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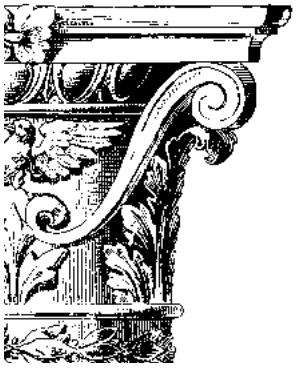

Understanding and Assessing the Impact of Nursing Home Approach to Care and Physical Design on Residents and Their Families: A Synthesis of the Literature

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Abstract

In this article current knowledge on changes in nursing home approach to care (i.e., staffing models) and physical design were reviewed with a view to the impact of change on residents and their families. A comprehensive search of English-language, peer-reviewed and gray literature concerning nursing home care published during the period of 1989 to 2012 was conducted. The results were synthesized using constructs that emerged from the literature: quality of life, quality of care, and resident satisfaction. The literature yielded empirical evidence suggesting that a resident-centered approach to care and physical design can improve resident quality of life and increase family involvement. Our synthesis points to a need for research that considers how the constructs and methods used to identify and assess change inform whether and how the experiences of residents and families are understood.

INTRODUCTION

Nursing homes have experienced significant changes since the mid-1990s. Over the past 18 years, new developments in approaches to care in nursing homes reflect an interest in a resident-centered perspective (Calkins & Cassella, 2007; Calkins, 2002; Capitman, Leutz, Bishop, & Casler, 2004; Weiner & Ronch, 2003). Within these approaches, there is an emphasis on resident choice, autonomy, and dignity, as well as increased social interaction among residents and between residents and staff (Calkins, 2002; Rahman & Schnelle, 2008; Wiersma & Pedlar, 2008). Increased partnering between staff and families is also a goal (Baker & Steber, 2005). Contributing to this shift in philosophy are the changes taking place in how space is utilized and designed, which is believed to exert great influence on both resident quality of life and family involvement (Gaugler, 2005; Weiner & Ronch, 2003; Day, Carreon, & Stump, 2003). Such changes are apparent in innovative physical designs (e.g., homelike features and settings instead of hospital-like wards), the importance placed on resident-centered, individualized care with particular attention to persons with dementia and emphasis on staff roles and scope of practice.

The recent interest in resident-centered approaches to care and physical design are often associated with what has been termed a "culture change" movement within nursing homes (Koren, 2010; Weiner & Ronch, 2003). The movement supports the deinstitutionalization of long-term care through the introduction of structural changes that promote the autonomy of nursing home staff, residents, and their families, and encourages a greater sense of "home" within nursing homes (Miller, Miller, Jung, Sterns, Clark, & Mor, 2010). More specifically, according to Foy White-Chu, Graves, Godfrey, Bonner, and Sloane, "The process of culture change in long-term care involves a shift in philosophy and practice toward resident-directed, consumer-driven health promotion and quality of life. Fundamental to this shift is a focus on the importance of the relationship between the resident and direct care staff" (2009, p. 370). Models associated with this movement include the Eden Alternative, and more recently, the Green House® model.

Our review of the literature featured the Eden Alternative and Green House model as significant developments in nursing home approach to care and physical design; however, the intent of the search was not to understand or assess the culture change movement. This article identifies current literature that discusses the impact of changes in physical design and approach to care on the experiences of residents and family involvement. Our examination focuses on changes cited in the literature as current "best practice" and presents the supporting empirical evidence offered (and the measures and assessments used). This makes it possible to identify areas of research that require more attention (i.e., physical design and family outcomes), expand awareness of literature on the impact of change on residents and families, and provide evidence of advancements in nursing home practice and policy.

The emergent conceptual framework offers a tool that can be used to map relations between and across resident and family perspectives, with implications for how constructs such as quality of life, quality of care, and resident satisfaction expand and/or constrict interpretations of nursing home care. The framework provides a model that can be used to clarify some of the current ways that resident and family outcomes are interpreted across a broad spectrum of persons involved in nursing home care, including practitioners, policy makers, and nursing home administrators; however, the "reality" of the extent to which the changes we have examined are actually implemented is beyond the scope of this article. The presentation of findings is descriptive in nature and includes information on the types of design when available in the literature. Current knowledge regarding the impact of changes to approach to care and physical design from the perspectives of residents and families is synthesized and organized using the constructs central to resident-centered care, and opportunities for further elaboration are highlighted. [1]

[1] It is recognized that the staff perspective is important; however, the scope of the literature search did not include that specific body of research. Reference to staff is made in this article in relation to the results relating to residents and families only.

DESIGN

Search Strategy, Selection Criteria, and Research Synthesis

A comprehensive search of five databases (AgeLine, PsychArticles, PsychInfo, MedLine, ProQuest) and two search engines (Google and Google Scholar) was systematically conducted from 2009 to 2012 for English-language, peer-reviewed and gray literature (e.g., technical reports, working papers not published commercially or indexed by major databases) from Canada, the U.S., England, and Australia. The scope of the search focused on research published between 1989 and 2012, and provided scientific evidence and evaluation results from the perspective of residents and their families. The search parameters

Exhibit 1. Literature Organizing Matrix.

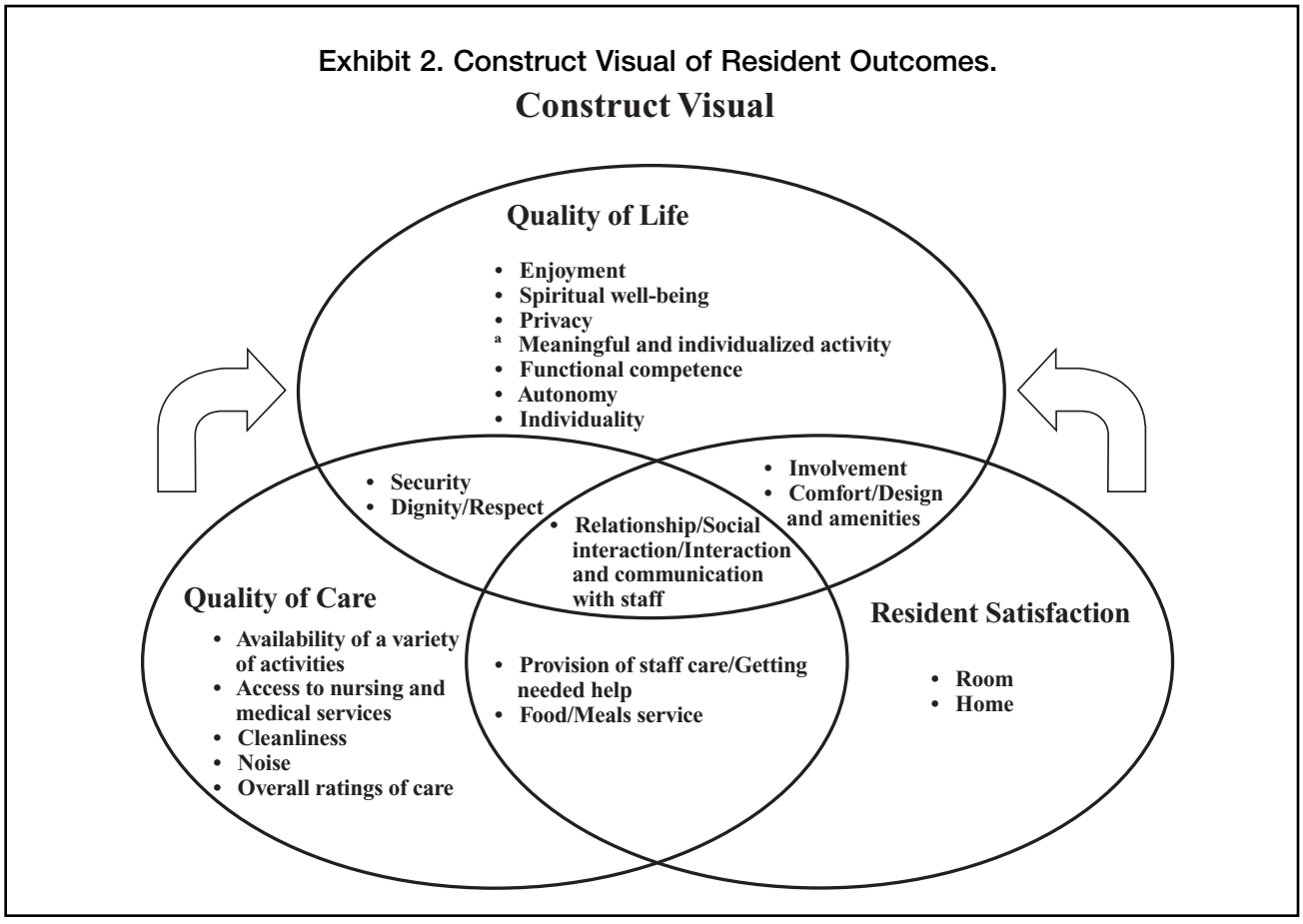
	Resident Quality of Life	Family Involvement
Physical Design	Boyd, 2003 Calkins & Cassella, 2007 Campbell, 2003 Cioffi et al., 2007 Cutler et al., 2006 Kane et al., 2007 Parker et al., 2004 Schwarz, Chaudhury, & Tofle, 2004 Tellis-Nayak, Shiverick, & Hernandez, 2010 de Veer & Kerkstra, 2001 Wiersma & Pedlar, 2008	Calkins, 2002 Cioffi et al., 2007 Gaugler, Anderson, & Leach, 2003 Lum et al., 2008-2009 Schwarz, Chaudhury, & Tofle, 2004 Train et al., 2005
Approach to Care	Bishop et al., 2008 Campbell, 2003 Chou et al., 2002; 2003 Koren, 2010 Kruschke, 2006 Lucas et al., 2007 Parsons, 2004 Paulus & Jans, 2005 Sudbury & Gnaedinger, 2007 Tellis-Nayak, Shiverick, & Hernandez, 2010 Wheatley et al., 2007	*Aveyard & Davies, 2006 Rosher & Robinson, 2005 Davis & Nolan, 2006 *Dijkstra, 2007 Gaugler, Anderson, & Leach, 2003 Gaugler, 2005; 2006 Keefe & Fancey, 2000 Levine et al., 2010 Logue, 2003 Lum et al., 2008-2009 *Maas et al., 2004 Nakrem, Vinsnes, & Seim, 2011 *Persson, 2008 Port, 2004 *family involvement interventions

used were physical design, approach to care (i.e., staffing models), resident quality of life, and family involvement. The included literature referred to individuals with varying levels of cognitive impairment. Discrepancies existed regarding the language that is used to refer to nursing homes ("aged care home" versus "nursing home") and care provider ("caregiver" versus "carer"). The search yielded 122 publications, of which 38 were deemed salient to the work and critically analyzed.

In the literature, resident and family outcomes were organized in terms of resident quality of life and family involvement, and conceptualized as impacting resident satisfaction, quality of life, and quality of care. We organized our search in terms of the impact of the changes in approach to care and physical design on residents and families (**Exhibit 1**). Each concept was considered to measure distinct, yet at times overlapping, items (Keefe, Stadnyk, White, & Fancey, 2009).

A construct visual was created for resident outcomes to illustrate the overlap that exists between and across resident quality of life, resident quality of care, and resident satisfaction (**Exhibit 2**). Although the resident outcomes described in the literature encompass much more than just resident quality of life, given the conceptual overlap that exists, the construct "resident quality of life" is employed as a unifying concept. Furthermore, we recognized that family involvement can have a significant impact on resident quality of life, and approach to care and physical design can influence the nature and extent of involvement. Since our interest was in understanding the impact of changes occurring within nursing homes on resident quality of life, we limited the scope of the research on family outcomes to studies that examined the impact of approach to care and physical design on family involvement.

Exhibit 2. Construct Visual of Resident Outcomes.



RESULTS

Approaches to Care and Physical Design

Newly constructed nursing homes demonstrate a neighborhood design also known as clusters or pods (Boyd, 2003; Kane, 2001; Schwarz, Chaudhury, & Tofle, 2004). These typically serve between 20 and 40 residents and allow individuals the privacy they desire, as they feature single rooms with private baths (Brush, Calkins, Kator, Wyatt, & Miller, 2008; Rabig, Thomas, Kane, Cutler, & McAlilly, 2006). They also often have large bay windows that bring the outdoors in for those who cannot go outside to enjoy it (Cioffi, Fleming, Wilkes, Sinfield, & Le Miere, 2007). Rooms are personalized with residents' meaningful possessions and centrally located near nursing stations, lounges, and dining areas. In these environments, choice and interaction are of utmost importance. For example, residents have the freedom to decide when and what to eat, when to sleep and awaken, and how to fill their days (Komarek, 2004).

Relationship formation is a key component of neighborhood design, and its implementation involves training staff to work in multifunctional, empowered care teams in which caregivers perform many tasks for only a few residents. It is believed that such an approach will better meet residents' needs (Boyd, 2003). Research comparing U.S. nursing homes with and without such teams demonstrated that increased contact occurs between certified nursing assistants (CNAs) and a smaller number of residents. Greater interpersonal contact between staff and residents creates opportunities for staff to learn and remember individuals' preferences and to more sensitively serve them. The small design also allows residents to get to know their neighbors, and they form more fulfilling friendships as a result (Kruschke, 2006; Yeatts & Cready, 2007).

The Eden Alternative, a widely cited example of a program that has pioneered the aforementioned approaches to care and changes in physical design, aims to decrease resident loneliness, helplessness, and boredom (Tavormina, 1999). Since its inception, many organizations intending to improve residents' quality of life have adopted the model's key elements, including relinquishing the institutional/medical approach to care; including pets, plants, and children in order to foster a more spontaneous and homelike environment; providing ample opportunity for social interaction and relationship formation; promoting resident choice and participation; and continually reassessing how residents' needs can be met (Tavormina, 1999; Thomas, 2003).

The noted benefits of implementing such a model include decreases in behavioral incidents (defined as altercations between two or more residents) and use of restraints, as well as reductions in rates of staff absenteeism and turnover. A series of behavioral studies conducted before and after Eden implementation at Providence Mount St. Vincent in Seattle also found increases in resident satisfaction and activity engagement (Boyd, 2003; Thomas, 2003). Interviews conducted at two other facilities in the U.S. that had implemented this model revealed residents' beliefs that their lives had improved, and that the goals of alleviating resident loneliness, helplessness, and boredom had been achieved (Kruschke, 2006; Parsons, 2004).

The latest illustration of the Eden Alternative is the Green House initiative (Thomas, 2003). The Green House initiative is an alternative model to the nursing home in the provision and design for long-term care, first built in Tupelo, Mississippi, in 2003 (Lum, Kane, Cutler, & Yu, 2008-2009). These small facilities house approximately seven to 10 residents. The aim is to promote individual growth and development and foster excellent resident quality of life "under normal rather than therapeutic circumstances" (Kane, Lum, Cutler, Degenholtz, & Yu, 2007, p. 834). They feature a family-style, open kitchen with a large dining table and private rooms and baths around a central area (Rabig & Rabig, 2008). In these environments, staff known as the

"Shahbazim" or "shahbaz" (universal workers) are CNAs and are responsible for cooking, cleaning, and doing laundry as well as caring for residents (Bowers & Nolet, 2011; Kane et al., 2007; Rabig et al., 2006).

Green House residents, as well as those living in two comparison sites, were interviewed in order to assess their quality of life in relation to 11 domains: physical comfort, functional competence, autonomy, dignity, privacy, individuality, meaningful activity, relationships, enjoyment, security, and spiritual well-being (Kane, 2001; Kane et al., 2003, 2007). Residents demonstrating a range of cognitive impairment[2] reported higher quality of life in seven domains (privacy, dignity, meaningful activity, relationships, autonomy, food enjoyment, and individuality) in comparison to one of the sites, and higher in four (privacy, dignity, autonomy, and food enjoyment) in relation to the other (Kane et al., 2007). Although the results differed in relation to the two comparison sites, Green House residents reported overall higher emotional well-being and were more satisfied with their living arrangements. They also were more likely to participate in organized activities on and off site, and were less likely to be on bed rest or to be depressed.

Synthesis

Evaluating research on the existence and impact of such large-scale changes is a challenging yet necessary task. Three main concepts were used to organize the changes identified in the body of research reviewed: quality of life, quality of care, and resident satisfaction (Keefe et al., 2009). The relationship between these three constructs was then examined in terms of the impact on resident quality of life and family involvement.

Recent research demonstrates that quality of life is largely subjective and as a result relates to residents' perceptions of key psychosocial domains (Peters, 2004). These may include feelings of being a meaningful contributor to one's family and community, perceptions regarding exertion of control and freedom of choice, and feelings relating to physical comfort, safety, and security (Kane, 2001, 2003). Quality of care also incorporates many of the aforementioned subjective components. Instruments assessing this concept, however, may uniquely include service- or facility-related domains such as nursing and medical services, availability of help, staff-related factors, cleanliness, noise, facility milieu, and cost (Rantz et al., 1998, 1999; Sangl et al., 2007). Finally, resident satisfaction measures seem to demonstrate an equal item distribution relating to both subjective and objective components. Domains addressing room and home design, as well as those referring to social interaction and community life, are included (Chou, Boldy, & Lee, 2001, 2002, 2003; Paulus & Jans, 2005).

In the contemporary Western context, what is known about changes in nursing home care and how these changes are examined depend in large part on how quality of life, quality of care, and resident satisfaction are operationalized (Kane, 2003). Although overlap exists, the way in which each construct is approached provided us with new and different information in terms of resident outcomes. The organization of our review and synthesis emphasized how specific elements relating to physical design and approach to care affect individuals. This article now turns to a consideration of the impact of approach to care and physical design on resident quality of life and family involvement, summarized in **Exhibit 3**.

Resident Quality of Life and Approach to Care

Knowledge of changes in approach to care was widespread within nursing home research. The changes cited in the literature involved placing greater emphasis on resident choice, involvement, and empowerment, and encouraged resident-staff relationships. Research appeared to consider quality

[2] Cognitive impairment was measured by the Minimum Data Set (MDS). Possible range of scores is 0-6, with a higher score indicating greater cognitive impairment. Mean MDS = 2.8 for participating Green House residents.

Exhibit 3. Key Factors That Impact Resident Quality of Life within the Context of Resident-Centered Care.

	Resident Quality of Life	Family Involvement
Physical Design	Private Rooms Private Bathrooms Smaller, Personalized Settings	Private Rooms Visiting Space
Approach to Care	Decentralized Staff Organization (Horizontal and Participatory) Knowledgeable Staff Staff Job Commitment Resident and Family Councils	Family Councils Family Involvement Interventions Family – Staff Communication

of life through two perspectives: the impact of staff on resident satisfaction and quality of life, as well as the influence of family councils. The Eden Alternative illustrates how such changes are reflected in every aspect of homes and highlights the associated positive results (Kruschke, 2006; Parsons, 2004). An "Edenized" facility in British Columbia, Canada, features five villages for residents with and without dementia, and all enjoy private rooms. Residents have close contact with animals and children, provide care for plants, pets, and each other, and offer input through a Resident Council (New Vista Society, 2008). Results from a client satisfaction survey administered to residents, families, staff, and community partners indicated that residents appreciated being treated with dignity, respect, kindness, and care, and found staff to be knowledgeable, competent, responsive, and available for interaction. They also felt that their privacy was respected and their independence encouraged (New Vista Society, 2005).

A key component of the new approach to care is staff organization. Staff members are being decentralized, empowered, and are working in teams in order to better meet residents' needs. Research also demonstrated the existing significant relationships between this aspect of care facilities and resident quality of life and satisfaction. The first relationship that emerges is between nursing assistants' job commitment and resident quality of life. Across 18 Massachusetts nursing homes, residents on units with nursing assistants who had higher levels of commitment were found to be more satisfied with their relationships with staff and demonstrate higher quality of life (Bishop et al., 2008). Nursing assistants demonstrated higher job commitment when they perceived that their supervisor showed them respect, was available to provide needed help, and worked with them to solve problems. These results exemplified how changes in care models affect individuals at all levels within a facility, including the residents. They also indicated that establishing conditions that foster job satisfaction and staff commitment will indirectly and positively influence resident quality of life (Boldy, Chou, & Lee, 2004).

Other research on the Eden Alternative further highlighted the important role of staff in resident well-being, as satisfaction with staff care has been found to exert a positive effect on all other dimensions of satisfaction (i.e., with room, social interaction, meals service, and resident involvement) (Chou et al., 2002, 2003). In addition, CNA staffing has been found to positively affect total resident satisfaction (Lucas et al., 2007). Residents perceive staff as influencing environmental warmth, the equitable (or inequitable) ways in which residents are

treated, place great importance on staff friendliness, and express care and concern for their professional caregivers (Campbell, 2003). Staff play a central role in almost every aspect of residents' experiences and are the direct means through which changes in approach to care are delivered (Campbell, 2003; Chou et al., 2002). For example, approaches to care that involve the decentralization of staff have been found to lead to decreases in medication errors and resident infection and falls (Sudbury & Gnaedinger, 2007). It is clear that staff members are important to residents. At the same time, it is apparent that further research is needed regarding the impact of other aspects involved in approach to care. Thus far, the majority of evaluative studies have focused on staff-related factors such as their job commitment and approach (team versus individual) (Bishop et al., 2008; Sikorska-Simmons, 2005).

Opportunities for choice and meaningful involvement have been identified by residents as important to their quality of life and satisfaction and may be facilitated through a number of avenues (Kane et al., 2003; Paulus & Jans, 2005; Train et al., 2005; Wheatley et al., 2007). One such example is allowing residents to take part in discussions and to provide input regarding the care issues that affect them. Resident interviews have demonstrated that such opportunities promote residents' perceptions of self-worth, and in turn, their feelings of empowerment (Campbell, 2003). Families also act as advocates for their relatives (Levine et al., 2010). Another means through which resident involvement may be facilitated is through family councils. These allow family members to act as correspondents and spokespersons for residents, and provide a direct way in which residents can voice their concerns and opinions and participate in center-level decision-making. Research has demonstrated that residents and their families are significantly more satisfied in facilities with family councils. This may be due to the fact that such homes are more likely to be resident-centered and open to input (Lucas et al., 2007).

Resident Quality of Life and Physical Design

Environment has been identified in much of the literature as one of the key domains in quality of life, quality of care, and resident satisfaction (Chou et al., 2001; Ettema, Dröes, de Lange, Mellenbergh, & Ribbe, 2007; Kane et al., 2003; Keating, 1998; Paulus & Jans, 2005; Rantz et al., 1998, 1999). Increasingly, facilities are offering single rooms with bathrooms to residents, as the importance of allowing individuals to maintain their privacy and dignity while living in congregate housing is understood. De Veer and Kerkstra (2001) noted that the experience of privacy is intimately related to feelings of being at home. Research also has shown positive associations between private rooms and resident quality of life. Not only do they afford greater privacy, but individuals can make the space their own with art, pictures, and furniture; residents appreciate and find this empowering (Campbell, 2003; Keating, 1998; New Vista Society, 2008). Private rooms also appear to positively impact psychosocial factors such as feelings of privacy and control. Research conducted with residents and staff regarding three types of rooms—traditional shared; enhanced shared, in which a dividing wall allows residents sharing a room to have a degree of privacy; and private—revealed that residents living in private rooms are more likely to experience better psychosocial outcomes than those sharing (traditional or enhanced), likely because it enables greater control over one's space. Related research from acute care settings also indicated that patients found their visits with families to be better and more frequent when in single rooms (cited in Calkins & Cassella, 2007).

An Australian study that investigated resident and staff perceptions following relocation from a traditional facility to a dementia-specific special care unit (SCU) revealed similar results (Cioffi et al., 2007). This unit featured private rooms and bathrooms that could be personalized with decorations and pictures, a central kitchen and dining area, large bay windows, and an open garden. Informants overwhelmingly

saw the change as positive. Three themes relating to family home, therapeutic environment, and work environment emerged from their discussions. Relatives and staff felt that the SCU had a pleasant milieu and noted the benefits experienced by residents, including weight gain, decreased agitation, fewer disturbances, better sleep, and greater ease in activity participation. Families no longer felt guilty about leaving their relatives there and were also more inclined to visit, as the environment was a more welcoming one. Staff also felt that they could provide better care, as accessibility to equipment in residents' rooms had been improved. Overall, it was believed that quality of life had improved (Cioffi et al., 2007). Others have corroborated the results of this single site. For example, research assessing the impact of Eden implementation (which involves change in physical design and in care approach) at a large American nursing home, Providence Mount St. Vincent, found associated improvements in resident quality of life (Boyd, 2003). An evaluation study of a Green House alternative found similar results, as residents reported higher overall emotional well-being and satisfaction with living arrangements than those reporting from traditional facilities (Kane et al., 2007).

Instruments used to assess physical change vary and include Professional Environmental Assessment Protocol (PEAP), the Sheffield Care Environment Assessment Matrix (SCEAM), and Environmental checklists. Items contained within the PEAP address eight dimensions of environmental experience, including awareness and orientation; safety and security; privacy; regulation and quality of stimulation; functional abilities; opportunities for personal control; continuity of self; and facilitation of social contact. A study published by Schwarz, Chaudhury, and Tofle in 2004, in which staff completed the PEAP and participated in focus groups, found that changes in environment, similar to those noted previously, resulted in maximized awareness, orientation, privacy, social contact, and resident-staff interaction. The more homelike and less institutional nature was also noted as positive.

The SCEAM assesses 10 domains in three categories: universal, physical, and cognitive requirements (Parker et al., 2004). Universal requirements refer to privacy, ability to personalize surroundings, choice and control, and connection with the wider community. Physical requirements include safety and health, support for physical frailties, and comfort. Finally, cognitive requirements involve support for cognitive frailties, awareness of the outside world, and normalness and authenticity, which emphasize a domestic environment as opposed to one that is institutional. This instrument has been used in England to examine the relationship between quality of life and facility size. Smaller facilities were found to be related to higher quality of life in a number of areas, including choice and control, comfort, support for cognitive frailties, awareness of the outside world, normalness, and authenticity (Parker et al., 2004). This study also revealed significant relationships between these particular domains and positive emotion (assessed by Affect Rating Scale [ARS]), well-being (assessed by Dementia Care Mapping [DCM]), and activity levels. Interestingly, although larger facilities scored higher on the safety and health domains, this was determined to be associated with lower scores in enjoyment of activities (assessed by Pleasant Event Schedule-AD [PES-AD]). Larger facilities also demonstrated low personalization, a factor that is extremely important to residents (Campbell, 2003). These results further demonstrate the importance of embracing changes in physical design that advocate smaller, personalized, and private settings.

Although changes in physical design can positively impact resident quality of life, problems still exist. Environmental checklists (developed by Cutler, Kane, Degenholtz, Miller, & Grant, 2006) identified deficiencies in facilities, nursing units, and residents' room and bath environments in 131 nursing units and 40 facilities in five states in the U.S. The following areas were noted to be problematic: lack of lounge space; overcrowded bathrooms; long distances between rooms, bathrooms, and other areas;

hall clutter; and noise. Other issues included poor ventilation, low light, and inappropriate switches and storage areas. Such inadequacies can negatively affect the quality of life domains of dignity, privacy, comfort, security, and functional competence, and, as the literature suggests, efforts should be made to specifically assess these areas and ameliorate associated challenges.

Family Involvement and Approach to Care

Families' continued involvement in nursing home care is important to residents. Although research has shown that involvement does continue post-placement, a number of factors may influence the level of involvement and visit frequency (Baker, 2007; Gaugler, 2005; Keefe & Fancey, 2000). The impact of current approaches to care on family involvement in long-term care facilities, primarily in the form of visiting, must be investigated. A well-cited example of a current care model that has been associated with improvements in resident quality of life is the Eden Alternative (Kruschke, 2006; Parsons, 2004). Research has demonstrated that adopting such an approach also may positively impact family involvement, as more family-oriented facilities are associated with greater family involvement (Gaugler, Anderson, & Leach, 2003).

Families surveyed with the Family Questionnaire (measure of families' perceptions regarding caregivers' skill and caring nature, quality of activities, environment, resident contentment, and their relationships with facility administration) pre- and post-Eden implementation revealed the improvements that families observed and most valued (Rosher & Robinson, 2005). They perceived staff to be more respectful and found the environment more conducive to visiting. Supporting these findings was the noted increase in daily visits as well as in activity participation such as gardening, assisting with animal care, and helping with special events (Rosher & Robinson, 2005).

Although few studies have explicitly examined how an overall change in a facility's approach to care impacts family involvement, many have explored associated outcomes of family involvement interventions. These initiatives allow families to provide input, learn about the facility, and establish relationships with staff. This is an area that requires attention, as an association between poor family-staff relationships and less frequent visiting has been found (Port, 2004). An intervention involving residents, relatives, and staff was implemented successfully in a dementia-specific residential care setting in England. The researchers observed the facility, sought staff and relative experiences through questionnaires, held off-site events where staff could discuss priorities for change, assembled a monthly action group involving relatives and various staff members, and held another off-site event in which progress was discussed. Interviews with staff and relatives revealed participants' positive perceptions of the intervention.

Such opportunities allow families and staff to develop a better understanding of each other's perspective, experience improved communication, and to establish trust, openness, and recognition (Aveyard & Davies, 2006; Dijkstra, 2007; Maas et al., 2004). This is particularly important as research indicated that families and staff hold different perceptions regarding each other's roles and responsibilities (Keating, 1998). Moreover, participation in such groups allows both parties (residents and families) to feel more confident in their abilities to go forward with mutually agreed-upon goals and initiatives. Residents are also indirectly positively affected, as the existence of family councils has been linked with improved resident input and greater appreciation of their surroundings (Gaugler, 2006; Lucas et al., 2007).

Despite these encouraging outcomes, obstacles still exist. For example, families may be unsure of how influential their input really is. Although they participate in initiative development, they appear to lack confidence that their ideas will come to fruition. Other challenges, such as including residents with cognitive impairments, finding time to attend meetings, and being frustrated with the lag between idea development and implementation, have been noted

(Aveyard & Davies, 2006; Dijkstra, 2007). Families also may hesitate, as they are unfamiliar with medical jargon, and may feel intimidated by medical personnel (Dijkstra, 2007; Logue, 2003). Staff and family turnover may further disrupt meeting continuity and decrease families' desire for involvement (Persson, 2008). Facility-level obstacles such as staff resistance to institutional change and inadequate availability of staff and space also may contribute to a lack of enthusiasm surrounding family councils (Logue, 2003). Some noted recommendations that may help to ease the family council development process include clearly defining relevant issues; setting realistic goals and timelines; including those who are interested in the group's goals and those who have the power to implement suggested changes; identifying obstacles; and keeping the ultimate goal of improving resident quality of life at the forefront (Persson, 2008).

Family Involvement and Physical Design

There is a paucity of literature addressing the impact of changes in physical design on family involvement. For the most part, research has addressed family involvement in general and may only touch on the relationship between family involvement and a specific aspect of physical design within a broad overview. One such example is private rooms. Our review of the literature revealed that visitors also appreciate the increased privacy associated with single rooms, and both residents and visitors noted that they help to facilitate more meaningful visits. This is especially the case during the "death or dying process," as "[m]ost family members want to be close to the dying relative but are sensitive to the fact that they are also in someone else's room" (Calkins & Cassella, 2002, p. 173).

Visitors appreciate the increased privacy associated with single rooms, and research suggested that they help to facilitate more meaningful visits. Staff members observed that more family members visit, the duration increases, and that relatives use residents' private rooms more freely (Calkins & Cassella, 2002; Schwarz et al., 2004). This is likely due to the fact that visitors find these environments more homelike and therefore more inviting (Cioffi et al., 2007). Others have noted that the presence of animals makes it easier to bring children (Rosher & Robinson, 2005). Lum, Kane, Cutler, and Yu's (2008-2009) longitudinal quasi-experimental study on the effects of a Green House nursing program on residents' families with two comparison groups in the U.S. illustrated that less involvement does not necessarily mean families are dissatisfied with care. This large-scale, multifaceted study found no significant difference in the overall family involvement between a Green House and the traditional nursing home environments included in the study; however, there were significantly better outcomes in family satisfaction, especially with respect to privacy and physical environment and autonomy (Lum et al., 2008-2009).

Research also demonstrated, however, that residents and families may hold different interpretations of visiting space. Satisfaction surveys with residents and families involved with the New Vista Care Home in British Columbia, for example, indicated that residents are generally more satisfied with visitor space than families (New Vista Society, 2005). Residents gave this aspect an A-, whereas families only gave it a B grade (New Vista Society, 2005). In their recent study in the U.S., Tellis-Nayak, Shiverick, and Hernandez (2010) observed important differences between resident and family perspectives on nursing homes. Their sample comprised 2,430 responses from residents and 3,779 responses from family members to satisfaction surveys from 89 nursing homes in 30 states. Perceived differences in perspective were contextualized in terms of the specific nature of each party's relationship to the nursing home, both in terms of needs and desires and roles and obligations. More research is needed to determine how these different perspectives impact the ways in which families are involved. Preliminary results, however, were encouraging as to the effect private rooms can have on not only residents but on family involvement as well.

Discussion

Within the context of aging populations, nursing homes are expected to provide an increasingly important site in the care of older adults (Nakrem, Vinsnes, & Seim, 2011). Our review yielded evidence regarding the potential impact of contemporary designs, models, and assessment methods on residents and families. An emphasis on a more holistic, resident-centered philosophy of care was observed as a common characteristic in the current literature on nursing homes. Overall, the research in the literature reviewed supported a move away from institutionalized, hospital-like environments and medicalized approaches to care to neighborhood designs featuring more private homelike environments that provide opportunities for increased interaction; however, the results of our review are not necessarily a reflection of the reality within nursing homes and in no way capture the perspectives of all residents and their families. It is possible that the newness of some of these models may have attracted the attention of the researchers who reported about new trends in the field, leading to overrepresentation of one model over other alternatives. This is further justification for more systematic and methodologically sound research.

Although other structured reviews of the literature on nursing home approach to care and physical design exist (e.g., Hill et al., 2011), our review of practices currently espoused in the literature and the practical impacts of such changes presents important evidence to suggest that when resident-centered approaches are adopted, resident autonomy and perceptions of empowerment are enhanced, and general improvements in resident satisfaction and quality of life follow. Furthermore, evidence exists that suggests families tend to visit more frequently and are more involved in assisting with resident care. These findings are important, as they indicate that approach to care and physical design impact interactions between family and residents in positive ways and, perhaps, normalize resident-family relations in what could be considered an abnormal environment. More research in this area is needed, however, as few studies have specifically examined how an overall change in the social and physical environment can impact family. Research indicated that this shift toward a resident-centered approach to nursing home design and care, as exemplified in the Eden Alternative and Green House models, also often involved decentralized staffing models. This presents an opportunity for examining the impact on staff satisfaction.

Rather than accept the presence of studies supporting the positive impact of resident-centered approaches on residents and their families in the literature as evidence of a global transformation in the meaning, design, and practice of nursing homes, we could question how what we know about transitions in nursing home care is a product of our chosen method of inquiry. Within the literature reviewed, most of the published research on the impact of approach to care and physical design from the perspective of residents and their families made use of case studies or qualitative or mixed-methodologies, and was largely evaluative, featuring small sample sizes. Although small sample sizes can yield rich qualitative data and provide for close interpretations and thick descriptions, questions can be raised concerning the representativeness and external validity of the published results. The prevalence of descriptive or single case studies and small sample sizes can be interpreted as indicating a possible limitation of contemporary nursing home research (Koren, 2010).

Conclusion And Future Directions

The recognition of the need for future research that can "enlarge the empirical base to support culture change" (Koren, 2010, p. 314) presents a unique opportunity to build reflexivity into the research practice. Various instruments can capture the nursing home experience from the resident and/or family perspective, and these instruments have varying utility in terms of understanding how transitions impact

the nursing home experience as related to resident quality of life; they are limited by the way in which they respectively define the concept (e.g., satisfaction versus quality of life versus quality of care). Although the specific constructs used to assess changes in the values and practices of contemporary nursing homes (e.g., quality of life, quality of care, and resident satisfaction) help to define the meaning and reality of a resident-centered approach, changes in physical environment and approach to care cannot be understood in isolation of these instruments and measures, as they are predisposing our knowledge by the way in which they are conceptualized.

A consideration of assessment instruments can offer a view to the ways in which social constructs organize how we know and perceive change. On a more macro level, the research methods used to frame questions and approach and engage the material shape the particular view we have and the kinds of results that can be expected. Many of the studies featured evaluative research (e.g., Aveyard & Davies, 2006; Keating, 1998). Within this research, "change" was represented both in terms of a "model" and an outcome, which could then be situated within existing research. This made it possible to make comparisons, which, in turn, made change visible.

The synthesis offers a site for rediscovering the relationships between models and methods, design and approach. Despite a shared interest in resident well-being, new developments in nursing home physical design and approach to care are heterogeneous. New conceptual models such as the Eden Alternative and Green House model can facilitate knowledge translation and exchange regarding nursing home care, as they represent a way of understanding the impact of both philosophical and practical implementation changes and the associated implications for those involved. Examining these models and their underlying constructs can help generate knowledge about transitions in care. Such models are, however, implemented in diverse locales, under presumably different conditions and therefore should be assessed in relation to the practice and policy contexts in which they are implemented. For example, our search identified literature on changes in facility design and approach in England, Australia, and the U.S. but generated very little information about changes in the Canadian context. Although there is knowledge to be gained from this review, there are important policy and practice distinctions between nursing homes, particularly in different geographic regions, that can influence how quality of life, quality of care, and resident satisfaction are understood and assessed.

Assumptions about the meaning and value of resident-centered approaches are in need of examination and from multiple perspectives. Critical analyses of the constructs that organize understanding and experience of resident-centered approaches to care can provoke new questions concerning the domains, instruments, and measures employed in evaluative studies. We restricted our focus to the perspectives of residents and their families. This decision reflected our interest in and commitment to privileging these commonly underrepresented voices within research on nursing homes. The inclusion of the perspective of the family in the proposed study recognized the important role that families have and can continue to have when a relative transitions into a long-term care facility. At the same time, an area of further inquiry could be the differences that are noted to exist between the two perspectives and the reasons for such differences (New Vista Society, 2005).

By concentrating on the perspectives of residents and their families, this article addressed an important gap in existing research. In excluding a consideration of the role of organizational and systemic factors, which facilitate or impede the implementation of resident-centered initiatives, it also created new gaps. The challenge this article presented concerns how to place residents at the center of research on nursing homes while, at the same time, accounting for the definitive role facility administrators, stakeholders, and social policy play in the implementation and assessment of change.

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References

Aveyard, B., & Davies, S. (2006). Moving forward together: Evaluation of an action group involving staff and relatives within a nursing home for older people with dementia. *International Journal of Older People Nursing, 1*, 95-104. doi: 10.1111/j.1748-3743.2006.00005.x

Baker, B. (2007). *Old age in a new age: The promise of transformative nursing homes*. Nashville: Vanderbilt University Press.

Baker, B., & Steber, M. (2005). Small world. *AARP Bulletin, 46*, 28. Retrieved from http://www.aarp.org

Bishop, C. E., Weinberg, D. B., Leutz, W., Dossa, A., Pfefferle, S. G., & Zincavage, R. M. (2008). Nursing assistants' job commitment: Effect of nursing home organizational factors and impact on resident well-being. *The Gerontologist, 48*, 36-45. doi: 10.1093/geront/48.Supplement_1.36

Bowers, B., & Nolet, K. (2011). Empowering direct care workers: Lessons learned from THE GREEN HOUSE® model. *Seniors Housing & Care Journal, 19*, 109-120.

Boyd, C. K. (2003). Providence Mount St. Vincent experience. *Journal of Social Work in Long-Term Care*, *2*(3-4), 245-268. doi:10.1300/J181v02n03_03

Brush, J. A., Calkins, M. P., Kator, M. J., Wyatt, A., & Miller, H. (2008). Creating home and building community II: The urban experience. *Long-Term Living*, *57*, 56. Retrieved from http://www.ltlmagazine.com/ME2/Default.asp

Calkins, M. P. (2002). Nursing home of the future: Are you ready? *Nursing Homes Long Term Care Management, 51*, 42-46. Retrieved from http://www.ltlmagazine.com/ME2/Default.asp

Calkins, M., & Cassella, C. (2007). Exploring the cost and value of private versus shared bedrooms in nursing homes. *The Gerontologist, 47*, 169-183. doi: 10.1093/geront/47.2.169

Campbell, S. L. (2003). Empowering nursing staff and residents in long-term care. *Geriatric Nursing, 24*, 170-175. doi: 10.1067/mgn.2003.40

Capitman, J., Leutz, W., Bishop, C., & Casler, R. (2004). *Long-term care quality: Historical overview and current initiatives*. Washington, D.C.: National Quality Forum. Retrieved from http://www.pdfcari.com/Long-Term-Care-Quality:-Historical-Overview-and-Current-Initiatives.html

Chou, S., Boldy, D. P., & Lee, A. H. (2001). Measuring resident satisfaction in residential aged care. *The Gerontologist, 41*, 623-631. doi: 10.1093/geront/41.5.623

Chou, S., Boldy, D. P., Lee, A. H. (2002). Resident satisfaction and its components in residential aged care. *The Gerontologist, 42*, 188-198. doi: 10.1093/geront/42.2.1888

Chou, S., Boldy, D. P., & Lee, A. H. (2003). Factors influencing residents' satisfaction in residential aged care. *The Gerontologist, 43*, 459-472. doi: 10/1093/geront/43.4.459

Cioffi, J. M., Fleming, A., Wilkes, L., Sinfield, M., & Le Miere, J. (2007). The effect of environmental change on residents with dementia. *Dementia, 6*, 215-231. doi:10.1177/1471301207080364

Cutler, L. J., Kane, R. A., Degenholtz, H. B., Miller, M. J., & Grant, L. (2006). Assessing and comparing physical environments for nursing home residents: Using new tools for greater research specificity. *The Gerontologist*, *46*, 42-51. Retrieved from http://gerontologist.oxfordjournals.org/

Day, K., Carreon, D., & Stump, C. (2000). The therapeutic design of environments for people with dementia: A review of the empirical research. *The Gerontologist, 40*, 397-416.

Davis, S., & Nolan, M. (2006). 'Making it better': Self perceived roles of family caregivers of older people living in care homes: A qualitative study. *International Journal of Nursing Studies, 43*, 281-291.

de Veer, A. & Kerkstra, A. (2001). Feeling at home in nursing homes. *Journal of Advanced Nursing, 35*(3), 427-434.

Dijkstra, A. (2007). Family participation in care plan meetings: Promoting a collaborative organizational culture in nursing homes. *Journal of Gerontological Nursing, 33*(4), 22-29. Retrieved from http://www.slackjournals.com/jgn

Ettema, T. P., Dröes, R., de Lange, J., Mellenbergh, G. J., & Ribbe, M. W. (2007). QUALIDEM: Development and evaluation of a dementia specific quality of life instrument. scalability, reliability and internal structure. *International Journal of Geriatric Psychiatry*, 22(6), 549-556. doi: 10.1002/gps.1713

Foy White-Chu, E., Graves, W., Godfrey, S., Bonner, A., & Sloane, P. (2009). Beyond the medical model: The culture change revolution in long-term care. *Journal of American Medical Directors Association, 10*, 370-378.

Gaugler, J. E. (2005). Family involvement in residential long-term care: A synthesis and critical review. *Aging and Mental Health, 9*, 105-118. doi: 10.1080/13607860412331310245

Gaugler, J. E., (2006). Family involvement and resident psychosocial status in long-term care. *Clinical Gerontologist, 29*(4), 79-98. doi: 10.1300/J018v29n04_06

Gaugler, J. E., Anderson, K. A., & Leach, C. R. (2003). Predictors of family involvement in residential long-term care. *Journal of Gerontological Social Work, 42*(1), 3-26. doi: 10.1300/J083v42n01_02

Hill, N., Kolanowski, A., Milone-Nuzzo, P., & Yevchak , A. (2011). Culture change models and resident health outcomes in long-term care. *Journal of Nursing Scholarship, 43*(1), 30-40. doi: 10.1111/j.1547-5069.2010.01379.x

Kane, R. A. (2001). Long-term care and a good quality of life: Bringing them closer together. *The Gerontologist, 41*, 293-304. doi:10.1093/geront/41.3.293

Kane, R. A. (2003). Definition, measurement, and correlates of quality of life in nursing homes: Toward a reasonable practice, research, and policy agenda. *The Gerontologist, 43,* 28-36. doi:10.1093/geront/43.suppl_2.28

Kane, R. A., Kling, K. C., Bershadsky, B., Kane, R. L., Giles, K., Degenholtz, H. B., … Cutler, L.J. (2003). Quality of life measures for nursing home residents. *Journal of Gerontology, 58A,* 240-248. doi: 10.1093/Gerona/58.3M240

Kane, R. A., Lum, T. Y., Cutler, L. J., Degenholtz, H. B., & Yu, T. (2007). Resident outcomes in small-house nursing homes: A longitudinal evaluation of the initial green house program. *Journal of the American Geriatrics Society, 55,* 832-839. doi: 10.1111/j.1532-5415.2007.01169.x

Keating, N. (1998). *Evaluating programs of innovative continuing care (EPICC): Final report*. (NHRDP Project No. 6609-1915-602). Research on Aging Policies and Practice (RAPP). Edmonton, Alberta: University of Alberta.

Keefe, J., & Fancey, P. (2000). The care continues: Responsibility for elderly relatives before and after admission to a long term care facility. *Family Relations, 49,* 235-244. Retrieved from http://www.blackwellpublishing.com/journal.asp?ref=0197-6664

Keefe, J., Stadnyk, R., White, E., & Fancey, P. (2009). *Building research capacity for examining the impact of development on quality of life for nursing home residents and their families. Background document*. Halifax: Nova Scotia Centre on Aging, Mount Saint Vincent University.

Komarek, A. G. (2004). Creating a healing environment. *Nursing Homes Long Term Care Management, 53*(10), 78. Retrieved from http://www.ltlmagazine.com/ME2/Default.asp

Koren, M. J. (2010). Person-centred care for nursing home residents: The culture-change movement. *Health Affairs, 29*, 312-317. doi: 10.1377/hlthaff.2009.0966

Kruschke, C. (2006). Eden Alternative and Rosebud Nursing Center: Does the Eden Alternative improve resident outcomes in a long term care setting? *Dissertation Abstracts International, 67*(11), 6289B.

Levine, C., Halper, D., Peist, A., & Gould, D. (2010). Bridging troubled waters: Family caregivers, transitions, and long-term-care. *Health Affairs, 29*(1), 116-124. doi: 10.1377/hlthaff.2009.0520

Logue, R. M. (2003). Maintaining family connectedness in long-term care. *Journal of Gerontological Nursing, 29*(6), 24-31. Retrieved from http://www.slackjournals.com/jgn

Lucas, J. A., Levin, C. A., Lowe, T. J., Robertson, B., Akincigil, A., Sambamoorthi, U., … Crystal, S. (2007). Relationship between organizational factors and resident satisfaction with nursing home care and life. *Journal of Aging and Social Policy, 19,* 125-151. doi: 10.1300/J031v19n02_07

Lum, T., Kane, R., Cutler, L., & Yu, T.Z. (2008-2009). Effects of Green House® nursing homes on residents' families. *Health Care Financing Review, 30*(2), 35-51.

Maas, M. L., Reed, D., Park, M., Specht, J. P., Schutte, D., Kelley, L. S., … Buckwalte, K. C. (2004). Outcomes of family involvement in care intervention for caregivers of individuals with dementia. *Nursing Research, 53*(2), 76-86. Retrieved from http://journals.lww.com/nursingresearchonline/pages/default.aspx

Miller, S., Miller, E., Jung, H., Sterns, S., Clark, M., & Mor, V. (2010). Nursing home organizational change: The 'culture change' movement as viewed by long-term care specialists. *Medical Care Research and Review, 67*(4), 65S-81S.

Nakrem, S., Vinsnes, A., & Seim, A. (2011). Residents' experiences of interpersonal factors in nursing home care: A qualitative study. I*nternational Journal of Nursing Studies, 48,* 1357-1366. doi: 10.1016/j.ijnurstu.2011.05.012

New Vista Society. (October, 2005). *Client satisfaction survey report*. Retrieved from http://www.newvista.bc.ca/Client.pdf

New Vista Society. (August, 2008). *New Vista Care home resident information booklet*. Retrieved from http://www.newvista.bc.ca/ResidentBook.pdf

Parker, C., Barnes, S., McKee, K., Morgan, K., Torrington, J., & Tregenza, P. (2004). Quality of life and building design in residential and nursing homes for older people. *Aging & Society, 24*, 941-962. doi: 10.1017/S0144686X04002387

Parsons, M. E. (2004). Impact of the Eden Alternative on quality of life of nursing home residents. *Dissertation Abstracts International, 65*(3), 1250B.

Paulus, D., & Jans, B. (2005). Assessing resident satisfaction with institutional living: Developing a tool. *Journal of Gerontological Nursing, 31*(8), 6-11. Retrieved from http://www.slackjournals.com/jgn

Persson, D. (2008). Family councils in nursing facilities: Strategies for effective participation. *Journal of Gerontological Social Work, 50*(3-4), 51-63. doi: 10.1300/J083v50n3_05

Peters, R. (2004). Quality of life: Definitions, measurement, and application to practice. Retrieved from http://www.coag.uvic.ca/resources_research_snapshots_qol.htm

Port, C. L. (2004). Identifying changeable barriers to family involvement in the nursing home for cognitively impaired residents. *The Gerontologist, 44*, 770-778. doi:10.1093/geront/44.6.770

Rabig, J., & Rabig, D. (2008). From "nursing home" to "home": The small house movement. *Long-Term Living, 57*(3), 12. Retrieved from http://www.ltlmagazine.com/ME2/Default.asp

Rabig, J., Thomas, W., Kane, R. A., Cutler, L. J., & McAlilly, S. (2006). Radical redesign of nursing homes: Applying the green house concept in Tupelo, Mississippi. *The Gerontologist, 46*, 533-539. doi:10.1093/geront/46.4.533

Rahman, A. N., & Schnelle, J. F. (2008). The nursing homes culture-change movement: Recent past, present, and future directions for research. *The Gerontologist, 48*, 142-148. doi:10.1093/geront/48.2.142

Rantz, M. J., Mehr, D. R., Popejoy, L., Zwygart-Stauffacher, M., Hicks, L. L., Grando, V., … Maas, M. (1998). Nursing home care quality: A multidimensional theoretical model. *Journal of Nursing Care Quality, 12*(3), 30-46. Retrieved from http://journals.lww.com/jncqjournal/pages/default.aspx

Rantz, M. J., Zwygart-Stauffacher, M., Popejoy, L., Grando, V. T., Mehr, D. R., Hicks, L. L., … Maas, M. (1999). Nursing home care quality: A multidimensional theoretical model integrating the views of consumers and providers. *Journal of Nursing Care Quality, 14*(1), 16. Retrieved from http://journals.lww.com/jncqjournal/pages/default.aspx

Rosher, R. B., & Robinson, S. (2005). Impact of the Eden Alternative on family satisfaction. *Journal of the American Medical Directors Association, 6*(3), 189-193. Retrieved from http://www.jamda.com/home

Sangl, J., Buchanan, J., Cosenza, C., Bernard, S., Keller, S., Mitchell, N., … Larwood, D. (2007). Development of a CAHPS instrument for nursing home residents (NHCAHPS). *Journal of Aging and Social Policy, 19*(2), 63-82. doi: 10.1300/J031v19n02_04

Schwarz, B., Chaudhury, H., & Tofle, R. B. (2004). Effect of design interventions on a dementia care setting. *American Journal of Alzheimer's Disease and Other Dementias, 19*, 172-176. doi: 10.1177/153331750401900304

Sikorska-Simmons, E. (2005). Predictors of organizational commitment among staff in assisted living. *The Gerontologist, 45*, 196-205. doi:10.1093/geront/45.2.196

Sudbury, F., & Gnaedinger, N. (2007). Optimizing LTC nursing resources by redesigning staff mix and leadership model. *Canadian Nursing Home, 18*(4), 16-19. Retrieved from http://www.nursinghomemagazine.ca/

Tavormina, C. E. (1999). Embracing the Eden Alternative in long-term care environments. *Geriatric Nursing, 20*, 158-161. doi: 10.1016/S0197-4572(99)70009-1

Tellis-Nayak, V., Shiverick, B., & Hernandez, M. (2010). Where allies part ways and strangers converge: Nursing home performance in the eyes of residents, families, and state surveyors. *Seniors Housing & Care Journal, 18,* 32-37.

Thomas, W. H. (2003). Evolution of Eden. *Journal of Social Work in Long-Term Care, 2*(1-2), 141-157. doi: 10.1300/J181v02n01_10

Train, G. H., Nurock, S. A., Manela, M., Kitchen, G., & Livingston, G. A. (2005). A qualitative study of the experiences of long-term care for residents with dementia, their relatives and staff. *Aging & Mental Health, 9*(2), 119-128. Retrieved from http://www.tandfonline.com/toc/camh20/current

Wheatley, M. V., Choi, K., Hirsch, M., Walley, J. E., Lee, C. S., Urman, H. N., & Urman, G. C. (2007). Implementation and results of the statewide Ohio nursing home resident satisfaction survey. *Journal of Aging and Social Policy, 19*(2), 107-124. doi: 10.1300/J031v19n02_06

Weiner, A. R., & Ronch, J. L. (Eds.). (2003). *Culture change in long-term care*. New York: Haworth Press.

Wiersma, E. C., & Pedlar, A. (2008). The nature of relationships in alternative dementia care environments. *Canadian Journal on Aging, 27*(1), 101-108. doi: 10.3138/cja.27.1.101

Yeatts, D. E., & Cready, C. M. (2007). Consequences of empowered CNA teams in nursing home settings: A longitudinal assessment. *The Gerontologist, 47*(3), 323-339. doi:10.1093/geront/47.3.323