of responsibilities i.e. ordering food, cooking, cleaning, laundering, providing personal care, administering medications, and acting as resources for the residents - self-manage and are not considered a part of the nursing workforce.	• 6 HPRD (above US standard of 3 hours in traditional models) • *Vertically expanded duties of staff members* • *Residents participate* in food acquisition and meal planning and preparation, or eat meals prepared by cross-trained staff members • *External, multidisciplinary teams* of healthcare professionals visit the Greenhouses intermittently to collaborate with the Shahbazim and provide individualised assessments, clinical care, and support as required • *Professional housekeepers* perform heavy cleaning and the bed linens are laundered at a central laundry	• Compared to residents living in traditional homes, residents living in Greenhouses - reported better emotional well-being - significantly more satisfied with their care - more likely to recommend the home to others • Greenhouse residents received 2 HPRD less for housekeeping, laundry, dietary, dietician, and staff education • Challenges for organisations include - amount of waste, its storage, and disposal - lacks of storage spaces for medical equipment • Positive attitudes from Shahbazim include - feelings of control, empowerment - professional fulfillment - reduced levels of fatigue and stress - mutuality, fellowship,

				and friendship with co-workers - increased confidence about care-giving abilities - enhanced abilities to cope under duress
SilverHope [2]	*Principles* • Recognising and valuing individuality of elders and staff • Honouring autonomy and choice • Supporting elders' dignity • Offering opportunities for reciprocal relationship between elders and staff • Providing supporting environment for meaningful activities amongst the elderly • Promoting maximum functional independence • Facilitating not only physical but also psychosocial comfort • Creating small 'households' where residents share greater bonding and actively help each other • Providing opportunities to develop 'personal living environment' as experienced in a home *Layout* • Mix of single and double rooms in a self-contained 'household' of up to ten residents • Single/double rooms allow privacy, dignity and personalisation of care; and minimises potential conflicts between residents • The 'household' layout includes a living and dining area	• *Senior Care Associate (SCA)* coordinates all household activities • *Nursing roving team* - consists of one nursing officer and three nursing aides - nursing officers and nursing aides visit the household on a scheduled basis and meet the clinical needs of the elders as required • *Ancillary support roving team* - ancillary support stays similar, on an as needed basis - coordinated by the SCA in alignment with residents' preferences • Greater emphasis on dementia care • Higher staffing ratios allow more direct contact time and better communication with residents	• *Resident preferences* form basis of decision making about some routines • *Staff accommodate* residents' preferences • *Residents make decisions* about individual routines • *One SCA per household* - develops greater bonding and better communication with residents - assumes a multi-functional role and supports eldercare, housekeeping etc. - partners with roving teams for clinical and ancillary support to ensure timely care planning - actively engages and supports the residents for daily activities	Not described

Key: ECN – Extended care assistants; RN – registered nurses; HPRD – hours per resident per day; CA – care aides; SCA – senior care associate

Table 3. Outline of other literature identified that evaluated various aspects of the Green House model [3-7]

Lead Author and Title	Objective	Findings
Zimmerman, S. *et al.* (2016) [3] New Evidence on the Green House model of nursing home care: synthesis of findings and implications for policy, practice, and research	To synthesise new findings from the THRIVE Research Collaborative (The Research Initiative Valuing Eldercare) related to the Green House model of nursing home care and broadly consider their implications.	Recommendations relate to assessing fidelity, monitoring quality, capitalising opportunities to improve care, incorporating evidence-based practices, including primary care providers, supporting high-performance workforce practices, aligning Medicare financial incentives, promoting equity, informing broad culture change, and conducting future research.
Afendulis, C.C. *et al.* (2016) [4] Green House adoption and nursing home quality	To evaluate the impact of the Green House model on nursing home resident-level quality of care measures.	Green House adoption led to improvement in re-hospitalisations and certain nursing home quality measures for individuals residing in a Green House home. The absence of evidence of a decline in other clinical quality measures in Green House nursing homes should reassure anyone concerned that Green House might have sacrificed clinical quality for improved quality of life.
Brown, P.B. *et al.* (2016) [5] Workforce characteristics, perceptions, stress, and satisfaction among staff in Green House and other nursing homes	To compare workforce characteristics and staff perceptions of safety, satisfaction, and stress between Green House and comparison nursing homes.	Green House environment may promote staff longevity and does not negatively affect worker's stress, safety perceptions, or satisfaction. Larger studies are needed to confirm findings.
Cohen, L.W. *et al.* (2016) [6] The Green House model of nursing home care in design and implementation	To describe the Green House model of nursing home care, and examine how Green House homes vary from the model, one another, and their founding (or legacy) nursing home.	Green House homes showed substantial variation in practices to support resident choice and decision making. Although variation in model implementation complicates evaluation, if expansion is to continue, it is essential to examine Green House elements and their outcomes.
Bowers, B. *et al.* (2016) [7] Sustaining culture change: experiences in the Green House model	To describe conditions that influence how Green House organisations are sustaining culture change principles and practices in a sample of Green House skilled nursing homes.	Reinforcing the Green House model requires a highly skilled team of staff with the ability to frequently and collaboratively solve both mundane and complex problems in ways that are consistent with the Green House model. This raises questions about the type of human resources practices and policy supports that could assist organisations in sustaining culture change.

Conclusions

1. Despite a great deal of anecdotal support for the Eden Alternative® philosophy, the empirical support for consistent assignments is not extensive. [1]
2. Resident and staff outcomes specific to the Eden Alternative® Greenhouses and the associated self-management are promising. Residents living in Greenhouses report heightened emotional well-being, and significantly more satisfaction with care. [1]
3. Shahbazim working in self-managed teams within the Greenhouses report diminished guilt and stress, and greater feelings of control, empowerment, and professional fulfillment. Self-organised and managed teams are associated significantly fewer quality-of-care deficiency citations. [1]
4. Nursing home administrators are urged to examine their resident population demographics and consider the various models and modes of service delivery before following the initiatives and implementing consistent assignments. [1]

Limitations

1. The articles included in the scoping review were not excluded based on pre-existing quality or methodological criteria. [1]
2. The review highlighted that depending on the organisation, the entire model may not have been completely implemented, design elements may have been selectively extinguished despite initial implementation, or select components of multiple models may have been combined into a hybrid model. [1]
3. There is no mention of the quality of evidence included in this snapshot.

References

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