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Design from Within: A Resident-Based Approach to Nursing Home Design

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Design from Within:

A Resident-Based Approach to Nursing Home Design

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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Maureen D. Carland

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We hereby recommend that the thesis of Maureen D. Carland entitled *Design from*

Within: A Resident-Based Approach to Nursing Home Design be accepted in partial

fulfillment of the requirements for the Degree of Master of Leadership Studies.

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Accepted

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Dean, Lewiston-Auburn College

Design from Within:

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Introduction

Nursing homes are at the forefront of long-term and healthcare for elderly people in the United States (Dickinson, 2004). In the U.S. alone, there are over 16,000 nursing home facilities with over 1.7 million beds (Center for Disease Control and Prevention, 2004). America's largest generation, the baby boomers, are beginning to seriously consider their retirement and long-term care options and there is growing interest by this sector in the quality of their care. The roles these facilities play has recently been more carefully scrutinized and examined to determine to what extent they are meeting residents' needs. It has been suggested that there has been a shift in focus in the long-term care community, and what is termed as a "culture change," has flourished. This culture change dismisses the cold, institutional-approach of the 1970's and 80's and instead focuses on renovating the design of nursing homes (Dickinson, 2008; Landow, 1995; Ogurek & Nessler, 2005; Thomas, 1996).

As a result of the focus on design, there was also an increase in the interest of obtaining stakeholder input. Literature identifies a wide range of stakeholders including: residents, staff members, and family members (Cleary & Edgman-Levitan, 1997; Dickinson (2004); Thompson, Menec, Chochinov, & McClement, 2008; Stern, MacRae, Gerteis, Harrison, et. al, 2003). Insight and opinion was solicited from these individuals through a variety of qualitative and quantitative methods including: interviews, focus groups, and surveys designed by researchers.

This paper examined the value and impact of obtaining stakeholder input in the design of long-term care facilities. Most previous literature focused on obtaining

input from an architect's or nurse's perspective, and very few studies have analyzed

input from the residents—the primary stakeholder (Woo, Mak, Cheng & Choy,

2011). Specifically, this paper identifies and examines stakeholder input at The

Maine Veterans' Home in Scarborough, Maine. The Maine Veterans' Home is

currently engaged in planning a large-scale, multi-million dollar renovation. Before

breaking ground, as the literature suggests, it was determined to be important to

obtain stakeholder input for the design process. The author of this paper, also the

Administrator of the home, utilized qualitative research methods to obtain

stakeholder input from the home's residents, family members, and staff members.

Specifically, input was solicited about the design of bedrooms—including the

orientation of the room, specific furniture choices, color schemes, etc. Data was

collected using focus groups, interviews, and a survey of three stakeholder groups

including residents, family, and staff members. First, a group of volunteer residents

were shown a mock up bedroom with a variety of furniture. They were then

interviewed about the opinions of the room and provided an opportunity to share

their thoughts. Second, a focus group comprised of volunteer family members were

also shown the mock up rooms and then allowed to discuss their opinions as a

group. Finally, a survey was given to all staff members, both nursing and non-

nursing staff to solicit feedback and ideas from staff members.

The findings of this research project suggest that the process of obtaining

stakeholder input engages, excites, and helps to get people on board with the

project. In addition, stakeholders can provide valuable insights that were

previously not considered. Furthermore, the research methods used in this study,

including focus groups with the families, interviews with residents, and surveys for staff members, served to appropriately engage each population group to a level in which they were most comfortable providing feedback.

Literature Review

Stakeholders

Literature has elucidated the importance of gaining stakeholder input in the design of long term care communities (Kaasalainen, S., Williams, J., Hadjistavropoulos, T., Thorpe, L., & Whiting, S., 2010; Peck, 1992; Thompson, et al., 2008; Woo, et al., 2011). Stakeholders that have been previously considered include: architects, families, nursing staff and other healthcare providers and, rarely, the residents themselves.

Within the past decade, architects have been brought on board to create innovative designs in nursing homes. Some of the pioneering work done in design includes revolutionizing the bed orientation in bedrooms to maximize privacy and dignity (Landow, 1995), increasing plants and "green" spaces (Henson, 2009), and creating a social and home-like environment (Hrehocik, 2009; Lee, 2006; Ogurek & Nessler, 2005; Pierce, 2001; Schwarz & Brent, 2001). The dialogue surrounding nursing home design converges on the idea that a hospital-like setting is undesirable in a long-term care facility (Koren, 2010). This has created a demand for architects who specialize in designing resident-focused structures. These architects have become well known in the field for their innovative design. For example, the Metropolitan Jewish Geriatric Center, one of the largest health care providers in

New York City, benefited from a reconstruction done by an architectural firm that utilized a neighborhood concept in retrofitting the complex in which they incorporated more community spaces, increased privacy for residents, and provided a warmer environment (Landow, 1995).

Resident Input

Resident input for nursing home design is becoming increasingly important to consider (Kleinsorge & Keenig, 1991). To date, a very small body of work has been resident orientated; that is, they sought residents' opinions before design. Some architects expressed that interviewing community groups to explore what they wanted provided valuable insights (Peck, 1992). However, most architectural reports and interviews do not mention gathering input from what is arguably the most important stakeholder group. Kleinsorge and Keenig (1991) articulate the paradox: "though the ultimate consumers are the recipients of care, they (residents) often are not making their own decisions." There are a few studies that have attempted to probe an elderly population for unmet needs (Kim, 2002; Stern, MacRae, Gerteis, Harrison, et. al, 2003; Woo, Mak, Cheng & Choy, 2011). These few studies recognize the importance of obtaining primary stakeholder input for design.

Types of Research Methodology found in Literature

I. Qualitative Methods

Past research in this field has been primarily qualitative action research. Action research, also known as participatory action research, is a research methodology that evolved from a variety of other intellectual traditions. It is a

collaborative approach that allows people to take systematic actions to resolve specific questions. It has been described to be "a highly reflective, experiential, and participatory mode of research in which all individuals involved in the study, researcher and subject alike, are deliberate and contributing actors in the research enterprise" (Berg, 2004, p.197). Many researchers in the published literature use qualitative methods to attain data on resident satisfaction and needs (van Eyk & Baum, 2003). One study specifically designed new techniques and tools for the evaluation of senior satisfaction (Rodiek, 2008). Other methods include surveys, interviews, and focus groups.

II. Focus Groups

A focus group is best described as eight to 12 participants in a homogeneous group using techniques to examine their discourse and formulations in order to discover attitudes, beliefs, and perceptions on a particular subject (Bulmer, 1998). Kleinsorge & Keenig (1991) assert that: "focus groups are a cost efficient way to solicit information (including ideas, attitudes, and perceptions) from participants." Previous research has elucidated the value in focus groups as a method for gaining interesting insights. Focus groups are well-suited for exploring complex phemonenas in depth and developing recommendations around key issues (Thompson, et al., 2008). The focus group format gives participants an opportunity to explore and exchange ideas, and if the focus group is structured correctly, it provides a safe space for members to be candid and honest. Furthermore, the details provided by focus groups are rich in experience and anecdotes (Bulmer, 1998).

Focus groups have been conducted to gather novel insights with various stakeholders from nursing homes (Bulmer, 1998; van Eyk & Baum, 2003; Woo, et al., 2011). In the long-term care field, the stakeholders that have participated in focus groups include: staff members (Bengtsson & Carlsson, 2005; Schwarz, Chaudhury, Tofle, 2004; van Eyk & Baum, 2003;) and residents (Kleinsorge & Keenig 1991). Some studies performed focus groups on both older individuals and health providers. For example, Woo, et al. (2011) interviewed those two populations in Hong Kong and the researchers identified several areas for improvement in the services for the older population. Furthermore, they found that it was important to evaluate the system from both the professional care providers' *and* the users' perspectives. Additionally, Innes, Kelly, and Dincarslan's (2011) study engaging focus groups consisting of residents and staff members in Northern Ireland and Scotland reaffirmed similar conclusions with repsect to the needs of patients with dementia.

Focus groups have important limitations that should be considered. They require preparation and can be expensive to run, especially if participants need to be compensated. Furthermore, there is a risk that group members do not present original ideas due to the nature of cohesiveness, groupthink, and the desire "to fit in" (Bulmer, 1998).

III. Interviews

In addition to focus groups, interviews are a common means through which to attain qualitative data. Patton (1990) suggests that "the purpose of interviewing is to find out what is in and on someone else's mind" (p. 278). In previous literature,

many different stakeholders have been interviewed. Nakrem, Vinsnes, and Seim

(2010) interviewed fifteen residents in a public municipal nursing home in Norway

to examine the interpersonal aspects of quality of care. Other researchers interview

administrators (Kim, 2002) and family members (Stern, et al., 2003). Many studies

used both focus groups and interviews with a variety of stakeholders to reach to

their conclusions.

Purpose of the Study

      The literature review has exhibited several qualitative methods and

stakeholders by which to examine the importance of key factors in an older person's

quality of life in a nursing home. However, in general there is a lack of resident-

focused solicitation of input for nursing homes in America. Therefore, this study

aims to examine the primary values held by residents and other stakeholders with

regards to their surrounding environment in a nursing home. Furthermore, this

study critically analyzes qualitative methods for obtaining stakeholder input.

Methodology

      This mixed methodology study was divided into three experimental phases.

The first phase included focus groups with family members of residents, the second

phase used interviews with residents, and the third phase consisted of conducting

surveys on staff members (including both nursing and non-nursing staff).

Focus Groups

This study facilitated one focus group consisting of the family members of the residents. The focus group methodology was chosen for family members because it paralleled Maine Veterans' Home's "Family Forum." That is, at the Maine Veterans' Home, there is already a pre-established means through which family members can come together on a quarterly basis where all family members are invited. Departments within the Home give updates and family members are encouraged to share their thoughts and ideas on improvement. Therefore, the focus group was a natural extension of this forum and it was through the Family Forum that volunteers were solicited.

The focus group consisted of five participants: two wives, one daughter, one son, and one sister of a variety of residents. The focus group was shown the mock up bedroom and notes on their thoughts and discussion were written down for analysis.

Interviews

All residents in Maine Veterans' Home were invited to be interviewed and eleven residents volunteered and were accepted. The structured interviews followed a series of questions (Appendix One). Residents were interviewed one-on-one by one of the nurse managers. The nurse manager also recorded the residents' answers to the interview questions.

Interviews were chosen to engage residents because of the difficulty of gathering multiple residents with cognitive and physical handicaps together at the

same time. It would have been crowded in the mockup rooms to an extent that may have been distracting and would have resulted in skewed data.

Surveys

One survey (Appendix One) was sent out to all staff members and seven nurses and three non-nurse staff members replied. The survey consisted of the same content of questions that were given to residents. Surveys are a valuable tool because they can reach a wide audience and they are composed of consistent questions. Staff members were not placed in focus groups nor interviewed due to the time limitation constraint.

Results and Discussion

Focus Groups with Family Members

The focus group consisted of family members of some of the residents at Maine Veterans' Home. These included two wives, one daughter, one son, and one sister of a variety of residents. The focus group had a unique component to it, as compared to focus groups in previous literature, because in this study the focus group walked around the mock room. This dynamic component served to provide an interesting means through which members of the group explored and expressed their ideas and opinions.

The overall atmosphere of the focus group was very cordial and the researcher set the stage by requesting "one hundred percent honesty" from the participants. The researcher also made sure to facilitate discussion by prompting questions and allowing the participants ample time to talk and discuss their ideas.

The focus group's discussion highlighted important issues including: spaciousness, coziness, privacy, chairs to host guests, and ability to personalize the room. They approved the sample curtains and bed spreads and the general consensus was that the neutral but pleasant patters were a good choice. Overall, the focus group did not provide revolutionary insights with respect to the design of the room. Their suggestions were ones that had already been vetted through administration discussion. However, the focus group activity did provide a tangible and extremely valuable result. The focus group engaged the resident family members and brought them on board with the project. Participants expressed pleasant surprise that the administration was soliciting their feedback for the design. After the researcher introduced the project and the Home's emphasis on the importance of soliciting stakeholder feedback, the participants of the focus group expressed their gratitude for being included and stated they were impressed with the Home. Expressions such as: "I'm very happy to be involved with this [the focus group]," "this [the focus group] is such a good idea," "It's really impressive what you [Maine Veterans' Home administration] are doing" were heard multiple times throughout the focus group discussions.

Interviews with Staff Members

Both nursing and non-nursing staff were surveyed with the intent of obtaining a wide range of opinions. The staff members were asked the same questions as the residents. Between the two groups, the nursing staff was more willing to participate and had more opinions on the subject matter. The survey sent to the nurses received 7 responses out of 20 surveys that were sent out. The survey

sent to non-nursing staff only received 3 responses out of 20 with only about half the questions answered. The disparities between the response rates could possibly be explained as an indication of how strongly the respondent feels towards the questions. For example, a nurse works closely with residents every day and he/she might have valuable insight about what is beneficial and harmful to the resident. A non-nurse employee (for example a member of the kitchen or housekeeping staff) may have fewer interactions with residents and therefore may not have as detailed an understanding of their needs. This concept was reflected in the survey results because the non-nursing staff tended to leave blank the questions that directly asked about preference on furniture sets, while nurses tended to answer those questions.

The results from the survey reinforce the general ideas that the administrators already considered and the residents had also articulated. That is, the staff expressed the themes of "comfort," "coziness," "personalization," and "personal space." The nursing staff rated the current room a 5.5 out of 10 and in general indicated that the rooms were adequate but could be improved. There was a theme of aesthetics presented by the nurses as indicated by the phrases: "more style/color," "more design," "brighter colors," and "something more eye appealing." Another theme in the responses emphasized the need to include space for the personalization of the rooms.   Finally, the nurses approved the use of a curtain system that could divide the room into sections and create spaces of privacy.

Interviews with Residents

   Residents were interviewed on a one-on-one basis and asked a set of prewritten questions (Appendix One). The questions ranged from a numeric ranking of the rooms to queries about what aspect of furniture was most important to consider. Residents on average ranked their satisfaction with their current room as a 6.7 out of 10, with a standard deviation of 2.9 (Table 1). The value 6.7 definitely implies room for improvement and the high value of the standard deviation suggests that some residents are not having their needs met. Interestingly, on average, the residents ranked their satisfaction with their rooms higher than the nurses did (Table 1).

   When describing their beds, 7 out of 11 residents said that "comfort" was the most important characteristic of a bed and 6 out of 11 mentioned the size as also being very important. Residents further described their ideal room as "cozy," "comfortable," and "homey" which reinforces the findings of previous literature. Furthermore, the residents strongly indicated their desire to have more chairs in the room for hosting visitors.

   The residents' responses were more focused on functionality than on aesthetics. For example, when asked what was important when choosing curtains for the room 9 out of 11 residents expressed that they had no preference. When shown two sets of curtains and asked which they preferred, 7 out of 11 residents had no preference. Another theme that the residents expressed was the need for extra chairs in their rooms to facilitate socialization in their rooms. When asked

about the most important factor in a bedroom the prevalent themes were: personalization (1), color (1), privacy (1), comfort (2), and space (5).

One unique finding from the interviews was that the residents were unable to put the curtains up and down when the curtain strings were on the side of the windows. As an example, the resident suggested that if the strings were in the middle, residents could access them independently. Through the use of these survey responses, we found novel information that was otherwise unknown to the administration.

Limitations

This paper considers the value of resident centered feedback, and also explores other stakeholders, including families and staff members. It does so in the context of the Maine Veteran's Home in Scarborough, Maine. Every effort has been made to obtain the largest possible number of stakeholders for input. However, the study was limited in time and scope due to the constraints of time and funding. Further researchers should replicate the study across different long-term care facilities and obtain a variety of stakeholder responses.

Conclusion and Discussion

This study examined the value and impact of obtaining stakeholder input in the design of bedrooms in long-term care facilities. Most previous literature focused on obtaining input from an architect's or nurse's perspective, and very few studies have analyzed input from the residents—the primary stakeholder. This study

aimed to obtain and analyze input from a wide range of stakeholders using a variety of qualitative methods.

The results of this study suggest that the process of obtaining stakeholder input engages and excites people and inspires people to get on board with a project. Specifically, this phenomenon was most pronounced with the family members of residents. Family members seemed pleasantly surprised that the administrator of the nursing home was genuinely interested in their opinions. This result was particularly interesting because it was not emphasized in previous literature. Other papers quantified resident and family satisfaction about their rooms (Bengtsson & Carlsson, 2005; Nakrem, Vinsnes & Seim, 2010). One newspaper article specifically quotes residents' pleasure about the changes that were brought to a nursing home (Nelson, 2002). However, no article comments on the value obtained through the stakeholder input process, namely that it can captivate and engage an audience with respect to a certain project.

The value of the focus group in this context was in reinforcing what the administration had considered (with respect to the design of the rooms) and furthermore in forming positive relationships with stakeholders. Many of these family members expressed that they would come back to The Maine Veterans' Home again if invited. This positive relationship with stakeholders is extremely valuable because it facilitates honest feedback, builds trust, and can prevent potential complaints that could escalate to a regulatory body costing time and money.

Furthermore, the interviews with the residents produced valuable information that would have otherwise been unavailable to the administration. This

result underscores the explicit value of obtaining resident-based input. Quite

simply, there is information that is not obtainable through any means other than by

gathering it from the residents. This study asserts that resident based approaches

to design are invaluable in providing the very best quality of care that our elderly

loved ones deserve.

Tables

Table 1. Room Satisfaction Survey Results

Stakeholder	Average room satisfaction (1-10, 10 is highest)	Standard Deviation
Residents	6.7	2.9
Nursing staff	5.5	2.3

Appendix

This appendix contains the interview questions for interviews with residents. The same questions were used for surveys sent to the staff.

General

- What factors are important to you in a room? (For example: space, furniture, wall colors, personalization, overall feel, etc.)
- Please rate your satisfaction with your current room on a scale of 1-10 (1=very dissatisfied, 10=very satisfied).
- What would you like to see differently from the current rooms?
- What do you think of the arrangement of furniture in the room?

Beds

- What is important to you when you're choosing a bed?
- Of the three beds in the room, which was your favorite?
- Why was that your favorite?
- Which bed do you see yourself being most comfortable with long term?

Wardrobes

- What is important to you when you're choosing a wardrobe?
- Of the two wardrobes in the room, which was your favorite?
- Why was that your favorite?
- Which wardrobe do you see yourself being most comfortable with long term?

Bedside Table

- What is important to you when you're choosing a bedside table?
- Do you see yourself being most comfortable with that bedside table long term?

Over-Bed Table

- What is important to you when you're choosing an over-bed table?
- Of the two over-bed tables in the room, which was your favorite?
- Why was that your favorite?
- Which over-bed table do you see yourself being most comfortable with long term?

Chair

- What is important to you when you're choosing a chair?
- Of the two chairs in the room, which was your favorite?
- Why was that your favorite?
- Which chair do you see yourself being most comfortable with long term?

Curtains

- What is important to you when you're choosing curtains?
- Of the two curtain sets in the room, which was your favorite?
- Why was that your favorite?
- Which set of curtains do you see yourself being most comfortable with long term?

Room Environment

- What overall environment are you looking for in your/your loved one's room? (If prompting is necessary: tranquil, warm, clean, fun, etc.)
- Do you anticipate having a lot of visitors in the room?
- What should the room have to better accommodate visitors?

Personalization

- Do you feel like you currently have a lot of personal belongings in your room?
- Is there enough room for you to keep personal belongings on shelves, tabletops, etc.?
- How important is personalization for the room? That is, should we leave space for you/your loved one to add a lot of personal belongings?
- Would you prefer a matching set of bedspread and curtains or neutral curtains and your own bedspread?

References

Bengtsson, A., & Carlsson, G. (2005). Outdoor environments at three nursing homes: Focus group interviews with staff. *The Journal of Housing for the Elderly*, *19*, 49-69. doi: 10.1300/J081v19n03_04

Berg, B. L. (2004). *Qualitative research methods for the social sciences*. (5 ed., pp. 195-207). Boston, MA: Pearson Education. Retrieved from http://digilib.bc.edu/reserves/sc210/piat/sc21007.pdf

Bulmer, C. (1998). Clinical meanings: Defining meaning through focus groups. *Nursing Standard*, *12*(20), 34-36.

Center for Disease Control and Prevention, (2004). *Nursing home care*. Retrieved from National Center for Health Statistics website: http://www.cdc.gov/nchs/fastats/nursingh.htm

Cleary, P. D., & Edgman-Levitan, S. (1997). Health care quality: Incorporating consumer perspective. *Journal of the American Medical Association*, *278*(19), 1608-1612.

Dickinson, E. E. (2008). Old age, new models. *Architect Magazine*, *97*(12), 71-75.

Dickinson, J. I. (2004). Nursing home design: A student challenge and call for change. *Journal of Interior Design*, *30*(1), 31-55.

Henson, T. (2009). Merrimack county nursing home Boscowen, New Hampshire. *Long-Term Living: For the Continuing Care Professional*, 24-27.

Hrehocik, M., Hoglund, J.D. (2009). *Long-Term Living: For the Continuing Care Professional*, *58*(6), 41-43.

Innes, A., Kelly, F., & Dincarslan, O. (2011). Care home design for people with dementia: What do people with dementia and their family caregivers value?. *Aging & Mental Health*, *15*(5), 548–556.

Kaasalainen, S., Williams, J., Hadjistavropoulos, T., Thorpe, L., & Whiting, S. (2010). Creative bridges between researchers and long-term care homes to promote quality of life for residents. *Qualitative Health Research*, *20*, doi: 10.1177/1049732310377456

Kim, Y. (2002). *Assisted living facility as a home: Cases in southwest Virginia.* Virginia Polytechnic Institute, Blacksberg, VA.

Kleinsorge, I. K., & Keenig, H. F. (1991). The silent customers: Measuring customer satisfaction in nursing homes. *Journal of Health Care Marketing*, *11*(4), 2-13.

Koren, M. J. (2010). Person-centered care for nursing home residents: The culture-change movement. *Health Affairs*, *29*(2), 1-6. doi: 10.1377/hlthaff.2009.0966

Knecht, B. (2004). Aging baby boomers want smart houses for their golden years. *Architectural Record*, *192*(4), 167-176.

Landow, L. J. (1995). Making it new. *Nursing Homes: Long term Care Management*, *44*(6), 14-18.

Lee, S. A. (2006). Charles Durrett on how 'intentional community' can help us get this aging thing right. *Journal of Financial Planning*, 24-27.

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

Nelson, K. T. (2002, Sept 22). Residents of nursing homes relish comforts of wood. *Northern Ontario Buisness*, p. 6D.

Ogurek, D., & Nessler, B. (2005). Senior service. *Health Facilities Management*, 18(5), 28-32.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. (2 ed., pp. 277-365). Newbury Park, CA: Sage Publications. Retrieved from http://digilib.bc.edu/reserves/sc794/leac/sc79402.pdf

Peck, R. L. (1992). The making of a new facility (interview with Montefiore home administrator Edward Vincur, architect Brad Perkins, and building committee chairman Darrell Young). *Nursing Homes*, *41*(3).

Pierce, R. A. (2001). After assisted living: Is this the next step?. *Nursing Homes Long Term Care Management*.

Rodiek, S. (2008). A new tool for evaluating senior living environments. *Seniors Housing & Care Journal*, *16*(1), 3-9.

Schwarz, B., & Brent, R. (2001). The architectural metamorphosis of long-term care settings. *Journal of Architectural and Planning Research* , *18*(3), 255-269.

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

Stern, A. L., MacRae, S., Gerteis, M., Harrison, T., Fowler, E., Edgman-Levitan, S., et. al (2003). Understanding the consumer perspective to improve design quality. *Journal of Architectural and Planning Research*, *20*(1), 17-28.

Thomas, W. H. (1996). *Life worth living: How someone you love can still enjoy life in a nursing home*. Acton, MA: VanderWyk & Burnham.

Thompson, G. N., Menec, V. H., Chochinov, H. M., & McClement, S. E. (2008). Family satisfaction with care of a dying loved one in nursing homes: What makes the difference?. *Journal of Gerontological Nursing*, *34*(12), 37-44.

Woo, J., Mak, B., Cheng, J. O., & Choy, E. (2011). Identifying service needs from the users and service providers' perspective: A focus group study of chinese elders, health and social care professionals. *Journal of Clinical Nursing*, *20*(23), 3463-3471. doi: 10.1111/j.1365-2702.2011.03702.x

van Eyk, H., & Baum, F. (2003). Evaluating health system change using focus groups and a developing discussion paper to compile the "voices from the field". *Qualitative Health Research*, *13*, doi: 10.1177/1049732302239605