

ORGANIZATIONAL AND RESIDENT CARE PRINCIPLES AND PRACTICES:
CONSIDERATION OF NURSING HOME STRUCTURAL, MARKET, AND
ADMINISTRATIVE FACTORS

by

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A THESIS

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ABSTRACT

A movement known as “culture change” was developed in an effort to improve conditions in the nursing home. The goals of culture change include increasing resident autonomy, increasing resident and direct care staff decision-making, creating a home-like environment, flattening the internal organizational hierarchy, and decentralizing roles in the nursing home in an effort to empower all employees. The purpose of this study was to identify features of Alabama nursing homes that are related to adoption of organizational and resident care practices consistent with culture change principles. Three categories of nursing home features were examined: structural factors, market factors, and nursing home administrator (NHA) influence. Additionally, NHAs’ perceptions of barriers to implementation of such innovations were explored.

All Alabama administrators of Medicare or Medicaid-certified nursing homes were invited to participate. A standardized survey was used to collect administrator self-report information about their facility and their perceptions and attitudes regarding culture change principles and practices. The response rate for the survey was 32.9%. Participants consisted of 75 nursing home administrators. Two administrators were responsible for daily operations of two facilities each; therefore, a total of 77 nursing homes participated.

The majority of the NHAs reported that they were very familiar with the principles of culture change, yet that culture change principles and practices only “somewhat” described their nursing homes. Medicaid census was significantly related to reported adoption of culture change practices, as was median household income and market density. Nursing homes with a lower

Medicaid census were more likely to implement culture change practices. Nursing homes situated in counties with a higher median income and more older adults were also more likely to implement these practices. Culture change implementation was higher in nursing homes with administrators that felt that culture change implementation was feasible in their nursing home. Barriers to implementation of these practices were residents' ability to engage, staff resistance to change, lack of resources, and regulations/survey process impediments.

DEDICATION

I dedicate this piece of work to my husband and daughter. They always expressed their pride in my work, and it was their support that kept me motivated to succeed.

LIST OF ABBREVIATIONS AND SYMBOLS

CCP	Culture Change Practices
CNA	Certified Nursing Assistant
RN	Registered Nurse
LPN	Licensed Practical Nurse
NHA	Nursing Home Administrator
M	Mean: the sum of a set of measurements divided by the number of measurements in the set
N	Number
SD	Standard deviation: the measurement of variability or dispersion of a data set
α	Cronbach's alpha: internal consistency or reliability
r	Pearson product moment correlation
η_p^2	The ratio of variance accounted for by the independent variable
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
F	Fisher's F ratio: A ratio of two variances
Wilks' λ	A probability distribution used to test difference between means on a combination of dependent variable
$<$	Less than
$=$	Equal to

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Chapter 1: Introduction

The current state of traditional nursing homes is in dire need of change. The organization and care models of traditional nursing homes were based upon the acute care setting. However, there are important reasons why nursing homes should resemble homes rather than acute care facilities. Unfortunately for many residents, the nursing home is the last place they will live. Currently a social movement known as “culture change” is progressing and expanding through nursing home communities, supported by the Centers for Medicare and Medicaid Services and many state regulatory agencies. Culture change, also known as resident-centered care and person-centered care, is a movement directed towards flattening the internal structural hierarchy in the nursing home, allowing more autonomy for residents and staff, enhancing the environment of the nursing home, and improving the quality of care of residents. These initiatives are innovative organizational and resident care principles and practices. Although the movement is growing, there are still nursing homes that have not made a commitment to such change. It is important, then, to identify factors that may impact change.

The purpose of this study is to identify features of Alabama nursing homes that are related to adoption of organizational and resident care practices consistent with culture change principles (as defined by the Pioneer Network; <http://www.pioneernetwork.net/>). Three categories of nursing home features will be examined: structural factors, market factors, and nursing home administrator (NHA) influence. Additionally, NHAs’ perceptions of barriers to implementation of such innovations will be explored. If identification of nursing home features

and barriers to execution can be identified, educational and motivational interventions can be developed to increase the number of nursing homes applying such practices.

Statement of Hypothesis and Specific Aims

Specific Aim 1: To describe culture change practices (CCPs; i.e., organizational and resident care practices or culture change practices) that have been implemented in Alabama nursing homes.

This information will be gathered using a modified version of the culture change survey developed by the Commonwealth Fund and the Pioneer Network as part of their national survey in 2008 (Doty, Koren, & Sturla, 2008).

Specific Aim 2: To examine the association between CCPs and Alabama nursing home structural factors. The structural factors that will be examined include ownership status, facility size, chain affiliation, and Medicaid/Medicare census.

Hypothesis 2: Nursing homes with structural factors that provide fewer resources for changing the culture (for-profit, smaller homes, not part of a chain, and higher Medicaid census) will implement fewer innovative CCPs.

Several studies have shown that for-profit nursing homes fare worse than nonprofit nursing homes in regard to quality of care, number of deficiencies, and staffing levels (Harrington, Woolhandler, Mullan, Carrillo, & Himmelstein, 2001; Hillmer, Wodchis, Gill, Anderson, & Rochon, 2005; McGregor et al. 2005; Zimmerman, Gruber-Baldini, Hebel, Sloane, & Magaziner, 2002). In addition, it has also been consistently documented that independent nursing homes that are not part of a chain have fewer deficiencies and provide a higher quality of care when compared to chain affiliated nursing homes (Harrington et al., 2001; Office of Inspector General, 2008). Anderson, Lewis, and Webb (1999) also linked chain affiliation with overall nursing home efficiency and concluded that nursing homes that are affiliated with chains

are less efficient than their counterpart. However, mixed results are found in the literature suggesting that there is not a general consensus on nursing home efficiency in chain affiliated facilities (Jensen & Meckling, 1976). Regarding innovation, Castle (2001) found that chain affiliation and large facility size were factors that increased the likelihood of nursing homes adopting innovative changes. Finally, facilities with a higher Medicaid census demonstrate lower quality of care indicators, presumably due to more limited resources since Medicaid reimbursement rates are substantially lower than Medicare rate (Nyman, 1988; Zimmerman et al., 2002).

Specific Aim 3: To examine the association between CCPs and Alabama nursing home market factors. The market factors that will be examined include median income in a county, market concentration, market density, and location.

Hypothesis 3: Nursing homes located in counties that are rural rather than urban and that have lower median incomes and less local nursing home competition (higher market share concentration [Herfindahl Index], lower market density [potential consumers]) will implement fewer innovative CCPs.

According to the Resource-Based Theory of Competitive Advantage, an organization is more likely to improve for the purpose of appealing to the consumers if it has the resources available to do so and if it will lead to a higher competitive advantage (Grant, 2001). Nursing homes in rural counties have fewer resources, especially rural counties that have a low median income, and they are less likely to implement innovative changes (Mor, Zinn, Angelelli, Teno, Miller, 2004). Studies have demonstrated that facilities with less market competition are less inclined to strive to improve service to consumers (Banaszak-Holl et al., 1996).

Specific Aim 4: To examine the association between CCPs and the NHAs' influence.

Hypothesis 4: Nursing homes with administrators that are familiar with culture change principles, feel that the nursing home culture should change, feel that their facility can change, and are committed to changing will implement more innovative CCPs.

NHAs play a huge role in the nursing home because they lead the facility in developing and implementing its structural and operational policies, and they oversee the day-to-day operations of the facility. Thus, they have a major influence over implementation of culture change related practices (Allen, 2008). The NHAs' familiarity of culture change, attitude towards principles of culture change, belief regarding feasibility of implementation, and commitment to overseeing the implementation of culture change will be assessed with four items on the survey measure.

Specific Aim 5: To describe NHAs' perception of barriers to implementation of CCPs.

Several barriers to culture change implementation have been documented in the literature. These include lack of common goal, direct care staff resistance, senior leadership resistance, cost, and state and federal regulations (Miller et al., 2010; Scalzi, Evans, Barstow, & Hostvedt, 2006; Stevenson & Gifford, 2007).

The present study will collect information regarding NHAs' perceptions of barriers with an open-ended question. This particular aim is exploratory, as more research is needed to address perceived barriers of culture change implementation.

Background

According to the National Center for Health Statistics, in 2005 there were 36.8 million older adults aged sixty-five and older in the United States. There were 18,000 nursing homes, and over 1.6 million residents living in nursing homes in 1999 (<http://www.cdc.gov/nchs/fastats>).

Given that the older adult population is expected to increase drastically over the next few years as a result of the baby boomers coming of age, and that many older adults spend their last few years in a nursing home, it is imperative that nursing homes be a more suitable and decent place to live. Unfortunately, many people respond quite negatively when asked if they are concerned with the current state of nursing homes (Kaiser Family Foundation, 2007). Some people may attribute their disdain for nursing homes to the fear losing their independence in such an institutional place (Kane & Kane, 2001). This fear is supported by the fact that the nursing home structure and design were created to resemble an acute care hospital setting (Foner, 1995).

In a qualitative study by Boisaubin, Chu, and Catalano (2007), residents of long-term care facilities and home-based care, family members, nurses, and long-term care facility administrators were asked their opinion about long-term care and autonomy. Residents felt that they deserved the right to make their own decisions in addition to upholding their dignity. Nurses and administrators noted that respecting a resident's privacy is an aspect of upholding his or her dignity. Residents felt that they should be treated like adults instead of children and caretakers should treat them with respect. Family members, nurses, and administrators noted that they prefer loved ones and residents to remain in the home for as long as possible. All administrators in the study admitted that there is a constant struggle with allowing the resident to maintain autonomy and decision-making rights within the limits of the long-term care facility. Resident autonomy is often times lost, and it is attributable to a couple of reasons. Direct care workers, generally referred to as certified nursing assistants (CNAs), care for a large number of residents, and in order to perform their job efficiently, they must wake up residents at an early morning hour and dress and feed them on a schedule that is generally not preferred by residents. Essentially, residents have no control over their schedule, including bedtimes, mealtimes, bath

times, and so forth (Kane, Lum, Cutler, Degenholtz, & Yu, 2007). Also, activities that are offered to residents are designed by an activities director, sometimes without regard for residents' preferences.

Another reason for fear of the nursing home may be related to the environment having an institutional feel. Reasonably, most people enjoy the feeling of home and would rather not spend life in a hospital-like environment. A study by Kruzich, Clinton, and Kelber (1992) investigated characteristics that influenced resident satisfaction in nursing homes. They found that residents preferred nursing homes that had a variety of living spaces including dining rooms and lounges. In addition, residents preferred an attractive environment that included less noise, clutter, and odor. They also rated higher satisfaction with nursing homes that were well-kept and in good condition. The participants in the study were more likely to score higher on nursing home satisfaction when they were allowed to personalize their rooms. Given the concerns of the consumers of nursing homes, it is clear that a change needs to be made (Kaiser Family Foundation, 2007).

Aside from consumer concerns is the problem related to the general internal organization or structure of the nursing home. A traditional nursing home institution is organized in a hierarchical, top-down manner in the following order: nursing home owner, NHA, Director of Nursing, professional nursing staff (RNs), LPNs, CNAs, residents, and family members. Decisions regarding policies, care of residents, and so forth, are generally made by management level employees without input from the CNAs, residents, or family members. This creates an unbalanced decision-making process that justifiably may affect direct care workers' job satisfaction and autonomy, which may then result in decreased quality of care, satisfaction, and well-being of the resident. A study found that residents were in fact more satisfied with their

relationships with CNAs and their quality of life when the CNAs were committed to their job (Bishop et al., 2008). The CNAs' job commitment was a direct result of their satisfaction with their position. Their satisfaction stemmed from the respect they received from upper level positions and their enhanced level of decision-making allowances. In other words, when they were allowed to make decisions regarding resident care and were acknowledged and respected for providing knowledgeable input, their job satisfaction increased significantly. Given the fact that CNAs spend the majority of their time with the residents, it seems sensible to allow them to provide more input in the decision-making process. Therefore, a less hierarchical organization may be beneficial to both the direct care workers and the residents.

Organizational and Resident Care Principles and Practices

In an effort to address the problems mentioned above, a movement known as culture change was launched. Culture change is a phenomenon coined as such because it is designed to literally change the entire culture of the traditional nursing home. It is an effort to de-institutionalize facilities by enhancing the environment and making it more homelike. The Department of Health and Human Services and Centers for Medicare and Medicaid Services (2009) released a guidance manual for state surveyors defining as homelike environment as one that rids the institutional feel of the environment as much as possible by allowing residents to use and decorate with their personal belongings. Another aim of culture change is to flatten the internal organizational hierarchy by empowering all levels of employment and utilizing input from direct care staff, residents, and family members regarding procedures and practices of the facility.

It should be noted that the term *culture change* is typically used in a way as to be generally synonymous with the terms *resident-centered care* and *person-centered care* (Mitty,

2005; Robinson & Rosher, 2006). However, *culture change* refers to the movement and process by which nursing home facilities reach the desired outcome of person-centered or resident-centered care (White-Chu, Graves, Godfrey, Bonner, & Sloane, 2009). Culture change is an innovative change of traditional organizational and resident care practices, and it will mostly be referred to as *innovative CCPs* for the purposes of this study. The term *culture change* will be used when referring to the movement or process.

As stated previously, people would rather live in a home instead of an institution (Kaiser Family Foundation, 2007). The idea of “home” is related to many aspects of quality of life. For example, private bedrooms and bathrooms are an aspect of “home,” both of which permit privacy. A major problem with nursing homes is the lack of private rooms (Kane & Kane, 2001). Also, a person possesses independence and choices in daily living at home; in contrast, autonomy is generally an aspect of quality of life that is taken away from a person when he or she lives in a facility. In addition to increasing quality of life, innovative changes such as culture change enhance the physical environment as well

(<http://www.pioneernetwork.net/CultureChange>; Koren, 2010). Residents are encouraged to bring personal belongings to the nursing facility to increase the homelike atmosphere. These belongings can be pictures, furniture, pets, and so forth. Structures such as nursing stations are removed to provide a de-institutionalized atmosphere. Some facilities that adopt resident-centered care may even build new nursing homes that actually look like small homes compared to the traditional large nursing home buildings.

Organizational change such as culture change also promotes decentralizing the internal organization of the nursing home facility (<http://www.pioneernetwork.net/CultureChange>; White-Chu et al., 2009). The hierarchical structure is flattened, and direct care workers are given

more autonomy and authority over decision-making processes. In addition, direct care workers are provided education on general care for older adults, such as how to decrease the risk of ulcers and incontinence. Often, they receive training in other areas of work, including housekeeping and food preparation. This training stems from the culture change efforts to de-compartmentalize roles. Team work is emphasized, and decisions are made from group consensus. In sum, every level of position is respected and important.

Culture Change in Alabama

Centers for Medicare and Medicaid Services and Quality Improvement Organizations have recently embraced the culture change effort (Centers for Medicare and Medicaid Services, <http://www.cms.hhs.gov/>). As a result, the Alabama Quality Assurance Foundation, which is the Quality Improvement Organization for Alabama, launched the Alabama Nursing Home Quality Initiative in 2005 (The American Health Quality Association, 2007). This initiative was a three year project with the main scope of work consisting of educating and assisting nursing homes in applying resident-centered care. One part of the scope of work addressed the issue of nursing homes' knowledge of culture change. The project manager for the Alabama Nursing Home Quality Initiative visited every nursing home in Alabama in an effort to encourage culture change (L. Prosch, personal communication, September 29, 2008). General knowledge about culture change and how to implement such change was provided. Additionally, three statewide conferences were held in 2006 and early 2007. Initiatives sparked the interest of several individuals throughout Alabama. As a result, individuals joined together and founded the Alabama Coalition for culture change in June of 2007.

The primary center that campaigns for the state coalitions is the Pioneer Network (<http://www.pioneernetwork.net/>). Currently, there are 30 state coalitions. The Alabama

Coalition for Culture Change is a group of stakeholders that advocates for the advancement of long-term care and the implementation of resident-centered care

(<http://www.pioneernetwork.net/Coalitions/Find/Alabama>). In general, state coalitions offer educational programs and networking meetings for advocates in long-term care. The state's coalition is in the process of applying for funding opportunities, as each state coalition is responsible for its own financial resources (L. Prosch, personal communication, September 29, 2008).

Structural Factors

Several studies have looked at the impact of certain structural factors as they relate to innovative change and quality care in nursing homes. Specific factors that have been analyzed include ownership status, facility size, chain affiliation, and Medicaid and Medicare census. Many studies analyze more than one variable; therefore, it is sometimes hard to differentiate between factors. However, a systematic review article that covered twelve years of literature investigated ownership status as it relates to quality of care (Hillmer et al., 2005). Process and outcome were examined to gauge the quality of care. The process-based indicators included factors such as rate of tube feeding, inappropriate use of restraints and psychoactive medications. Major outcome-based indicators included factors such as infections, pressure ulcers, accidents, and mortality. The authors concluded that for-profit nursing homes tend to provide a lower quality of care than nonprofit nursing homes.

In addition to providing lower quality of care, it has been shown that for-profit nursing homes generally have a higher number of deficiencies than nonprofit homes. One study found that for-profit nursing homes had 46.5% more deficiencies than nonprofit facilities and these deficiencies were in areas of quality of care, quality of life, and other miscellaneous areas such as

record keeping and administration (Harrington et al., 2001). However, it is important to note that deficiencies are given by surveyors' evaluations of the nursing homes' compliance of state and federal regulations (Centers for Medicare and Medicaid Services, 2009). The survey process is subjective in nature and prone to discrepancies. Lee, Gajewski, and Thompson (2006) investigated the reliability of the survey process and found that surveyors differed on their assertion of the scope and severity of a deficiency as well as the type of deficiency. Therefore, studies that solely use deficiencies as a dependent variable may not reveal a completely accurate account of the quality of the nursing home.

Some studies have looked at the staffing levels and hours of care per resident in for-profit and nonprofit nursing homes (McGregor et al., 2005; Harrington, Zimmerman, Karon, Robinson, & Beutel, 2000). Studies have shown that staff provides more hours of care to each resident in nonprofit facilities in contrast to for-profit facilities. This finding relates to quality of care because employees that have more time to spend with their residents may be more inclined to provide better quality care (Schnelle, Simmons, Harrington, Cadogan, Garcia, & Bates-Jensen, 2004). Another study by Aaronson, Zinn, and Rosko (1994) revealed that nonprofit facilities generally have better staffing and better resident outcomes which may result in higher quality of care.

Chain affiliation has been shown to have an impact on quality of care as well. One study found that chain affiliated nursing homes, as well as nursing homes with for-profit ownership status, provided a lower quality of care (Zimmerman et al., 2002). Another study found that chain operated nursing homes had more deficiencies than independent homes, and the same was true for for-profit facilities compared to nonprofits (O'Neill, Harrington, Kitchener, & Saliba, 2003). This is a recurrent finding and has been reported as a trend by the Office of the Inspector

General (2008). However, mixed results regarding cost efficiency exist in the literature. Some researchers have concluded that chains share information regarding efficient operations, thus shortening the so-called learning curve of management (Jensen, & Meckling, 1976). Conversely, other studies have shown chain affiliation to be associated with inefficiency (Anderson et al., 1999). Regarding early innovation adoption, Castle (2001) found that chain affiliation increases the likelihood of adopting such change.

In regard to facility size, mixed results exist in the literature. For example, O'Neill et al. found that for-profit homes tend to be larger in size and are associated with a lower quality of care (2003). On the other hand, Banaszak-Holl, Zinn, and Mor (1996) found that facility size and ownership status are not related and operate in different ways in regard to innovation. In fact, they assert that a facility larger in size has greater access to resources and thus is more likely to innovate. One study by Damanpour (1992) examined innovation adoption and facility size by way of a meta-analysis. A total of 36 organizations, both manufacturing and service organizations, were analyzed. The results of the study indicate that size is positively related to innovation, but more so in a manufacturing organization than a service organization. However, another study that examined facility size and innovation adoption analyzed school size, which is a service facility, and innovation, and results suggested that a larger facility size facilitated innovation adoption (Baldrige & Burnham, 1975).

Some studies have focused on Medicaid and Medicare census compared to private pay in nursing homes. Castle (2001) found in one study that more private pay and a lower Medicaid and Medicare census is associated with adoption of early innovation, such as culture change. In addition, some studies have shown that a higher Medicaid census decreases quality of care in nursing homes (Gertler, 1989, 1992). Nursing homes must provide the same quality of care to

all residents despite source of payment, yet the amount of reimbursement is lower for residents with Medicaid than private-pay. Therefore, Gertler (1992) asserted that nursing homes with a higher Medicaid census improved access for Medicaid residents but decreased quality of care due to the increase in residents. This is consistent with the findings from another study that investigated Medicaid census and nursing staff ratio (Zinn, 1994). Zinn (1994) found that nursing homes with a higher proportion of Medicaid recipients had lower levels of RN staffing and a higher proportion of residents not toileted, suggesting a lower quality of care.

Additionally, Harrington and Swan (2003) found that as Medicaid census increased, nursing staffing decreased. This was in contrast to the finding that as Medicare census increased, nursing staffing also increased. Some research has not replicated the finding that higher Medicaid census decreases quality of care, suggesting a need for more research (Grabowski, 2001, 2004).

Market Factors

It is understandable that a driving force of change in any industry is competition. However, resources are a necessity when a facility is going through change, be it environmental change, external structural change, or internal organization change. According to Resource-Based Theory of Competitive Advantage, organizations that possess resources and capabilities are in a position to improve and offer better services to consumers (Grant, 2001). Given the resources and capabilities, the organization has a competitive advantage over the other facilities in the area. In this scenario, the organization would be in a position to implement strategies to attract more consumers. In one study Castle (2001) found that nursing homes located in areas with higher median incomes and a greater number of nursing home beds were more likely to be early innovation adopters. This may be a result of the nursing homes' higher availability of resources.

Regarding market competition, mixed results have been reported in the literature. Banaszak-Holl et al. (1996) found that innovation was less likely in more concentrated, less competitive areas. This is consistent with theory regarding competition (Grant, 2001; Banaszak-Holl et al., 1996). Organizations in concentrated markets will be less likely to fund innovation because the market is not competitive. That is, there are a high number of organizations that likely have a relatively equal share in the market; therefore, competition is not a factor in business.

D' Aunno, Succi, and Alexander (2000) investigated organizational innovation in hospitals and found that population density and per capita income were not significant predictors for innovation. Walston, Kimberly, and Burns (2001) investigated managerial innovation in nursing homes. They concluded that market competition was not a factor in the degree of managerial innovation implementation. However, Kimberly and Evanisko (1981) suggested that it is important to consider type of innovation when looking at predictors of implementation. They claim the two types of innovations are administrative and technological. An additional type of innovation that may be effected by market factors includes service innovation. Damanpour (1992) pointed out that other types of innovation, product versus process and radical versus incremental, also may be affected by different variables as well at type of organization.

In regard to urban versus rural environment, Mor et al. (2004) found that that nursing homes located in poor urban areas and poor rural areas were more likely to have significantly fewer RNs and provide a lower quality of care. Although quality of care is an important aspect of CCPs, it is not the sole outcome of resident-centered care. Unfortunately, rural and urban differences regarding innovation were not found in the literature indicating a need for more research.

Nursing Home Administrator Influence

NHAs are essential in the nursing home because they oversee daily operations (Allen, 2008). They are a key component of the leadership team, and they are generally in contact with direct care staff, residents, and family members, as well as employees in the upper level of the organization hierarchy. Because of their involvement with all levels of staff, they are the ideal motivator for change. In other words, innovation can be adopted in a nursing home if the administrator is motivated to change the environment and encourages others to do the same (Allen, 2008). Therefore, it is important for administrators to believe in and embrace change in order for others to buy into the process and make it happen.

One study investigated individual characteristics and their relation to innovation adoption (Baldrige & Burnham, 1975). District superintendents, teachers, and principals from 20 schools were interviewed, and district superintendents from 264 school districts completed questionnaires in an effort to assess qualities in individuals that lead change efforts. Although demographic characteristics did not prove to be a predictor of innovative behavior, organizational level was associated with leadership in change efforts. Individuals in authoritative roles were the initiators of change, evaluated the change process, and served as a communication link between teachers and administrators. The results of this study may be applicable to the nursing home, as NHAs often communicate with staff such as direct care workers, those who provide care, and other administrators and directors, those who provide resources.

Barriers to Innovation

Scalzi et al. (2006) investigated barriers and facilitators of organization change in three nursing homes by interviewing all levels of staff and family members. They concluded that three

major barriers to change are resistance to change by direct care staff, conflicting goals, and high turnover of NHAs. Direct care staff was not included in meetings or trainings and therefore did not possess the values or knowledge of organizational change comparable to upper level management. This in turn created a resistance to change. Conflicting goals was a major theme and illustrated management's attempt to use incentives as a way to implement change among the direct care staff. However, direct care staff was then more interested in the incentives rather than implementing change. A high turnover of NHAs was a barrier to change because, as the researchers noted, leaders such as NHAs serve as role models and facilitate the implementation of change. Additionally, new NHAs brought about new ideas for change that may not have been brought to fruition.

In 2007, Stevenson and Gifford investigated NHAs' perceptions of the regulatory process as a barrier to "culture change." Surveys were sent to administrators in nursing home facilities in Rhode Island. Fifty-two percent of NHAs responded, and almost half of the participants reported that regulations inhibited them from implementing culture change practices. Additionally, almost half of the participants reported that their nursing home facility had refrained from or hesitated to accommodate resident preferences as a result of regulations and fear of being cited.

A recent survey from the Commonwealth Fund gathered information from several populations in an effort to address perceived barriers to culture change implementation (Miller et al., 2010). The populations that were targeted included consumers/advocates, nursing home providers, other providers, state and federal government agency officials, university/academics, researchers and consultants. The participants were asked to rank order perceived barriers from a list that included cost, regulation, senior leadership resistance, care staff resistance, family resistance, and size of the facility. Among all professional populations, the three top-ranked

barriers included cost, senior leadership resistance, and regulation. Respondent familiarity of culture change had an effect on rank order. For example, employees that indicated they were very familiar with culture change ranked senior leadership resistance as the number one barrier, whereas those that were not as familiar with culture change were more likely to rank cost as the biggest barrier.

Need for Study

Progress has been made in the nursing home industry with the advent of culture change. However, many nursing homes have not yet committed to adopting this innovation (Doty et al., 2008). It is important to understand what factors may influence the implementation of CCPs so as to identify nursing homes that have not adopted the change and assist them in the initial phase of the culture change journey by providing pertinent information.

Doty et al. (2008) described the status of culture change across the country. In their study, nursing homes in southern states were less likely to respond to their survey. Therefore, the results of their study may not be an accurate representation of the nursing homes in Alabama. The current study aims to describe the CCPs in Alabama nursing homes.

Currently, there is a large breadth of literature on factors associated with quality of care in nursing homes. The literature suggests that for-profit homes are associated with higher deficiencies and lower quality of care. Chain affiliation is also associated with a higher number of deficiencies compared to independent nursing homes; however, chain affiliation has been linked to early innovation adoption. Literature regarding facility size is mixed suggesting that other nursing home structural factors may play a bigger role in quality of care and innovation. The literature suggests that a lower Medicaid census is associated with higher quality of care and

increased rates of early innovation. This study aims to investigate the relation between these structural factors of nursing homes and the implementation of CCPs.

Although the nursing home is an organization dedicated to service among the residents, it is a business that may be impacted by market factors. Average county income and market concentration have been shown to increase adoption of innovative practices. However, market (measured by potential customers) and location have not been as highly researched in regard to innovation adoption. Therefore, this study aims to examine the relation between market factors and the implementation of CCPs.

Leadership in the nursing home is another factor that is likely to influence quality of care and adoption of innovation. The NHA is the target participant in the current study because of the important and dynamic role in the nursing home. NHAs are responsible for daily operations, and they are in a position to talk to direct care workers as well as other administrative staff. Therefore, they are able to serve as a liaison and may have the ability to drive change. This study aims to investigate the relation between NHAs' potential impact and adoption of CCPs.

A last important goal of the study is to assess NHAs' perception of barriers related to CCPs.

Chapter 2: Method

Participants

Administrators were targeted as participants of this study because of their knowledge of the day-to-day operation of the facility and because of their influence over facility strategy, policies, and practices. All administrators possess a NHA license, which is obtained upon completion of the national exam from the National Association of Boards of Long Term Care Administrators (2006). Most people in this position receive a bachelor's degree in health care business administration. A NHA is responsible for the day-to-day operation of the facility. A few responsibilities of the administrator include overseeing the health and well-being of residents and employees, managing employees, handling billing, keeping up with up-to-date knowledge on regulations, and making sure that the nursing home meets or exceeds state regulations (Allen, 2008). Potential participants for this study included administrators from nursing homes in Alabama excluding skilled nursing facilities for disabled children and nursing facilities exclusively for veterans. These facilities were excluded because this study aims to examine nursing home facilities that are accessible to all older adults. A list of nursing homes was obtained from the Centers for Medicare and Medicaid Services website, Nursing Home Compare, and from the Alabama Nursing Home Association website (<http://www.medicare.gov/NHCompare>; <http://www.anha.org/>). Both websites were used as a source because each website did not produce a comprehensive list of nursing homes in Alabama.

Sample Size. According to the survey literature, survey response rates have progressively declined over the years (Cook, Heath, & Thompson, 2000; Dey, 1997; Sheehan, 2001). A nationally conducted survey in which Directors of Nursing were invited to participate achieved a response rate of 37% (Doty et al., 2008). Therefore, a goal was set *a priori* to achieve a response rate of 33% to 37%.

A total of 234 NHA were invited to participate in the study. Of these nursing homes, 62% are part of a chain ($N = 145$). The ownership statuses of these nursing homes are as follows: 79.5% for-profit ($N = 186$), 14.5% nonprofit ($N = 34$), and six percent government ($N = 14$). A total of 75 NHAs agreed to participate. Two NHAs are responsible for the daily operations of two nursing homes; therefore, their responses accounted for two nursing homes each. As a result, data was collected from 77 nursing homes rendering a response rate of 32.9%.

General demographic information was collected from participants including age, gender, number of years employed at current nursing homes, number of years employed at current nursing home as a NHA, and total number of years employed as a NHA at any facility. Data was missing from several participants for three variables: (a) age was missing for eight respondents; (b) number of years employed at current nursing home was missing for nine respondents; (c) number of years employed at current nursing home as a NHA was missing for 10 respondents; and (d) total number of years employed as a NHA at any facility was missing for 12 respondents on. Sample characteristics are listed in Table 1.

Measures

Commonwealth Fund Culture Change Survey. The Commonwealth Fund conducted a nationwide survey in 2007 that addressed the issues regarding adoption of culture change (Doty et al., 2008). A panel of experts in the field of long-term care assisted with the development of

the survey instrument. They identified the crucial principles of culture change and devised a way to measure the implementation of those principles (Doty et al., 2008; M. Doty, personal communication, January 21, 2009). Specific areas that were addressed included resident care and decision-making, staff culture and working environment, and physical environment.

After reviewing the current measures of culture change (Doty et al., 2008; Pioneer Network, n. d.; Quality Partners of Rhode Island, n. d) and concluding that other instruments were unnecessarily lengthy for the purposes of this study, I decided to use a modified version of the Commonwealth Fund survey because it was concise and included all of the major aspects of culture change principles and practices (Doty et al., 2008). It was important that the survey measure be brief and succinct so as to increase response rate. Items that assessed the implementation of specific initiatives, percentage direct care staff employment, and questions pertaining to Directors of Nursing were omitted from the current survey. Items were added in an effort to capture the NHAs' knowledge of "culture change," attitude regarding the principles of "culture change," beliefs regarding feasibility of implementation, and level of commitment towards change. In addition, demographic information about the NHA was added to the survey (see Appendix 1).

I piloted the survey with a NHA in a nursing home facility in Birmingham, Alabama. The purpose of the pilot was to assess the amount of time it took to complete the survey in addition to soliciting feedback on the specific items. Information gathered from the pilot survey was used to make modifications to items on the survey. Specifically, two items that assessed resident decision-making and staff decision-making allowances in regard to nursing home policies were added. In addition, questions regarding Medicaid and Medicare census were added.

Finally, the survey item that assessed barriers to implementation was changed to an open-ended question.

Facility characteristics. Information regarding nursing home structural characteristics (facility size, chain affiliation, and ownership status) was gathered from the Nursing Home Compare website of U.S. Department of Health and Human Services and the Centers for Medicare and Medicaid Services (<http://www.medicare.gov/NHCompare>). Information regarding Medicaid and Medicare census was derived from two items added to the NHA survey.

Information regarding nursing facility market factors was gathered from several public websites. Average county income and market density (measured by total number of potential consumers) were obtained from the U.S. Census Bureau website (<http://quickfacts.census.gov/qfd/index.html>). Information regarding location (urban and rural status) was measured by the 2003 Urban Influence Codes, collected from the United States Department of Agriculture website (2003). Market concentration was measured by the Herfindahl-Hirschman Index (Castle, 2001), calculated with information regarding number of beds in the nursing home and county as collected from the Nursing Home Compare website of U.S. Department of Health and Human Services and the Centers for Medicare and Medicaid Services (<http://www.medicare.gov/NHCompare>).

Participant Recruitment and Survey Administration Procedures

To determine the order in which the NHAs were contacted, I used the Randomizer website (<http://www.randomizer.org>), to randomly assign each nursing home an identification number between one and 234. Due to the large number of nursing homes, data collection occurred in waves of 30-40 surveys over an eight month period in an effort to create a manageable endeavor.

NHAs' names were obtained from the Alabama Nursing Home Association website (www.anha.org). When a nursing home was not listed on the Alabama Nursing Home Association website, the administrator's name was obtained by calling the facility and asking to receptionist. Initial contact was attempted with each administrator via telephone. The telephone script can be found in Appendix 2. Up to five phone call attempts were made in an effort to reach each NHA. The repeated phone calls were made over a two week period after the initial call was made. When able to directly reach the administrator by telephone, I introduced myself and the study, encouraged participation, and answered any questions. I asked each administrator about his or her survey administration preference, giving the choice of a mailed paper survey or a web-based survey. Studies have provided evidence that offering more than one survey method may increase response rate (Beebe, Davern, McAlpine, Call, & Rockwood, 2005; Dillman, 2007; Dillman et al., 2009). NHAs were also asked if they preferred to be contacted by phone or email if their assistance in the study was needed in the future. If they preferred email contact, an updated email address was collected.

Approximately one week after the initial phone calls, each participant was mailed an introductory letter typed on University of Alabama letterhead and an informed consent. The introductory letter can be found in Appendix 3. This letter served two purposes. First, it served as a reminder to those participants whom I had contacted. Second, it served as an introduction to those participants whom I had not been able to contact. The introductory letter included the title of the study, the URL for the web-based survey, the participant identification number, and directions for reading the informed consent. The informed consent provided information about the purpose of the study, the rights of a participant in the study, and information regarding confidentiality. Because it was important to link a survey to the nursing home in order to obtain

pertinent information about structural and market factors, the informed consent explained that an identification number was necessary but that all data would be kept in a locked file. A paper survey was mailed along with the introductory letter for those administrators that requested a paper survey and for the administrators I was not able to contact by means of telephone. In addition, a self-addressed, stamped envelope was mailed along with the paper surveys in an effort to increase response rate. Approximately one month after the introductory letter was mailed, a follow-up email was sent or phone call was made (depending on the NHA's preferred contact method) to the NHAs that had not responded (see Appendix 4). After I mailed surveys and made follow-up emails or phone calls to every potential participant, I made a second follow-up email or phone call to all potential participants that had not responded in an effort to increase response rate.

Data Analysis

Dependent variables. There are four dependent variables in the study, and each measured a construct related to adoption of CCPs. The first dependent variable is the NHA's perception of degree of CCP implementation which was assessed by a question on the survey which asks "*How well does this definition of person-centered care provided above describe this nursing home?*" The measure was scored in a five-point Likert-type scale ranging from "not at all" = 1 to "completely" = 5.

The remaining three dependent variables are averages of factors related to resident autonomy, resident decision-making, and direct care staff decision-making. Specifically, the first averaged variable is the mean of the item scores pertaining to resident autonomy in the nursing home. The scores that were combined to form the variable asked the following questions: "*Is it the practice in this nursing home that residents can..... (1) access food from the*

refrigerator if they want to?, (2) access appliances necessary to prepare their own meal?, (3) eat when they want?, (4) eat where they want?, (5) request and receive favorite foods when they are not on the menu?, (6) go to bed when they want?, (7) get up when they want?, (8) choose when they bath or shower, even if they need assistance?, (9) choose how they are bathed?”

The second averaged dependent variable is the mean of scores pertaining to resident decision-making allowances in the nursing home. The scores that were combined to form the variable presented the following questions: *“How involved are residents in (1) creating the schedule for meals?, (2) planning menus?, (3) creating the calendar for social events, activities, and outings?, (4) planning of social events, activities, and outings, (5) decorating of communal areas?, (6) decisions about who provides their own hands-on care?, (7) developing the resident’s care plan?, (8)[involvement in] creating policies?”*

The third averaged dependent variable is the mean of scores that measure direct care staff decision-making allowances. The scores that were combined to create this variable posed the following questions: *“How involved are direct care workers in.... (1) scheduling of staff shifts?, (2) staff assignments to residents?, (3) performance evaluations?, (4) hiring and staff selections?, (5) planning social events?, (6) budget and resource requests?, (7) policy and procedure development?”*

Predictor variables. Because there are five aims of the study, three of which are predictive aims, there are several groups of independent variables. Table 2 lists the independent variables and sources for the predictive aims. The first aim is predictive and was intended to describe the CCPs that are being implemented in Alabama nursing homes.

The second aim of the study was to examine structural nursing homes factors. These predictor variables include facility size (measured by number of beds), chain affiliation (i.e.,

chain affiliated and independent), ownership status (i.e., for profit and nonprofit), and Medicaid/Medicare census (measured by categories of percentages).

The third aim of the study was to examine nursing home market characteristics. These predictor variables include average income in a county, market concentration (measured by the Herfindahl-Hirschman Index), market density (measured by total number of potential consumers), and location (measured by the 2003 Urban Influence Codes).

The fourth aim examined NHAs' attitudes and beliefs regarding culture change in the nursing home. Specifically, variables that were measured include their current knowledge of culture change, agreement with culture change principles, belief about feasibility of implementation in his or her nursing home, and level of commitment to implementation. All of these variables were measured on the survey using a five-point Likert-type scale ranging from "not at all" = 1 and "completely" = 5.

The fifth aim of the study was to assess NHAs' perceptions of barriers to implementation of CCPs. This was assessed with an open-ended question on the survey.

Analysis approach. Because there were five aims of the study, several statistical procedures were used for analysis. An analysis of variance (ANOVA) was conducted between respondents and non-respondents to test for significant differences among the two groups. Reliability analyses were conducted for the three composite dependent variables. Pearson correlations were computed to examine relation between each dependent variable. For Aim 1, descriptive statistical procedures were used to describe the environment and practices of the nursing homes in Alabama. Multivariate analyses of variance (MANOVAs) were conducted for Aims 2 through 4 to determine if each set of predictor variables (structural, market, and attitude) had an overall effect on the set of dependent variables. If an overall effect was found significant

for the group of predictor variables, univariate between-subjects tests were examined in the analysis. The methodologic literature advises that this method decreases experiment-wide error rate and is comparable and perhaps superior to performing multiple analysis of variance (ANOVA) tests and utilizing the Bonferroni correction (Hummel & Sligo, 1971; Rencher & Scott, 1990). Finally, Aim 5 was addressed using a thematic analysis of the NHAs' responses to the open-ended question regarding barriers to implementation of CCPs (Braun & Clarke, 2006).

Chapter 3: Results

Sample Characteristics

A total of 77 NHAs responded, resulting in a response rate of 32.9%. Table 3 illustrates characteristics of nursing home respondents and non-respondents. Regarding nursing home structural factors, respondents were not significantly different from non-respondents in regard to chain affiliation, nursing home size, or profit status. Regarding market factors, nursing home respondents were not significantly different from non-respondents in terms of average county income, percentage of population over 65 years of age, or rural/urban status as documented by the United States Department of Agriculture (<http://www.ers.usda.gov/Data/UrbanInfluenceCodes/2003/LookUpUIC.asp?C=R&ST=AL>).

Dependent Variables

Reliability was examined for the three averaged dependent variables. The first averaged dependent variable that measured resident autonomy in the nursing home consisted of nine items and appeared to have good internal consistency, $\alpha = .83$. The second averaged dependent variable measured resident decision-making. This variable consisted of eight items and appeared to have good internal consistency, $\alpha = .80$. Finally, the third averaged dependent variable measured staff decision-making in the nursing home. This variable consisted of seven items and appeared to have good internal consistency, $\alpha = .85$.

Pearson correlations were computed for each dependent variable. The first dependent variable assessed the degree of culture change in the nursing home based on the NHA's

perception. This variable had a significant positive correlation with the second dependent variable that measured resident autonomy ($r = .50, p < .001$) but had a significant negative correlation with the third dependent variable that measured resident decision-making in the nursing home ($r = -.36, p = .002$). There was a marginally significant negative correlation between the first dependent variable and fourth dependent variable that measured staff decision-making ($r = -.21, p = .07$). As degree of culture change increased, resident autonomy increased as well, whereas the opposite was true for resident decision-making and staff decision-making in the nursing home. There was a significant negative correlation between the second dependent variable and the third dependent variable, suggesting that as resident autonomy increased, resident decision-making decreased. It is important to note that resident autonomy addressed the degree to which residents are allowed do things independently and make decisions regarding daily activities, whereas resident decision-making addressed the degree to which residents are allowed to make decisions regarding care and engaging activities. There was also a significant negative correlation between the second and fourth dependent variables ($r = -.30, p = .01$) suggesting that staff decision-making decreased as resident autonomy increased. Finally, there was a significant positive correlation between the third and fourth dependent variables ($r = .63, p < .001$) suggesting that as resident decision-making increased, staff decision-making increased as well. Although all dependent variables were correlated, some were correlated negatively suggesting that the dependent variables measured different aspects of CCPs. This may illustrate that CCP implementation is a process and only a limited number of initiatives can be implemented at a given time.

Aim 1

The survey used for the study addressed different aspects of the nursing home including environment, resident autonomy, resident decision-making, staff decision-making, senior management teams, direct care staff, and NHA familiarity with ideas of CCPs in the nursing home. Descriptive statistics were computed for each aspect of the nursing home.

Environment. Table 4 shows numbers and percentages for the nursing home environment. The majority of NHA respondents indicated that 1-25% of the resident rooms in the nursing home were private ($N = 58, 75.3\%$). One NHA respondent noted that his/her nursing home did not have any private rooms, and one NHA respondent reported that the nursing home contained 100% private rooms. When asked about the percentage of private bedrooms that had a private bathroom, the majority of NHA respondents indicated that 1-25% of private bedrooms contained private bathrooms ($N = 33, 42.9\%$).

In regard to nursing home units, the majority of the respondents indicated that all residents reside in traditional nursing units ($N = 63, 81.8\%$). None of the NHA respondents indicated that residents reside in a household model.

The majority of NHA respondents indicated that nurse stations were located in a central area ($N = 61, 79.2\%$). Only one respondent noted that work places for direct care staff at the nursing home had been integrated into living spaces (1.3%).

Regarding décor of resident rooms, the majority of the nursing homes always encouraged residents and family members to decorate the residents' private living space ($N = 56, 72.7\%$). Two nursing homes never encouraged residents to decorate their rooms (2.6%).

Resident autonomy. Table 5 shows a complete list of the percentages for resident autonomy. Resident autonomy was assessed with nine items on the survey. The majority of the nursing homes always allowed residents to access food from a refrigerator but never allowed them utilize appliances to prepare meals. The majority of nursing homes always allowed residents to eat when and where they want, go to bed when they want, and get up when they want. Additionally, the majority of nursing homes always allowed the residents to bath or shower when they want, and they are always allowed to choose how they are bathed.

Resident decision-making. Table 6 shows a complete list of percentages for resident decision-making. The majority of nursing homes assigned decision-making of most resident activities to staff alone and solicited little input from residents. However, the majority of NHAs indicated that planning of social events and development of resident care plans was made jointly by staff and residents.

Staff decision-making. Table 7 shows a complete list of percentages for staff decision-making. In all domains related to direct care staff except for planning of social events, the majority of nursing homes have department supervisors make the decisions with little input from direct care staff.

Senior management teams. The majority of the nursing homes included direct care staff and residents in their senior management teams ($N = 52$, 67.5%, and $N = 41$, 53.2%, respectively). However, almost half of nursing homes did not include family members ($N = 38$, 49.4%) and seven participants did not respond.

Direct care staff. The majority of NHAs indicated that CNAs provide care to the same residents and they participate in consistent staff assignment ($N = 67$, 87%). Nine respondents indicated that CNAs rotate shifts (11.7%), and one NHA did not respond.

The majority of NHAs indicated that all CNAs at the facility attended training in the past year that was paid for by the nursing home ($N = 30, 39.0\%$). Only five respondents noted that CNAs did not receive training paid for by the nursing home (6.5%).

Nursing home administrator. Numbers and percentages are reported in Table 8. The majority of NHAs indicated that they were “completely” familiar with the principles of “culture change.” However, the majority felt that the definition only “somewhat” described their nursing home and felt that it was “somewhat” feasible to implement CCPs in their nursing home.

Aim 2

A MANOVA was performed to examine the relationship between the four structural characteristics and the four measures of CCPs. Structural independent variables included facility size, ownership status, chain affiliation, and Medicaid and Medicare census. The overall omnibus test showed a significant main effect for Medicaid census, Wilks' $\lambda = .841, F(4, 61) = 2.887, p = .03, \eta_p^2 = .16$. Given the significance of the overall test, the univariate between-subjects tests were examined. A significant univariate main effect for Medicaid census was obtained for NHAs' perception regarding the degree to which they felt the term culture change defined their nursing home, $F(1, 62) = 5.21, p = .026, \eta_p^2 = .08$; the direction of the effect was such that a Medicaid census level below 50% was related to an increase in NHAs identifying their nursing home as one that is consistent with CCPs.

Aim 3

A MANOVA was performed to examine the effects of the four market factors on the four measures of CCPs. The predictive factors that were entered included urban influence code, median household income, market density, and market concentration. There were a significant multivariate effects for median household income and market density, Wilks' $\lambda = .83, F(4, 57) =$

2.94, $p = .028$, $\eta_p^2 = .17$, and Wilks' $\lambda = .83$, $F(4, 57) = 2.97$, $p = .027$, $\eta_p^2 = .17$, respectively. Due to the significance of the overall test, univariate between-subjects tests were analyzed to determine effects. Results indicated a significant effect for median household income and two predictor variables, which were the NHAs' perception regarding the degree to which culture change defined their nursing home and the averaged variable for resident autonomy practices in the nursing home, $F(1, 60) = 9.41$, $p = .003$, $\eta_p^2 = .14$, and $F(1, 60) = 6.80$, $p = .011$, $\eta_p^2 = .10$, respectively. In counties that have a higher median income, NHAs indicated that their nursing home "mostly" and "completely" reflects the CCPs. In addition, those nursing homes are more likely to allow greater resident autonomy among residents. In regard to market density, univariate analyses showed a significant effect for NHAs' perception regarding the degree to which culture change defines their nursing home, the averaged variable for resident autonomy, and the averaged variable for staff decision-making, $F(1, 60) = 6.15$, $p = .016$, $\eta_p^2 = .09$, $F(1, 60) = 9.11$, $p = .004$, $\eta_p^2 = .13$, and $F(1, 60) = 4.40$, $p = .04$, $\eta_p^2 = .07$, respectively. Results suggest that as market density increases, NHAs perceived their nursing home to be more successful at implementation of CCPs, the NHAs perceived their nursing home to allow more resident autonomy, and the NHAs perceived a greater amount of staff decision-making practices in the nursing home.

Aim 4

A MANOVA was conducted to examine the effects of NHAs' knowledge of and attitude toward "culture change," beliefs regarding the feasibility of implementation, and level of commitment to implementation. The results showed a significant multivariate effect for NHAs' belief regarding feasibility of implementation in their nursing home, Wilks' $\lambda = .720$, $F(4, 63) = 6.129$, $p < .001$, $\eta_p^2 = .28$. Given the significance of the overall test, univariate analyses were

examined looking at the three dependent variables that showed significance. Results showed statistically significant results for the dependent variable that assessed NHAs' perception regarding the degree to which culture change defines their nursing home, $F(1, 66) = 12.271, p < .001, \eta_p^2 = .16$. NHAs that believed it was feasible to implement CCPs in the nursing home were more likely to perceive their nursing home as being defined by the principles of culture change. Univariate between-subjects tests showed significant results for the composite dependent variable that measured resident autonomy allowance in the nursing home, $F(1, 66) = 9.527, p = .003, \eta_p^2 = .13$. More resident autonomy occurred in nursing homes where the administrator believed that it was feasible to implement CCPs. Lastly, univariate between-subjects tests showed significant results for the averaged dependent variable that measured resident decision-making in the nursing home, $F(1, 72) = 12.319, p = .001, \eta_p^2 = .16$. More resident decision-making allowances occurred in nursing homes where the administrator believed implementation of CCPs was feasible.

Aim 5

The final aim of the study was to identify NHAs' perceptions of barriers to CCP implementation. A descriptive analysis approach was used to find themes and frequency of themes (Krippendorff, 2004). Four major themes were identified in the data: residents' ability to engage, resistance to change among staff, lack of resources, and regulations/survey process impediment.

Regarding *residents' ability to engage*, NHAs expressed their concern about residents' ability to engage in activities such as care planning. A total of 13 responses were related to the theme concerning residents. Three respondents noted that a direct barrier to implementing CCPs is residents' cognitive impairment. For example, one NHA wrote, "Types of resident and

dementia limit their ability to give input in some care situations and planned activities.”

Additionally, one NHA responded by writing that a major barrier is the “...cognitive ability of residents as well as their interest in being involved in directing every aspect of their care and living environment.” Other respondents simply noted the diversity in case mix as a barrier. Another NHA wrote that a barrier to implementation was “...making sure everyone’s care is met.”

A second theme that emerged was *resistance to change among staff*. Ideas that were compiled and placed in this category relate to buy-in from employees, staff perception of culture change, company policies, lack of education, upper level administration. A total of 23 responses were coded and placed in this theme. One NHA wrote, “Anytime that change is implemented it seems to meet with resistance.” Another noted, “The first barrier is to educate the staff and change their mind set of providing care.” One respondent commented that staff perceptions regarding load of work is a barrier. Another NHA wrote, “This [culture change] concept is new. Most say they do, but they don’t. I’ve been an administrator for 19 years and this idea is not the norm.”

A third theme that developed from the responses was *lack of resources*. Particular resources that were mentioned include design of facility/floor plan, budget constraints, employee turnover and adequate amount of staff, and time. Thirty-four responses were coded and fell in this overarching theme. Many NHAs noted that the facility design was a barrier to implementation of culture change. One NHA wrote that a major barrier is “...architecture of the building. We are a CCRC [continuing care retirement community] and have challenges with design of the building in order to achieve culture change for resident cooking.” Many respondents noted that a major barrier is lack of financial resources. A NHA wrote, “We are in a

medical model and strive to provide resident-centered care in that model. I would love to have lots of money to build the Green Houses for our facility.” Regarding staff turnover, two respondents commented that this is a barrier in addition to not having an adequate amount of staff to make this type of innovation happen. Two NHAs noted time as a resource is a barrier to implementation. One NHA commented that a barrier is “...time for acceptance, training, and unity for the same goals.”

The last theme, *regulations/survey process impediments*, emerged from 11 responses. NHAs felt that many of the guidelines the nursing home must comply with are not conducive to CCPs. The specific guidelines they referred to are part of the yearly survey process nursing homes are required to participate in if they have Medicaid or Medicare beds. One NHA wrote that a major barrier is “...the survey process. State surveyors might not understand the benefits and are only looking at it from a black and white picture.” Another noted that a barrier to implementation is “...regulatory interference. As wonderful as it sounds, the state and federal agencies still demand certain levels of compliance that often, in my opinion, do not match what is best for the residents’ wants or needs.”

Chapter 4: Discussion

This study aimed to describe the current state of nursing homes in Alabama, examine how structural factors, market factors, and NHA perceptions and attitudes are related to CCP implementation, and investigate perceived barriers to CCP implementation. Overall, there was partial support for the predictive aims related to structural and market factors and NHAs' perceptions and attitudes. I also identified several important themes regarding NHA-reported barriers to CCP implementation. My results suggest that a complex set of intra- and inter-facility factors must come together if culture change is to be pursued by a facility.

Regarding structural factors, Medicaid census was significantly associated with NHAs' perception of how their nursing home operates, with a higher Medicaid census resulting in a less favorable perception. This finding is consistent with the literature on Medicaid census and reimbursement. For example, Castle (2001) reported that nursing homes with lower Medicaid census were more likely to implement innovation in the nursing home. These findings, both in the literature and in the present study, may be a result of the reimbursement rate of Medicaid and a lack of financial resources on the part of the nursing home. Because reimbursement is lower for residents with Medicaid versus private pay, NHAs in facilities with a high Medicaid census may believe that they lack financial resources to implement CCPs.

Regarding market factors, median household income and market density were shown to be significant predictors of NHAs' perception of their facility's CCPs. Specifically, median household income had an effect on both the NHAs' perception of the facility in regard to CCPs

and resident autonomy. NHAs were more likely to perceive their nursing home as being successful at implementing CCPs and allowing more resident autonomy if the nursing home was in a county that had a higher median income. This is consistent with the literature relating to innovation and emphasizes that implementation of CCPs is higher in areas with more resources (Banaszak-Holl et al., 1996; Castle, 2001). Additionally, market density had an effect on the NHAs' perception of the facility's success at implementing CCPs, resident autonomy permitted in the nursing home, and staff decision-making practices. The higher the market density (i.e., number of potential consumers in the area), the more NHAs perceived their nursing home to be consistent with CCPs. Higher market density also predicted more resident autonomy and more decision-making among direct care staff as perceived by the NHA. Based on the results of this study, it is reasonable to assume that nursing homes located in areas with a higher concentration of potential consumers will increase the chance of nursing homes implementing such innovations. Thus higher median income (i.e., county market resources) and higher market density (i.e., more potential customers) may create an environment that is conducive, and perhaps motivational, for implementation of CCPs.

Regarding NHA perceptions and attitudes, the degree to which the NHAs' believed CCP implementation was feasible in their nursing home was significantly associated with NHAs' perceptions of their nursing homes. Specifically, NHAs who believed CCPs can feasibly be implemented in their nursing home were more likely to believe their nursing home was defined by CCPs. Additionally, as the belief of feasibility of implementation increased, so did the practice of resident autonomy and resident decision-making. These findings illustrate that the NHA may play a role in the development and implementation of CCPs in some nursing homes. Additionally, there was evidence that NHAs who believed implementation is an unattainable

challenge may not perceive their nursing home as a facility that can promote resident-centered care. Because NHAs play an integral role in the daily operations of the nursing home by serving as liaison for direct care staff and administration, it is logical to assume that they would also serve as a driving force for CCP implementation. The results of the present study illustrate this logical assumption.

The response rate of this study was 32.9%, which is comparable to 37% response rate of the Commonwealth Fund national study (Doty et al., 2008). There were no significant differences between respondents and non-respondents on facility and market characteristics, suggesting that the results of the study may be an accurate representation of the state of CCPs in the state of Alabama. Due to the inability to gather information from NHA non-respondents, I was unable to compare characteristics of NHAs; thus, it is possible that there may in fact be differences among NHA respondents and non-respondents. However, there is evidence that suggests that a low response rate is not necessarily indicative of response bias and that a sample obtained with a low response rate may still allow for an accurate representation of the population (Asch, Jedrziwski, & Christakis, 1997). In support of generalizability of respondents' perceptions and characteristics to the larger population, three out of the four themes regarding NHA reports of barriers to innovative organizational and resident care changes were found in previous literature (Miller et al., 2010; Scalzi et al., 2006; Stevenson & Gifford, 2007).

Four major themes were identified in the thematic analysis of perceived barriers to implementation. NHAs reported that lack of resources is a direct barrier. Specifically, they reported that the building design of the nursing home inhibits the feel of a home-like environment. Lack of money and time were also reported as obstacles. This qualitative theme of

barriers as it relates to financial resources is consistent with the quantitative findings of this study regarding Medicaid census and median household income.

However, there are some practices of culture change that may not require extra financial resources. For example, culture change is an organizational redesign of the traditional hierarchy. This movement encompasses resident autonomy, resident decision-making, staff decision-making, and decentralizing positions in the nursing home, none of which are directly related to the design of the building nor financial resources. However, these factors may be indirectly related to another NHA barrier theme, the survey process as an impediment. This finding is consistent with previous studies (Miller et al., 2010; Stevenson & Gifford, 2007), and it suggests that perhaps NHAs, state surveyors, and the Centers for Medicare and Medicaid Services need to communicate and cooperate more regarding how to implement innovative organizational and resident care changes in ways that are concordant with federal and state regulation, and perhaps on ways to more flexibly interpret those regulations.

Another important finding from the thematic analysis was NHAs' perception of residents' ability to engage as an obstacle to CCP implementation. They felt that allowing autonomy and decision-making among residents with cognitive impairments was an unattainable feat. This is an idea that was not found in the literature. More research is needed in this area to determine success of CCPs in nursing homes with a majority population of residents with moderate to severe cognitive impairments.

Finally, resistance to change among staff was a perceived barrier among NHAs. It has been documented that complex innovations may take longer to implement than simple innovations (Damanpour, 1992; Kimberly & Evanisko, 1981; Robertson, 1967). Culture change is a complex innovation because the focus of change is on many aspects of the nursing home.

Therefore, it is reasonable to expect the process of implementation of CCPs to be long and trying. Hence, nursing homes generally refer to implementation as a “journey,” and perseverance is a quality that may drive success.

Structural factors that did not impact implementation of CCPs in the present study included profit status, chain affiliation, nursing home size, and Medicare census. These results were not consistent with the literature. For example, Castle (2001) reported that chain affiliation increases adoption of innovative practices. These findings were not observed in the present study. Mixed results in the literature regarding facility size were not resolved in the present study due to a failure to produce statistically significant results. Profit status, which is reported in the literature to have an effect on quality of care, did not have a significant effect on NHAs’ perception of their facility’s principles and practices. Medicare census as it relates to innovations has not been extensively researched, but it appears that it does not have as large of an influence on nursing home innovations as Medicaid census.

Market factors that did not impact the adoption of CCPs included market concentration and location. Market concentration, which represents competition, has been known to influence implementation of innovations (Banaszak-Holl, 1996). It is possible that market concentration could have been confounded by location in the present study, but this study also failed to find an impact of rurality on the adoption of CCPs.

Surprisingly, NHAs’ familiarity with, attitudes toward, and commitment to culture change did not impact the implementation of CCPs. Many of the NHAs in Alabama were very familiar with the concept of culture change, but this familiarity does not necessitate adoption of such practices. The same is true for NHAs’ attitudes toward culture change. Perhaps this is because most people that enter the position of NHA believe that the nursing home culture should

improve. It was surprising that commitment to culture change did not influence the implementation of CCPs. An explanation of this finding might be that implementation of any innovation that requires extensive change from the norm must be a facility-wide commitment in order for it to be a success. Although the NHA is a key player in the daily operations of the nursing home, all employees must believe in and implement changes at each level of employment. Therefore, a NHA may believe in culture change principles, but unless the NHA believes it is feasible to implement such practices, he or she will have a difficult time striving to promote CCPs and identifying the nursing home as one that has joined the culture change movement. With this understanding of how belief of feasibility can play a crucial role in NHA influence, one can make the argument that it is important to prepare the nursing home for change by warming the soil and educating staff on the importance of such principles and the positive outcomes that could ensue.

Limitations

A major limitation of the present study was the low power obtained in the statistical analyses for the variables that did not reach significance. Although a few of the predictor variables were found to be significant, a large proportion of variables did not achieve adequate power. This may be a result of a small sample size relative to the number of predictor variables examined in the study. Alternatively, the predictor variables that did not reach an acceptable significance level may not play a role in innovative adoption of CCPs in nursing homes in Alabama.

A second limitation of the study is related to the method that was used for obtaining information about the nursing homes' practices and level of implementation of CCPs. Because information was gathered by means of survey, some data was missing. This is a common

problem with surveys (Brick & Kalton, 1996), but it did not occur frequent enough to warrant alarm to response bias. Additionally, NHAs were asked to report information related to CCPs in the nursing home, and this information would not be accurate if the NHA did not routinely communicate with direct care staff or the Director of Nursing. NHAs were also asked to provide information about their perception of CCPs in the nursing home. It is plausible that NHAs answered questions accurately considering they were aware that their anonymity would be upheld. For example, many NHAs responded to survey items that were indicative of a traditional nursing home rather than a culture change nursing home. This would suggest that these NHAs were not falsifying information in an effort to portray the nursing home in a favorable light.

A third limitation, which is an extension of the aforementioned topic, is lack of another opinion or perception of the current state of the nursing home. The national Commonwealth Fund study that investigated nation-wide implementation of CCPs assessed opinions and perceptions from the Directors of Nursing (Doty, et al., 2008). It is reasonable to assume that Directors of Nursing may have different perceptions or opinions of the practices in the nursing home, especially since Directors of Nursing generally have more contact with direct care staff.

Implications for Future Studies

More research and understanding is needed in the area of the state regulatory and survey process. The literature and present study suggest that regulations deter nursing homes from adopting CCPs. State regulations were initially created to protect residents and improve quality of care (Hawes et al., 1997). Culture change aims to improve quality of life for nursing home residents and quality of work environment for employees. Therefore, culture change can be thought of as an extension of state regulations. However, this idea is not the norm, and many

NHAs feel that the state regulations impede the advancement of CCPs. More research is needed to understand how to make the coexistence of state regulations and CCPs successful.

More research is needed to understand the factors that play a role in innovation implementation, especially considering the existence of mixed findings in the literature. Other factors that may potentially play a role include location in country, wages of direct care staff, education level of direct care staff, education level of leadership members, and so forth. Future research should focus more on individual levels because the driving force of change is the people within the nursing home.

In sum, this study indicated that Medicaid census, market density, and NHA perception of implementation feasibility contributed to the adoption of CCPs in the nursing home. The conditions required for adoption of CCPs is thus complex and are located both within and outside of the facility. My findings suggest that continued cooperation and support of federal and state agencies with nursing facilities will be critical if CCP implementation is to become nationally wide-spread.

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APPENDIX 1

Nursing Home Culture Survey

This survey focuses on practices and policies in this nursing home. Please complete all questions to the best of your knowledge.

1. **Approximately what percent of the rooms in your nursing home are private, single rooms?**

0% 1-25% 26-50% 51-75% 76-99% 100%

If your nursing home has private, single rooms, approximately how many of those rooms have their own private bathroom?

0% 1-25% 26-50% 51-75% 76-99% 100%

2. **Approximately what the Medicaid census at your nursing home?**

0-10% 10-25% 26-50% More than 50%

3. **Approximately what is the Medicare census at your nursing home?**

0-10% 10-25% 26-50% More than 50%

4. **Approximately what percent of residents in this nursing home live in the following settings? (check all the appropriate boxes for a, b, c, and d)**

a. **Traditional nursing units: Areas with a larger number of residents under care, often occupying a hallway or floor of a building**

0% 1-25% 26-50% 51-75% 76-99% 100%

b. **Neighborhoods: Areas in which the traditional nursing unit is broken into smaller functional units, in which ancillary services, such as laundry, dining, and bathing, are shared with other neighborhoods**

0% 1-25% 26-50% 51-75% 76-99% 100%

c. **Households: Self-contained areas with a full kitchen, living room and dining room, with a relatively small number of residents per household**

0% 1-25% 26-50% 51-75% 76-99% 100%

d. **Other (specify)**

0% 1-25% 26-50% 51-75% 76-99% 100%

5. **Which of the following best describe how nurses' stations (for RNs, LPNs, and unit charge nurses) are typically structured in this nursing home? (PLEASE CIRCLE)**

a. Nurses' stations occupy a centralized location near resident rooms, for example in the middle of the unit with staff working behind counters

b. Some/all nurses' stations have been redesigned to be more informal with desks and counters designed to be more open

c. Nursing work space has been integrated into resident living space/ completely eliminated

6. **Are residents and their family members encouraged to decorate and personalize their rooms even if it includes using nails, tape, screws, etc?**

Always Often Sometimes Occasionally Never

7. **Is it the practice in this nursing home that residents can...?**

a. **Access food from a refrigerator whenever they want to**

Always Often Sometimes Occasionally Never

b. **Access appliances necessary to prepare their own meal (e.g., microwave, stove, sink)**

Always Often Sometimes Occasionally Never

c. **Eat when they want**

Always Often Sometimes Occasionally Never

d. **Eat where they want (e.g., room or central dining)**

Always Often Sometimes Occasionally Never

e. **Request and receive favorite foods that are not on the menu**

Always Often Sometimes Occasionally Never

f. **Go to bed when they want**

Always Often Sometimes Occasionally Never

g. **Get up when they want**

Always Often Sometimes Occasionally Never

h. **Choose when they bath or shower, even if they need help or supervision**

Always Often Sometimes Occasionally Never

i. **Choose how they are bathed (e.g., bath or shower, undressed or partially undressed, washing up while in bed, etc)**

Always Often Sometimes Occasionally Never

8. For each of the activities listed, how involved are the residents in decision making? (check the appropriate boxes)

	Decisions are made by staff	Decisions are made by staff with some input from residents	Decisions are made jointly by staff and residents	Decisions are made by residents
Creating the schedule for meals				
Planning menus				
Creating the calendar for social events, activities, and outings				
Planning of social events, activities, and outings				
Decorating of communal areas (e.g., choice of furniture, wall color, etc)				
Decisions about who provides their own hands-on care				
Developing the resident's care plan				
Involvement in creating policies (e.g., scheduling staff assignments, schedule for resident/family councils)				

9. Are any of the following individuals a regular and formal part of the senior management team that makes important decisions affecting the entire nursing home (for example, major renovations, pet policies, etc.)?

- a. Direct care workers __Yes __No
- b. Residents __Yes __No
- c. Family members __Yes __No
- d. Other (specify) __Yes __No

10. How are Certified Nursing Assistants (CNAs) assigned to care for residents?

(PLEASE CIRCLE)

- a. CNAs rotate to provide care for different residents on a scheduled basis (e.g., daily, weekly, monthly)
- b. CNAs consistently provide care for the same group of residents each shift they work (e.g., caring for the same residents at least 85% of their time)

11. For each of the items listed, how involved are direct care workers in the decision making?

	Decisions made by department head/supervisor	Decisions made by department head/supervisor With some input from direct care workers	Decisions made jointly by department head/supervisor and direct care workers	Decisions made by direct care workers
Scheduling of staff shifts				
Staff assignment to residents				
Performance evaluations				
Hiring and staff selection				
Planning social events				
Budget and resource requests				
Policy and procedure development				

12. In the past year, approximately how many CNAs on your staff attended continuing education courses or other educational courses paid for by your facility?

 0% 1-25% 26-50% 51-75% 76-99% 100%

13. Approximately what percent of staff is trained to do tasks outside of their primary duty (for example, social worker or housekeeping trained to provide feeding assistance or CNAs trained to provide activities)?

 0% 1-25% 26-50% 51-75% 76-99% 100%

We would like to ask you a few questions about the concept of person-centered care principles and practices, also known as resident-centered care. A person-centered nursing home can be defined as an organization that has home and work environments which include the following:

- Care and all resident-related activities that are decided by the resident
- A living environment that is designed to be a home rather than an institution
- Close relationships existing between residents, family members, staff, and community
- Worked organized to support and allow staff to respond to residents' needs and desires
- Management that allows collaborative and group decision making
- Processes/measures that are used for continuous quality improvement

14. Prior to this survey, how familiar were you with the terms resident-centered care or person-centered care? (circle the number that applies)

Not at all familiar	Somewhat familiar	Completely familiar
1	2	3
4	5	

15. How well does this definition of person-centered care provided above describe this nursing home? (circle the number that applies)

Not at all	Somewhat	Completely
1	2	3
	4	5

16. Do you agree with the principles outlined above that describe resident-centered care? (circle the number that applies)

Do not agree at all	Somewhat agree	Completely agree
1	2	3
	4	5

17. Do you think that it is possible to implement person-centered care principles and practices in your nursing home? (circle the number that applies)

Do not agree at all	Somewhat agree	Completely agree
1	2	3
	4	5

What do you perceive as a barrier?

18. How committed are you to the adoption of person-centered care principles and practices in your nursing home? (circle the number that applies)

Not at all committed Somewhat committed Extremely committed
1 2 3 4 5

19. What is your age? _____

20. How long have you worked at this nursing home?

21. How long have you working at this nursing home as a licensed administrator?

22. How long have you worked as a licensed administrator in the nursing home industry?

23. What college degree(s) have you attained?

24. What certificate(s) and/or licensure(s) have you attained?

25. What training on culture change or resident-centered care practices have you attended?

APPENDIX 2

Telephone Script – initial call

Hello (*Mr. or Ms.*) (*Insert Name*). My name is Lindsey Jacobs and I am a graduate student in clinical psychology at the University of Alabama. I am calling to introduce myself and invite you to participate in a research study that I am conducting for my master's thesis. I am sending questionnaires to all nursing homes in Alabama inquiring about organizational and resident care practices. In the next couple of weeks you will receive an introduction letter and a consent form from me and my advisor, Dr. Lynn Snow.

These documents will have more specific information about the study. I am offering the questionnaires in a paper form and internet form. Would you like to fill out a paper questionnaire or complete it online?

(Allow response). If I needed to contact you again, would you prefer to be contacted by phone or email?

(Allow response. If the administrator prefers to be contacted by email, get correct email address.)

Thank you so much for your time.

APPENDIX 3

Introduction letter

(Date)

(Name)

Administrator

(Address)

Dear *(Mr. or Ms.) (Insert name)*,

You are being asked to take part in a research study. This study is titled “Consideration of Nursing Home Structural, Market, and Administrative Factors That May Impact Organizational and Resident Care Principles and Practices.” The study is conducted by Lindsey Jacobs, BA and Lynn Snow, PhD. This study will serve as Lindsey Jacobs’s master’s thesis. Dr. Snow is a professor at the University of Alabama. This study seeks to identify nursing home features that are related to adopting innovative organizational and resident care practices (culture change practices) in the state of Alabama.

Enclosed you will find an informed consent document. A return envelope and paper questionnaire are enclosed if you requested a paper form or if you have not been contacted by the researcher. You may also access the questionnaire at the following website *(insert URL)*. Please read the informed consent document.

- If you choose to participate and will complete the paper form of the questionnaire, please sign and return the informed consent and questionnaire to us. You may keep a copy for yourself.
- If you choose to participate and will complete the online form of the questionnaire, you will be prompted to click “I agree” before completing the questionnaire (see consent form).

Your **participant ID number** is *(insert participant number)*.

Thank you very much for your time.

Sincerely,

Lindsey Jacobs, BA
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APPENDIX 4

Telephone Script and Email - reminder call and email

Hello (*Mr. or Ms.*) (*Insert Name*). My name is Lindsey Jacobs and I am a graduate student in clinical psychology at the University of Alabama. My advisor, Dr. Lynn Snow, and I mailed an introduction letter and consent form describing a research study I am conducting a for my master's thesis. I am calling because I haven't received your survey, and I wanted to remind you that you may fill out the online version at (*insert URL*) or I can mail an extra paper version if you'd like. Thank you so much for your time.

Table 1

Descriptive Characteristics of the Study Sample

Demographic Variable	Mean (Standard Deviation)/ Number (Percentage)
Sex	
Male	46 (59.7%)
Female	31 (40.3%)
Age	47.7 (9.8)
Years at current NH	9.9 (10.6)
Years at current NH as NHA	7.5 (8.8)
Years as a NHA	14 (9.9)
Survey method	
Paper	42 (54.5%)
Web-based	35 (45.5%)

Note. There was large variability in years at current nursing home, years at current nursing home as NHA, and years as a NHA. This variability ranged from .12 years to 45 years.

Table 2

Independent Variable Measures and Sources

Independent Variables	Type	Measure	Source
Profit status	Categorical	Profit and non-profit	Nursing Home Compare
Chain affiliation	Categorical	Chain and independent	Nursing Home Compare
Facility size	Continuous	Number of beds in NH	Nursing Home Compare
Medicaid census	Categorical	0-10%, 10-25%, 26-50%, and above 50%	Survey
Medicare census	Categorical	0-10%, 10-25%, 26-50%, and above 50%	Survey
Rural/Urban status	Categorical	Metropolitan = 1,2; Non-metropolitan = 3-12	2003 Urban Influence Codes
Median income in county	Continuous		U.S. Census Bureau
Market concentration	Continuous	Herfindahl-Hirschman Index	Nursing Home Compare
Market density	Continuous	Number of potential customers/ population	U.S. Census Bureau
Familiarity with culture change	Continuous	Range from “not at all” = 1 to “completely” = 5	Survey
Agreement with culture change principles	Continuous	Range from “not at all” = 1 to “completely” = 5	Survey
Belief regarding feasibility of CCPs	Continuous	Range from “not at all” = 1 to “completely” = 5	Survey
Commitment to implementation of CCPs	Continuous	Range from “not at all” = 1 to “completely” = 5	Survey

Table 3

Facility and Market Characteristics of Nursing Home Respondents and Non-Respondents

Characteristics	Respondents Mean (Standard Deviation)/ Number (Percentage)	Non-respondents Mean (Standard Deviation)/ Number (Percentage)
Chain affiliation		
Chain affiliated	45 (58.4%)	100 (63.7%)
Independent	32 (41.6%)	57 (36.3%)
Nursing home size	121.71 (52.02)	113.13 (46.30)
Ownership status		
For profit	55 (71.4%)	131 (83.4%)
Nonprofit	22 (28.6%)	26 (16.6%)
Median county income	\$41,355.23 (\$9,150.76)	\$40,838.69 (\$7,761.42)
Population 65+	14.47% (2.49)	14.37% (1.92)

Table 4

Descriptive Statistics for Nursing Home Environment

Survey item	0%	1-25%	26-50%	51-75%	76-99%	100%
Percent of private, single rooms	1 (1.3%)	58 (75.3%)	13 (16.9%)	4 (5.2%)	--	1 (1.3%)
Percent of private bathrooms	4 (5.2%)	33 (42.9%)	7 (9.1%)	2 (2.6%)	4 (5.2%)	26 (33.8%)
Percent of residents in traditional units	2 (2.6%)	1 (1.3%)	2 (2.6%)	1 (1.3%)	5 (6.5%)	63 (81.8%)
Percent of residents in neighborhoods	61 (79.2%)	3 (3.9%)	1 (1.3%)	1 (1.3%)	--	1 (1.3%)
Percent of residents in other	57 (74.0%)	--	1 (1.3%)	--	--	--

Note. The table presents counts and percentages for nursing home environment characteristics. Columns that lack data indicate that there were no responses. Data was missing for several items. One response was missing for percentage of private bathrooms. Three responses were missing for percentage of residents in traditional units. Ten responses were missing for percentage of residents in neighborhoods. No participant indicated that residents reside in household models; therefore, this item is not presented. Finally, 19 responses were missing for percentage of residents in a unit that was not described in the survey. Only one participant indicated that a percentage of residents live in a unique unit, and this unit was dedicated to activity-based care for residents with dementia.

Table 5

Descriptive Statistics for Resident Autonomy

Is it the practice in this nursing home that residents can...?	Always	Often	Sometimes	Occasionally	Never
Access food from a refrigerator whenever they want to	29 (37.7%)	8 (10.4%)	13 (16.9%)	11 (14.3%)	16 (20.8%)
Access appliances necessary to prepare their own meal	8 (10.4%)	3 (3.9%)	8 (10.4%)	15 (19.5%)	43 (55.8%)
Eat when they want	34 (44.2%)	20 (26.0%)	12 (15.6%)	7 (9.1%)	4 (5.2%)
Eat where they want	56 (72.7%)	11 (14.3%)	3 (3.9%)	4 (5.2%)	3 (3.9%)
Request and receive favorite foods that are not on the menu	29 (37.7%)	33 (42.9%)	5 (6.5%)	8 (10.4%)	2 (2.6%)
Go to bed when they want	53 (68.8%)	20 (26.0%)	4 (5.2%)	--	--
Get up when they want	49 (63.6%)	23 (29.9%)	3 (3.9%)	2 (2.6%)	--
Choose when they bath or shower, even if they need help or supervision	38 (49.4%)	23 (29.9%)	10 (13.0%)	5 (6.5%)	1 (1.3%)
Choose how they are bathed	45 (58.4%)	19 (24.7%)	8 (10.4%)	3 (3.9%)	2 (2.6%)

Note. The table displays counts and percentages. Columns that do not contain data indicate that there were no responses.

Table 6

Descriptive Statistics for Resident Decision-Making

For each of the activities, how involved are residents in decision making?	Decisions are made by staff	Decisions are made by staff with some resident input	Decisions are made jointly by staff and residents	Decisions are made by residents
Creating the schedule for meals	32 (41.6%)	33 (42.9%)	11 (14.3%)	--
Planning menus	16 (20.8%)	42 (54.5%)	18 (23.4%)	--
Creating the calendar for social events, activities, and outings	7 (9.1%)	37 (48.1%)	31 (40.3%)	--
Planning of social events, activities, and outings	7 (9.1%)	31 (40.3%)	37 (48.1%)	1 (1.3%)
Decorating of communal areas	37 (48.1%)	25 (32.5%)	14 (18.2%)	--
Decisions about who provides their own hands-on care	14 (18.2%)	41 (53.2%)	19 (24.7%)	1 (1.3%)
Developing the resident's care plan	3 (3.9%)	27 (35.1%)	46 (59.7%)	--
Involvement in creating policies	33 (42.9%)	33 (42.9%)	10 (13.0%)	--

Note. The table displays counts and percentages. Columns that do not contain data indicate that there were no responses.

Table 7

Descriptive Statistics for Staff Decision-Making

For each of the item, how involved are direct care workers in decision making?	Decisions made by department head/supervisor	Decisions made by department supervisor with some direct care worker input	Decisions made jointly by department supervisor and direct care workers	Decisions made by direct care workers
Scheduling of staff shifts	20 (26.0%)	42 (54.5%)	15 (19.5%)	--
Staff assignment to residents	20 (26.0%)	40 (51.9%)	16 (20.8%)	1 (1.3%)
Performance evaluations	39 (50.6%)	27 (35.1%)	11 (14.3%)	--
Hiring and staff selection	47 (61.0%)	23 (29.9%)	6 (7.8%)	--
Planning social events	9 (11.7%)	32 (41.6%)	34 (44.2%)	--
Budget and resource requests	41 (53.2%)	27 (35.1%)	7 (9.1%)	--
Policy and procedure development	33 (42.9%)	36 (46.8%)	6 (7.8%)	--

Note. The table displays counts and percentages. Columns that do not contain data indicate that there were no responses.

Table 8

Descriptive Statistics for Nursing Home Administrator

Survey question	Not at all	A little	Somewhat	Mostly	Completely
Prior to this survey, how familiar were you with the terms resident-centered care or person-centered care?	2 (2.6%)	--	9 (11.7%)	19 (24.7%)	47 (61.0%)
How well does this definition of person-centered care provided above describe this nursing home?	4 (5.2)	7 (9.1%)	39 (50.6%)	23 (29.9%)	4 (5.2%)
Do you agree with the principles outlined above that describe resident-centered care?	--	--	18 (23.4%)	30 (39.0%)	29 (37.7%)
Do you think that it is possible to implement person-centered care principles and practices in your nursing home?	1 (1.3%)	2 (2.6%)	29 (37.7%)	26 (33.8%)	19 (24.7%)
How committed are you to the adoption of person-centered care principles and practices in your nursing home?	--	2 (2.6%)	22 (28.6%)	32 (41.6%)	21 (27.3%)

Note. The table displays counts and percentages. Columns that do not contain data indicate that there were no responses.