CULTURE CHANGE IN NURSING HOMES:

THE PERCEPTION OF LEADERS VERSUS STAFF

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ABSTRACT

The elderly population in Kansas is growing, leading to an increased need for nursing home care. To improve the quality of life for residents and staff, many facilities have implemented care models called culture change that are focused on resident-centered care and staff empowerment. The *Kansas Culture Change Instrument* (*KCCI*) was developed using six constructs using the 2006 Commonwealth fund definition (Doty, Koran, & Sturla, 2009) as the theoretical framework. The six constructs were: *resident-centered care, a homelike environment, staff/resident relationships, staff empowerment, nursing home leaderships*, and *quality improvement* with an added seventh construct, *share values*. The purpose of this study was to determine: a) how leader and staff perceptions differed on the seven subscales of culture change in nursing homes; and b) whether staff and leaders scores vary differently in culture change nursing homes when compared to non-culture change nursing homes.

The study is a secondary analysis using data from the Kansas Nursing Home Project. Staff and leaders employed at 100 randomly selected nursing homes in Kansas comprised the sample. The response rate was 72% (n=72). Data were collected using the *KCCI.* Paired t-tests and Pearson Correlations (r) were used for data analysis. The results indicated statistically ($p < .01$) different scores between the staff and the leaders on the total culture change score and the seven subscales Mean differences ranged from .08 to .38 on average subscales scores that ranged from 1 (never) to 4 (always). There were stronger correlations between staff and leader scores in nursing homes that had undergone extensive culture change. Collecting information from all staff and leaders in nursing homes can be time consuming and expensive. Nursing homes that had extensively implemented culture change had more consistent findings than the nursing homes that had partial or limited implementation. Consequently, it is important to assess where the nursing home is on the

continuum of culture change implementation before determining who will be involved in the data collection.

INTRODUCTION

The elderly population in Kansas is increasing, leading to an increased need for nursing home care. With the increasing numbers of residents being cared for in nursing homes, the focus is shifting to providing quality of life for residents and quality of work for staff. Currently in nursing homes most decisions are made at the administrative level and direct care staff are rarely asked to express their opinion about problems they encounter when providing care. Similarly, residents are placed on schedules that have little to do with how they lived their lives before entering the nursing home. Robinson and Rosher (2006) report that, "many nursing homes maintain schedules for eating, bathing, sleeping and other activities, often putting the task before the individual" (p. 19).

To improve the quality of life for residents and the quality of work for staff, some nursing homes have broken away from the institutional environment and have implemented a care model called culture change. Culture change is focused on allowing residents to make decisions regarding their activities of daily living, such as when they wake up and go to bed, what they eat, and when they shower. Additionally, the model incorporates direct-care staff members being involved in decision making about their daily work and planning the care for the residents.

Problem and Purpose

In 2007 the number of Americans over the age of 65 was 37.0 million, which is 12.6% of the US population (Administration on Aging, 2008). This percentage has tripled since 1990. Not only is the elderly population growing, this population is now older in general. "In 2007, the 65-74 age group (19.4 million) was over 8.8 times larger than in 1900, but the 75-84 group (13.0 million) was 17 times larger and the 85+ group (5.5 million) was 45 times larger" (Administration on Aging, 2008). This increase in growth is expected to continue to increase over time, which would result in an increased need for facilities to provide for this generation once they can no longer care for

themselves. According to the Administration on Aging (2008), the population of those 65 and older is projected to be 72.1 million in 2030, nearly double that which it was in 2007. They also reported that 15.1% of those 85 years or older lived in an institutional setting in 2007.

The cost of caring for these elders is high for the state. In the fiscal year 2007 almost 42%, 893 million dollars, of Medicaid spending in Kansas was toward long-term care (Kaiser Family Foundation, 2009). This stresses the importance of families, future residents, and healthcare providers having accurate data that represents the quality of care provided in nursing homes throughout Kansas. When collecting data from homes, it is important to see whether it is sufficient to just collect data from leaders, or if direct care staff need to be included to provide more accurate results regarding culture change in nursing homes.

The purpose of the study is to determine how leader and staff perceptions differ on the constructs of *culture change* in Kansas's nursing homes. This study was driven by two research questions: a) will scores on the subscales of culture change differ between staff and leaders, and b) do staff and leaders' scores vary differently in culture change nursing homes from non culture change nursing homes?

Literature Review

Culture change in nursing homes, the benefits of culture change, and how culture change can be implemented are discussed extensively in *Pioneering Change (*Norris-Baker, Doll, Gray, & Kahl, 2003*)*. Issues that lead to the need for change include that fact that elderly people live in their homes as long as possible to avoid being put in a nursing home. Also, children are helping their parents find nursing homes and are expecting their loved ones to be given the resources to attain a "superlative quality of life for as long as possible" (Norris-Baker et al, 2003, p. 9). Many benefits are seen in homes that have implemented one of the culture change models including: a one-third reduction in the use of anxiolytics and antidepressants administered for anxiety and depression,

almost a two-thirds reduction of in-house decubitus ulcers, a one-fourth decrease in the cumulative rate of bedfast residents, a one-fifth decrease in use of restraints, more than 40% drop in staff absenteeism" (Norris-Baker et al., 2003). Norris-Baker and associates state, "Currently culture change for nursing homes does not have much of the 'what might happen when you do' information available. That makes it important that each of the organizations committed to making change also commit to evaluating those changes to document their anticipated and unanticipated impacts" (Norris-Baker et al., 2003, p. 80).

The goal of nursing home care and of most healthcare professions in general is to ensure patients have positive outcomes and are satisfied with the care provided. If culture change is indeed a positive change for nursing homes, one would hope that resident and family satisfaction would increase in nursing homes that have undergone culture change. The *Eden Alternative* is a social model of care designed to transform the current medical model of nursing care in nursing home to a culture change model. The *Eden Alternative* is exemplified by the inclusion of animals, plants, and children that assist in combating resident loneliness, helplessness, and boredom with the core philosophy being a resident-centered approach to care and the resident's right to choice and decision making. Rosher and Robinson (2005) conducted a study to determine the impact of the *Eden Alternative* model on family satisfaction with the nursing home care. The research team surveyed thirty-seven families prior to *Eden Alternative* implementation and then two years after implementation. This study found a significant ($p < .001$) improvement in family satisfaction after the implementation of the *Eden Alternative* model, with the most exciting finding being an improvement in families' perceptions of respect given to elders by staff (Rosher & Robinson). Many aspects seen with culture change involve providing residents with more options regarding their own daily cares and their lives. Giving residents these options is a means of showing them respect, and it follows that families would sense that staff have respect for their loved ones as well.

A facility must change its organizational structure as well as the mindsets of staff and leaders in order to undergo the long process of culture change. Scalzi, Evans, Barstow, and Hostvedt (2006) conducted a study to identify the barriers and enablers that nursing homes met when changing their organizational structure. Data were collected from staff and families from three nursing homes that had implemented culture change. The barriers that were identified included not including nurses in culture-change activities, perceived corporate emphasis on regulatory compliance, a focus on the 'bottom line,' and high turnover rates of administrators and direct care staff (Scalzi, Evans, Barstow, & Hostvedt, 2006). The study also identified the need for a critical mass of 'change champions' in the organization, consistency between the administration, staff, and residents in shared values and goals, resident and family participation, stable tenure of administrators, and empowerment of staff at the facility level to be enablers of culture change in nursing homes (Scalzi et al.).

Another study conducted by Robinson and Rosher (2006) also identified barriers to culture change and provided recommendations to deal with the barriers. There are four key points that resulted from this study. First, the authors suggest that prior to implementation of a culture change model, nursing homes should identify and analyze potential barriers, such as staff turnover, and identify interventions to overcome these barriers. Education and empowerment are important components of culture change that can be useful in dealing with barriers. If culture change education and empowerment are occurring in a home that has greater than 100% turnover annually, one can see that it would be very difficult to maintain proper education and provide residents with consistent high quality care. Second, the infusion of culture change is dependent on a major change in organizational structure, with the elders making decisions regarding the facility. This can be accomplished by providing Certified Nurse Aides (CNAs) and other care providers with the knowledge and resources they need to allow residents to make choices regarding their care. The third key point is that the study revealed decreased incidence of depression in elders and

increased family satisfaction following the implementation of culture change. However the authors state that confounding variables, such as a change in administrator and an increase in staff/resident ratio, may have led to this conclusion (Robinson & Rosher, 2006). Finally, the fourth key point of this study, it is necessary to frequently evaluate the progress of culture change by qualitative techniques. The authors recommend surveying staff every three to six months throughout culture change implementation. This way if a change is detected the situation can be evaluated at that point to attempt other variables that could be causing the change (Robinson & Rosher, 2006).

Quality of life for residents and quality of work for staff are important components of culture change models. In addition to assessing resident's satisfaction with their quality of life as well as the family's satisfaction with the care the resident receives, it is important to assess how staff perceives the quality of their work life in the nursing home. Since the process for the implementation of culture change models in the nursing home can be lengthy, it is important to determine where nursing homes are in process as well as if there are differences between nursing homes that have implemented culture change and those that have not.

RESEARCH METHODOLOGY

The study was a secondary analysis using data from the Kansas Nursing Facility Project. The aim of the Kansas Nursing Facility project was to establish a valid and reliable culture change instrument and to examine the relationship between the elements of culture change and quality of nursing home care in the state of Kansas (Bott et al., 2009). The study recommends annual collection of data from culture change homes in Kansas in order to make this information available for nursing home leaders and staff and to determine where Kansas stands on culture change implementation. The purpose of this secondary analysis was to determine if there were differences between nursing home leaders and direct-care staff on the subscales of culture change, and if there were differences between culture change nursing homes and non culture change nursing homes.

Sample and Setting

The sample was comprised of nursing home leaders and staff employed at 100 randomly selected nursing homes in Kansas. The random sample was stratified on regional population density proportional to size to ensure that no area of the state had a decreased chance of inclusion. From the 100 nursing homes in Kansas selected, data were provided by 72 nursing homes (response rate = 72%). The facility demographics show that the median number of beds in the nursing homes surveyed was 58 (range = 16 to 178 beds). The average percent of days paid by Medicaid n was 54% (*range* = 5 – 90%). More than half (59%) of the nursing homes were non-profit organizations, and more than two-thirds (69%) were located in rural areas.

A total of 2,717 leaders and staff participated in data collection (*n* = 457, leaders; *n*=2,260, staff). Nursing home leaders included: administrators, directors of nursing, and department heads. The roles of the direct care staff surveyed included: Registered Nurses, Licensed Practical Nurses, Certified Nurse Aids, Certified Medication Aides, and Rehab personnel. The support staff that responded included dietary, activities, housekeeping, maintenance, and business office personnel.

The response rate for staff in the nursing homes ranged from five to 100% with an average response rate of 70%. Table 1 shows the sample demographics. In summary, the majority of the leaders surveyed were department heads that had been employed at the nursing home for more than five years and were educated with a technical or associates degree. The majority of the staff that completed the surveys was Certified Nurse Aides (CNAs) and Certified Medication Aides (CMAs) that had been employed at the facility one to five years with a high school diploma being the highest education achieved.

Measures

To collect data from staff and leaders the *Kansas Culture Change Instrument* (*KCCI*) was utilized. Bott and associates (2009) developed the *KCCI* that was comprised of six constructs from the 2006 Commonwealth fund definition (Doty, Koran, & Sturla, 2009) that provided the guiding framework (See Figure 1): *resident-centered care, a homelike environment, staff/resident relationships, staff empowerment, nursing home leaderships*, and *quality improvement.* In the development of the *KCCI* a seventh construct, *share values,* was added. The seven subscales also were averaged to create a total culture change score. Average scores were created that ranged from one (never) to four (always) for all subscales except the *Quality Improvement* subscale that ranged from one (strongly disagree) to four (strongly agree).

Two versions, leader and staff, of the *KCCI* were developed- and were comprised of 78 and 66, respectively. Cronbach's alphas ranged from .74 to .94 for leaders and from .73 to .94 for staff across the seven subscales (See Table 2).

The subscale *Resident-Directed Care and Activities* was defined as care and all resident related activities that were directed by the resident. This included nine items that specifically look at the following areas: residents choosing when they ate and bathed; residents helping themselves or having what they wanted to eat; residents determining how they bathed; care plans based on resident's requests; residents waking up and going to bed when they'd desired; designing activities for residents with memory problems; and allowing residents to dress themselves if they were able.

The *Home Environment* was defined as a living environment that was designed to be a home rather than an institution. This 13-item subscale included items that looked at the following specifics: residents living in small households or neighborhoods in private rooms; residents getting outdoors without help; residents decorating their own rooms; a small group of residents sharing a living room and dining room; residents having pets and live plants inside the home; communities

being involved; spur of the moment activities occurring; and residents' personal items displayed in common areas.

The subscale *Relationships with Staff, Family, Resident & Community* was defined as close relationships existing between residents, family members, staff and community. The ten items that comprised the Relationships *with Staff, Family, Resident & Community* subscale were related to staff working with the same group of residents; families knowing the staff; involving the community in nursing home activities as well as having community volunteers; families visiting; acknowledging and remembering residents who died; encouraging residents and staff to discuss feelings about a resident's death; and residents spending time with each other.

The *Staff Empowerment* subscale was defined as work organized to support and empower all staff to respond to residents' needs and desires. The 10-item subscale was focused on direct care staff having input into resident care planning; knowing when care plan changes were made; staff creating their own work schedules and covering shifts for each other; cross-training staff; rewarding staff growth and education through raises, etc; involving direct care staff in quality improvement teams; staff contacting a resident's family about a resident's need; and staff growing as individuals.

The *Nursing Home Leadership* is a 9-item subscale that was defined as management-enabling, collaborative, and decentralized decision-making. For this subscale staff and leaders were surveyed on the following areas: leaders valuing team members from all departments; teams involving direct care staff in decisions; leaders hiring staff who really care; leaders improving working conditions; leaders not ignoring ideas from staff and asking questions with open-minds; leaders being available to talk to staff and making use of their ideas; and supervisors treating aides with respect.

The 8-item subscale, *Quality Improvement,* looks at the following areas: co-workers have been at the home a long time; homes evaluate services to make improvements; home having plan to lower turnover rates; nursing home tries to retain employees; staff updated on budget and cost changes; direct care staff have input into the budget of care for their residents; and staff ideas are used to reduce wasted time/effort. A concise definition of *Quality Improvement* is systemic processes that are comprehensive and measurement-based, and that are utilized for continuous quality improvement.

The final subscale, *Shared Values,* was added to the KCCI by the Kansas Nursing Facility team. *Shared values* was a 7-item subscale that included leaders and staff sharing values and common goals related to homelike environment, choice for residents, respect for residents and co-workers, decision making, quality of life for residents and quality of work for staff.

Two additional questions were asked on the leader version of the KCCI. The first question was is your nursing home currently involved in culture change? Response options ranged from one (no discussion around culture change) to five (culture change has completely changed the way that we take care of residents in all areas of the organization). The second question was how many years has your nursing home been involved in culture change? The response options included the five categories; not involved in culture change; less than one year; one to two years; three to four years; five or more years, and don't know. The 'don't know' category was recoded to one. Using the average scores of the two questions, a cluster analysis revealed three groups; no or limited culture change; partial culture change homes, and extensive culture change homes. Table 3 provides a detailed definition of each group.

Procedures

Following institutional Human Subjects Committee (HSC) approval, the administrators of the 100 randomly selected nursing homes were contacted by mail and asked to participate in the

study. Each facility was sent a box containing an instructional letter for the administrator, return shipping envelopes with pre-paid postage, and questionnaire packets for leaders (leader version) and for all staff (staff version). Each questionnaire packet contained an instructional letter, instructions for completing questionnaires, a sealable envelope, and the questionnaire. Follow-up calls were made to identify a study coordinator in each nursing home. All 100 of the homes were contacted by phone except for two that had closed (Bott et al., 2009).

Nursing homes that decided to participate were provided with detailed data collection instructions and also provided the current number of staff in the nursing home. This number was used for calculating facility response rates. Bott and associates (2009) developed the following exclusion criteria for participation by staff: a) all agency and hospital personnel, and b) any PRN staff member who worked less than three shifts per month. Staff and nursing homes leaders were encouraged to complete the questionnaires in separate locations, and names or individual identification codes were not included so that the staff could be assured their responses were anonymous. Staff members were instructed to turn in their completed questionnaires in a sealed envelope to a central person with a neutral role. All completed questionnaires were returned via mail in sealed envelopes.

Each of the nursing homes was sent a reminder postcard. All homes that did not return questionnaires were contacted by phone. All completed surveys received by the research team by mail were electronically scanned, audited, and compiled into a file for analysis (Bott et al., 2009).

Data Analysis

Data were stored on a secured file server at University of Kansas Medical Center. Data analysis was done using SPSS 16.0. T-tests were used to determine if leaders and staff scores on the subscales of culture change vary. To control for Type I error, the *p* value was set at .01. Pearson

correlations (*r*) were conducted to analyze whether staff and leaders scores vary differently in culture change homes as opposed to non-culture change nursing homes.

RESULTS

Means for leaders and staff for the total culture change score and the seven subscales are provided in Table 4. The means across the subscales ranged from 2.49 (*SD* = .38) to 3.09 (*SD* = .36) for leaders and from 2.53 (*SD* = .31) to 2.85 (*SD* = .35) for staff.

The first research question was to determine whether scores on the subscales of culture change would vary between leaders and staff. T-test results revealed there were statistically ($p < .01$) different scores between the leaders and staff on the seven subscales (See Table 4). The *Leadership* subscale has the largest mean difference of .38 and the *Home Environment* subscale has the smallest mean difference of .08. Additionally, there was a statistically ($p < .001$) significant difference between leaders (*M* = 2.85; *SD* = .30) and staff (*M* = 2.85; *SD* = .28) on the *Total Culture Change* score.

Research question two was to explore whether leader and staff scores would vary differently in culture change than non-culture change nursing homes. Correlations ranged from .38 to .83 across the seven subscales for the extensive culture change nursing homes; from .29 to .60 in the partial culture change homes; and from .30 to .67 in the limited culture change homes. There were higher correlations between staff and leaders scores on *Total Culture Change* score and all subscales in nursing homes that had extensively implemented culture change group with the exception of *Staff Empowerment* and *Quality Improvement*. Nursing homes that had partially implemented culture change had lower correlations for all subscales except *Resident Care* and *Quality Improvement* than nursing homes in the limited culture change group (See Table 5).

DISCUSSION

Implementation of culture change models is a grassroots movement that is impacting how residents are cared for in nursing homes and how staff are involved in the decision that impact their daily work life and the care that residents receive. Evaluation of the impact of culture change care models in terms of the quality of life for residents and the quality of work for staff is an important step in the process. Having a valid and reliable measure that represents the constructs of culture change is imperative in the evaluation process as well as a determination of the appropriate nursing home personnel that should be providing information about the culture change process.

Although we found statistically significant differences between the leaders and staff on the total and subscale scores of culture change, the differences were small and not necessarily meaningful, It could be anticipated that we might find more similarities in nursing homes that either had not begun the process of implementing a new care model such as culture change or had fully implemented the new care model. Those that were somewhere in the middle of the continuum might be less similar. Our findings did in fact support this as there were higher associations between staff and leader scores in nursing homes that were in the extensive culture change group, that is they had been involved in culture change activities for more than one year and culture change had extensively or completely changed the way residents were cared for in some or all areas.

Also we found more consistency in the nursing homes that had not or had limited implementation of the culture change model. In nursing homes that had partially implemented culture change, the associations between staff and leaders varied on the different subscales of culture change, indicating that staff and leaders had different viewpoints. This may be indicative that the nursing home was in the process of change and all aspects may not have been clearly communicated to the staff or had not been implemented. The nursing home leaders were either more informed about upcoming changes or had not implemented all aspects of the model just

because they were in the process of change. Two of the areas that reported very similar findings were related to resident care and home environment. Often, providing residents more choices in their daily routines as well as making their rooms and living spaces more home-like are the easiest aspect to implement, where other areas such as staff empowerment and decentralized decision making involve more complicated changes.

Collecting information on culture change from both staff and leaders in nursing homes can be time consuming and expensive. This study provided partial support that collecting information from only leaders in nursing homes would be representative of that nursing home's culture change environment. Assessing where the nursing home is on the culture change continuum may be important in determining what nursing home staff should be involved in providing information in nursing homes that have undergone the process of changing to the culture change care model.

The limitations of this study is that findings cannot be generalized beyond the Midwestern state where data was collected and further research would be warranted in other regions of the country. Continued data collection across years to assess changes in the scores for nursing homes in Kansas would be important in further evaluation as well.

REFERENCES

Administration on Aging. (2008). A Profile on Older Americans: 2008. Retrieved on April 29, 2009, from http://www.aoa.gov/AoARoot/Aging_Statistics/Profile/index.aspx

Bott, M.J., Dunton, N., Gajewski, B., Lee, R., Boyle, D., Bonnel, W.Q., Averett, E., Becker, A., Coffland, V., et al. (March 31, 2009). Culture change and turnover in Kansas nursing homes, *Kansas Nursing Facility Project Report* submitted to the Kansas Department of Aging, Kansas City, KS: author.

Doty, M. M., Koren, M.J., & Sturla, E. L. (2008). *Culture change in nursing homes: How far have we come? Findings from The Commonwealth Fund 2007 National Survey of Nursing Homes*. Retrieved May 10, 2008 from http://www.commonwealthfund.org/publications/publications_show.htm?doc_id=684709

Kaiser Family Foundation (2009). Kansas: Distribution of Medicaid Spending by Service, FY2007. Retrieved on April 29, 2009, from http://www.statehealthfacts.org/profileind.jsp?ind=178&cat=4&rgn=18#

Norris-Baker, L., Doll, G., Gray, L., & Kahl, J. (2003). *Pioneering Change.* Retrieved on March 22, 2009 from www.ksu.edu/peak

Scalzi, C.C., Evans, L.K., Barstow, A., & Hostvedt, K. (2006). Barriers and enablers to changing organizational culture in nursing homes. *Nursing Administration Quarterly*, 30(4), 368-372.

Robinson, S.B., & Rosher, R.B. (2006). Tangling with barriers to culture change. *Journal of Gerentological Nursing,* 19-25.

Rosher, R.B., & Robinson, S. (2005). Impact of the Eden Alternative on family satisfaction. *Journal of American Medical Directors Association*, 189-193.

McLaughlin, M., & Patry, G. (2006). Improving nursing home culture pilot. *Medicine and Health/Rhode Island, 89*(3), 150-151.

U.S. Census (2007). 2007 Population Estimates. Retrieved on April 28, 2009, from http://www.census.gov/

Kaiser Family Foundation (2009). Kansas: Distribution of Medicaid Spending by Service, FY2007. Retrieved on April 29, 2009, from http://www.statehealthfacts.org/profileind.jsp?ind=178&cat=4&rgn=18#

APENDIX

Table 1

Sample Demographics

	Leaders (*n* = 457)		**Staff (*n* = 2,260)**	
Characteristics	**Category**	**%**	**Category**	**%**
Years in NH	<1 year 1-5 years >5 years	19.1 35.1 45.8	<1 year 1-5 years >5 years	32.6 40.0 27.4
Role in NH	Administrator/ Assistant Director of Nursing/ Assistant Department Heads Other	13.1 17.2 51.8 17.9	RN/LPN CNA/CMA Dietary/Activities/ Social Services PT/OT/ST/ Restorative Aides Other	13.8 44.4 15.8 3.2 22.8
Education	Some High School (HS) HS Diploma Technical/AD Bachelors or higher	2.3 21.8 46.0 19.9	Some High School (HS) HS Diploma Technical/AD Bachelors or higher	11.2 43.6 38.4 6.8
Primary Shift Worked	Days Evenings Nights Other	83.0 4.8 0.9 11.3	Days Evenings Nights Other	46.1 26.1 9.3 18.5
Gender	Male Female	15.2 84.8	Male Female	12.7 87.3
Race/ Ethnicity	Caucasian African American Hispanic Other	92.4 1.8 3.1 2.7	Caucasian African American Hispanic Other	76.1 10.9 6.6 6.4

Table 2

Cronbach's Alphas for the Seven subscales of the Kansas Culture Change Instrument for Leaders and Staff

Subscales	***α**** ***Leaders***	***α**** ***Staff***
Resident Care	.85	.85
Home Environment	.74	.73
Relationships	.83	.80
Staff Empowerment	.87	.95
NH Leadership	.91	.92
Quality Improvement	.90	.90
Shared Values	.94	.94

*Cronbach's alpha

Table 3

Definitions of Nursing Home Culture Change Groups with Cut points.

Group	Definition	Cut point
Limited	The nursing homes had either not been involved or involved for less than one year in culture change activities and culture change had not changed or had had limited impact on the way residents were cared for in some areas.	< 2.5
Partial	The nursing home had been involved in culture change activities for at least one year and culture change had partially changed the way residents were cared for in some or all areas	2.5-3.49
Extensive	The nursing home had been involved in culture change activities for more than one year and culture change had extensively or completely changed the way residents were cared for in some or all areas	≥ 3.5

Table 4

Culture Change Subscale Scores for Leaders and Staff

	Leaders		**Staff**		
Total Scale & Subscales	***M***	***SD***	***M***	***SD***	***p***
Total Culture Change Score	2.85	.30	2.68	.28	<.001
Resident Care	2.89	.40	2.73	.38	<.001
Home Environment	2.78	.32	2.70	.30	<.01
Relationships	2.97	.30	2.85	.26	<.001
Staff Empowerment	2.49	.38	2.84	.30	<.01
NH Leadership	3.09	.36	2.71	.32	<.001
Shared Values	3.07	.38	2.85	.36	<.001
Quality Improvement	2.67	.32	2.53	.31	<.001

Table 5

Pearson Correlations (r) between Leaders and Staff for Culture Change Subscales

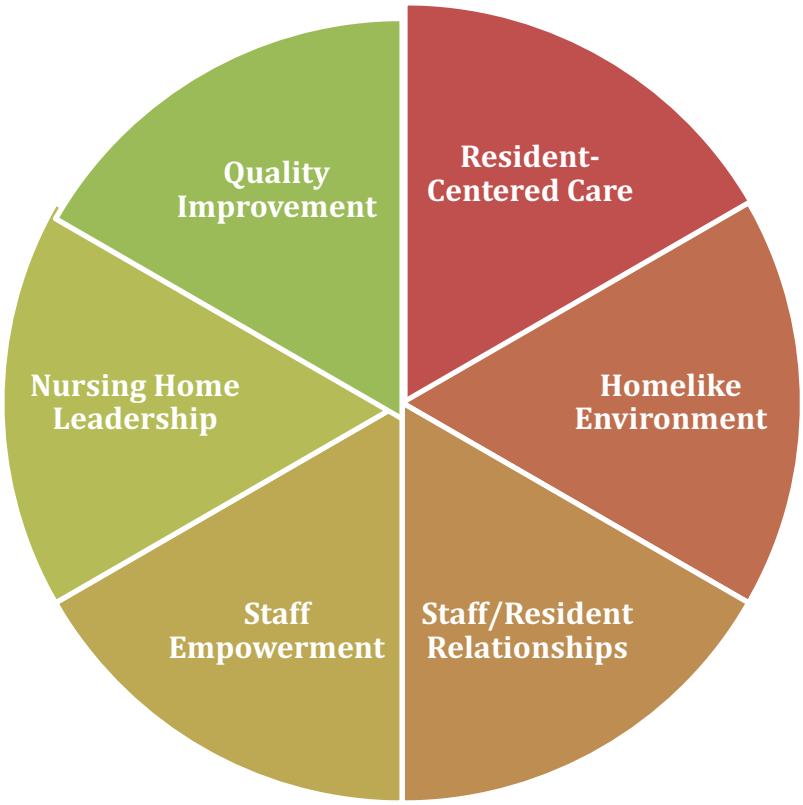
Total Scale & Subscales	**Total** **r**	**Limited** [a] **r**	**Partial** [b] **r**	**Extensive** [c] **r**
Total Culture Change Score	.63***	.49	.49**	.63**
Resident Care	.72***	.58*	.60***	.72**
Home Environment	.68***	.67**	.58***	.72***
Relationships	.67***	.61*	.36*	.83***
Staff Empowerment	.62***	.66**	.57***	.39
NH Leadership	.42***	.30	.32	.47*
Shared Values	..49***	.42	.29	.61**
Quality Improvement	.52***	.35	.53**	.38

[a]Limited Culture Change nursing homes
[b]Partial Culture Change nursing homes
[c]Extensive Culture change nursing homes

*p<.05
**p<.01
***p<.001

Figure 1

Theoretical Framework using the 2006 Commonwealth Fund Definition of Culture Change



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