



Meeting: NURSES INVOLVEMENT IN CULTURE CHANGE
Opportunity for Improving Residents' Quality of Care and Quality of Life
(funded by the Commonwealth Fund)

Presentation: October 27 – 28, 2008

Topic: Research in Culture Change in Nursing Homes

Background Paper: Christine Mueller, PhD, RN, FAAN, University of Minnesota, School
of Nursing
Email contact: cmueller@umn.edu

Nursing home culture change--or a non-institutional, resident-directed model of care in nursing homes, intends to promote autonomy and control for residents residing in nursing homes and those that work most closely with them. New models of care with names such as the Eden Alternative, Green Houses®, Regenerative Communities, and Wellspring have been 'operationalizing' resident-directed models of care in nursing homes for approximately 20 years. The major components of nursing home culture change include empowerment and support of first line direct care workers, creating a home-like environment through environmental and care practice changes, and leadership commitment.

Evidence to support the description and outcomes of this transformation of nursing home care has been slowly accumulating. The majority of research to date is descriptive, yet points to desired staff, resident, and organizational outcomes in nursing homes. This review of the literature focuses on studies that evaluated the implementation of nursing home culture change (NHCC) models. There is a growing body of literature that was not examined for this paper that addressed topics relating to and supporting NHCC (e.g. staff empowerment, quality improvement, environmental design). These topics have been systematically examined at a 2005 consensus conference sponsored by the National Institute on Aging, the Commonwealth Fund,

Mather Institute on Aging, and the Research Retirement Fund, *Practice Innovations in Long-term Care: Developing a Research Agenda* (Port, Sloane, & Zimmerman, 2005) and can be retrieved at <http://www.pragmaticinnovations.unc.edu/>. The conference led to recommendations for further research and policy changes related to innovative practice models in nursing homes.

This paper evaluated the research literature to answer four questions:

1. How far has NHCC penetrated current U.S. nursing homes?
2. Are there valid and reliable measures of NHCC?
3. What evidence is there that NHCC models improve resident, staff and organizational outcomes?
4. What is the extent of research on nursing/nurses and NHCC?

NHCC in U.S. nursing homes

The Pioneer Network is a grassroots organization dedicated to promoting household living environments in congregate settings as well as in home and community-based services and fosters the ability of elders and direct care workers to express choice in meaningful ways (Pioneer Network, 2008). A recent report from the Commonwealth Fund found that the majority of nursing home providers were familiar with the concept of culture change (Doty, Koren, & Sturla, 2008). The survey was completed by 1, 453 directors of nursing and almost one-third of them described their nursing homes as “culture change adopters’ and a one-fourth described themselves as ‘culture change strivers.’ Resident-directed practices are increasing in these nursing homes and nursing homes considered culture change adopters implement most of these practices. For example, 53% of culture change adopters allow residents to determine their own schedules compared to 22% of traditional nursing homes. However, this example calls into question nursing homes that consider themselves culture change adopters if 47% of them are not

allowing residents to determine their own schedules—a fundamental practice for resident-directed care. There is even less change in physical environments of culture change adopters; 16% are breaking down larger units into small units; 1% have residents living in households; 7% have eliminated large nursing stations.

The Colorado Foundation for Medical Care, under a contract with the Centers for Medicare and Medicaid Services (CMS), surveyed 37 nursing homes across the country known to have implemented many culture change practices. Over 90% of these facilities indicated they had implemented system-wide culture change (e.g. encourage new ideas; support resident directed care) (Colorado Foundation for Medical Care, 2008). Both of these national surveys serve as important benchmarks for evaluating the progress of transforming U.S. nursing homes.

Measuring nursing home culture change

Research to evaluate the effectiveness of nursing home culture change requires that there are reliable and valid strategies and tools to measure nursing home culture change. While there have been a variety of instruments developed and used to measure NHCC, only a few reported the validity and reliability of these instruments. The survey used by the Commonwealth Fund to evaluate the impact of NHCC in U.S. nursing homes was briefly described, but no information was provided about its development and whether it was examined for validity and reliability. Schoeneman and Bowman (2006) developed the *Artifacts of Culture Change* which was based on the conceptual model HATCh- Holistic Approach to Transformational Change model. Face and content validity of the tool were evaluated by experts in the field. The Artifacts tool has been provided to the nursing home and research community to use in evaluating nursing home culture change.

Grant (2008) developed the Culture Change Staging Tool (CCST) which stages a facility into one of four CC stages: Stage 1-institutional stage; Stage 2-transformational stage; Stage 3-neighborhood stage; and Stage 4-household stage. The CCST classifies nursing facilities using a heuristic typology of culture change practices. The second measure developed by Grant (2008) was the Culture Change Scale (CCS) consisting of six sub-scales: 1) system-wide culture change; 2) resident choice; 3) organizational design; 4) empowering supervision; 5) job design; and 6) decision-making. Cronbach alphas for the subscales ranged from .80 to .97 and .97 for the entire scale. The use of this tool in evaluating NHCC will be described later.

Under a contract with the CMS, the Colorado Foundation for Medical Care conducted a comprehensive literature review on the measurement of NHCC (Colorado Foundation for Medical Care, 2006). This review identified eight constructs of 25 NHCC key practices: 1) resident directed care and activities; 2) home environment; 3) relationships with staff, family, resident and community; 4) staff empowerment; 5) collaborative and decentralized management; 6) measurement based CQI processes. They also identified eight measurement instruments of nursing home culture change and cross referenced the instruments with the six constructs. This cross reference identified five key practices that were included in all eight instruments (restoring dining choices, assisting residents in determining their own daily schedules and care plans, committing to consistent staffing, involving staff in care planning and care conferences, and promoting staff development and empowerment). Twenty of the 25 key practices were found to have documented evidence in the literature of having an impact on one or more of the following outcomes: pressure ulcers, physical restraints, depression, pain, incontinence, rate of transfer to acute care, medication safety and adverse events, and workforce outcomes. A 51-item Culture Change Assessment Tool was developed for nursing homes to evaluate their progress in NHCC.

The tool addresses the following areas: 1) staff decision making; 2) resident decision making; 3) consistent assignment; 4) system wide culture change; 5) home environment; 6) staff roles; 7) alternate meal service. There was no description of how this tool was developed from the literature review and whether the tool was evaluated for reliability. The tool was provided to 37 nursing homes that were identified by national experts in NHCC as having high culture change implementation. Data from the CCAT were also obtained from 247 nursing homes. An organization completing the online CCAT can benchmark their results against the 37 gold-standard nursing homes and the 247 nursing homes in the U.S. The tool can be obtained at http://www.cfmc.org/nh/nh_mcc.htm

Through the Robert Wood Johnson Foundation national demonstration project, Better Jobs Better Care, White, Newton-Curtis and Lyons (2008) developed and tested a measure of person-directed care (PDC). Five constructs of person directed care were identified from the literature: personhood, comfort care, autonomy, knowing the person, and support for relationships. Another component, environmental support, was also identified. Face validity for items associated with each of the constructs was determined through a review by lay and professional experts in the field. The 64-item PDC measure was given to 430 nursing home staff in eight facilities in one state. Using factor analysis, the five constructs remained and three constructs related to environmental support were identified (support for work with residents; person-directed environment for residents and management/structural support). This tool is recommended for the evaluation of person-directed care practices in nursing facilities.

Mueller (2007) developed and tested a tool to measure NHCC practice in nursing homes. The *Components of Nursing Home Culture Change Survey* (CNHCC) was developed by reviewing four culture change instruments and selecting items from those instruments that were

associated with the following six components that are key to NHCC: physical environment; care processes; resident involvement; dining practices; organization of care/staff empowerment; administrative support. The 64 item instrument was completed by 20 directors of nursing in nursing homes nominated by NHCC experts that were known to be exemplary in their ability to provide care and services that are resident-directed and in which culture change was deeply embedded in the organization. The instrument was also completed by 13 directors of nursing in non-nominated nursing homes. There was a statistically significant difference in each of the six key NHCC components; the nominated nursing facilities were much more likely to engage in the key NHCC practices than the non-nominated nursing homes. The CNHCC survey demonstrated the ability to discriminate between facilities engaged and not engaged in NHCC practices, thus providing evidence of construct validity and could be used to evaluate NHCC practices in nursing homes.

In summary, there are a variety of NHCC instruments with varying degrees of validity, but limited evidence for reliability. Further evaluation of these instruments is necessary in order to have valid and reliable measures of NHCC that will support evaluation of NHCC models and practices.

Evaluation of NHCC models

Fifteen studies evaluating different models of resident-directed care were identified. Nine (60%) of the studies evaluated the Eden Alternative model; two evaluated the Greenhouse house-hold model; one evaluated the Wellspring model and the remainder evaluated resident-directed practices that were implemented in nursing homes. These studies included publications in journals (7) as well as dissertations (6) and foundation reports (2).

All of the studies were descriptive and the number of facilities in the study samples ranged from one facility to 17 facilities (both intervention and control facilities). The studies examined outcomes such as resident, family, staff, organizational, and financial outcomes. None of the studies used the same outcome measures. Attention to the reliability and validity of the measures varied.

Eden Alternative. The Eden Alternative Model was developed in the early 1990's and was designed to address boredom, helplessness, and loneliness identified as the three "plagues" experienced by nursing home residents (Thomas, 1994). While the Eden Alternative (EA) is the most researched culture change model, the impact of the Eden Alternative model on resident, staff, family and organizational outcomes is mixed. Coleman et al (2002) compared two facilities (EA and traditional model nursing facility) on residents' clinical and functional status as well as some financial parameters. After one year of implementation of the EA, there were no differences in improvement in resident survival, cognition, nutritional status, functional status, infection rates, or cost of care between the EA facility and the traditional model nursing facility. In contrast, Bergman-Evans (2004) also compared an EA facility and traditional model nursing facility by examining quality of life outcomes and found that after one year of implementing the EA model, the residents in the EA facility exhibited less boredom and helplessness than residents in the traditional model facility.

A study of one nursing facility implementing the EA for two years found significant positive changes in resident depression scores and family satisfaction, but there were many organizational difficulties that occurred including a new administration that did not support the principles of the Eden Alternative (Robinson & Rosher, 2006; Rosher & Robinson, 2005). This

organizational turmoil affected staff satisfaction and turnover; staff decision making, a key principle for the EA, was not honored.

An intriguing ethnographic study was reviewed in which the researcher functioned as a nursing assistant in one facility that had committed to the EA (Lopez, 2006). The researcher recorded observations in field notes. While the desire of the staff and administration in the facility was to provide person-centered care, the realities of resource limitations, especially staffing, seriously impeded the implementation of a culture change philosophy in the organization as well as the implementation of culture change practices. Resource limitations were noted to cause nursing assistants to break important care rules and cause management to implement punitive personnel policies. The researcher argued that poor nursing home care cannot be solved by culture change; it requires a substantial improvement in staffing levels that are tied to Medicare and Medicaid reimbursement rates.

Three dissertations examined the impact of the EA on resident outcomes.¹ A study comparing an EA facility with a traditional model nursing facility found that resident cognition, loneliness, and depression worsened in the traditional model facility (Parsons, 2004). Another study using a case study approach found that there were no changes in the clinical needs and cognitive and functional status of the residents or the quality in an EA nursing facility. However, interviews with residents, staff and family members found that they perceived residents' lives had improved when the plagues of loneliness, helplessness and boredom were addressed (Kruschke, 2006). Parnell (2005) conducted focus groups with residents in two EA nursing facilities to explore loneliness, helplessness and boredom from the perspectives of the residents. While the study did not examine if these three nursing home plagues were diminished in EA

¹ Only the abstracts of these dissertations were reviewed thus limiting a critical review of the design, methods, and findings of the studies.

facilities, it found that residents experienced these plagues as losses from adapting to institutional living. A fourth dissertation used participatory action research to determine if residents, families, and staff in four facilities embarking on adoption of the EA model were in agreement about cultural changes needed to improve quality of care and quality of life. While there was agreement, there were differing views of the sequence of implementation of these changes (Rose, 2006).

The evidence supporting the impact that the EA model of care has on staff, resident, family and organizational outcomes is weak. The studies are limited by their design, sample size, measures, and realities of conducting research in a setting where there are no controls.

Green House model. The Green House model has been characterized as a “radical redesign of nursing homes (Rabig, Thomas, Kane, Cutler, & McAlilly, 2006). This model requires a transformation of the physical environment to provide a home in which the typical activities of a household can be carried out (e.g. cooking food, doing laundry). The full intention of the Green House model is to give primacy to quality of life outcomes, but without giving up responsibility for the clinical outcomes and associated clinical care. Rabig’s (2007) dissertation study examined residents’ perceptions of changes in their quality of life after moving to a Green House from a traditional nursing facility. The case study methodology involved 10 residents/cases and interviews were conducted one month prior to relocation and three months after relocation to the Green House. Using a questionnaire structured around 11 domains of quality of life (Kane et al., 2003), residents perceived better quality of life.

The Green House model was evaluated using a longitudinal quasi-experimental design (Kane, Lum, Cutler, Degenholtz, & Yu, 2007). Over two years, resident quality of life, emotional well-being, satisfaction, self reported health and functional status were compared

among three groups of residents: those residing in the Green Houses; a control nursing facility that was on the same grounds as the Green Houses and had the same administrative staff, and another control facility that was in the same region. Residents living in the Green Houses reported greater quality of life on 7 of the 11 domains. There was no difference between the three groups of residents on self reported health, ADLs, and IADLs. Residents in the Green Houses reported significantly higher satisfaction than residents in the control facilities. Quality of care indicators were equal to or better for 19 of the 20 quality indicators.

The limitations in evaluating house hold models of care, such as the Green Houses, is that there are so few of them. The Robert Wood Johnson Foundation is pursuing a rapid replication of the Green House model on a national level with the goal of developing Green House homes with 50 or more organizations throughout the U.S. (NCB Capital Impact, 2008).

Wellspring Model. Wellspring is a confederation of 11 free standing not-for-profit nursing homes founded in 1994. The intervention offered through Wellspring is the consultation and education services of a geriatric nurse practitioner, a shared program of staff education, sharing comparative data on resident outcomes, and empowering facility specific multidisciplinary teams to implement interventions to improve the quality of care for residents. Underlying the intervention to improve the quality of care for residents is a philosophy of creating a work environment for employees that enables them to make decisions about their work and care for residents and fosters a team approach. Thus, the component of Wellspring that is consistent with nursing home culture change is empowerment of staff.

The evaluation of Wellspring involved observations at each facility and large Wellspring events (i.e. staff training), and semi-structured interviews with staff, administrators, residents and families (Stone et al, 2002). Wellspring facilities were compared to control facilities using data

from nursing home surveys, turnover and retention, quality of care indicators, and financial data. There were many limitations to the study design acknowledged by the researchers. In the context of those limitations, the findings of the evaluation were that staff turnover rates were lower and increased more slowly than the comparison facilities, performance on state surveys improved, costs were lower than comparison facilities, and observational and interview results indicated that the quality of life for residents as well as their interaction with staff was improved. Wellspring's innovative staff training model and the use of a geriatric nurse practitioner as an internal expert to reinforce evidence-based care practices were effective in supporting clinical and culture change practices. The researchers noted that it was extremely important that culture change have the full commitment of top administrative staff.

Resident-directed models of care. Two studies evaluated a resident centered care model that was implemented in nursing facilities of a large for-profit nursing home corporation. Scalzi, Evans, and Hostvedt (2006) examined the barriers and enablers of changing organizational culture in three facilities that were part of this corporation and in the same regional area. Semi-structured interviews were conducted with groups of staff according to their category (e.g. leadership staff, professional staff, caregiver staff) and family members. The major barriers included the exclusion of nurses from culture-change training and activities, staff perception of competing goals (e.g. compliance with regulation vs. choice for residents), and high turnover of administrators. Enablers of culture change included having "change champions" to motivate staff and implement changes, management style that was congruent with the values of culture change, and participation of residents and family in decision making.

Grant (2008) compared seven facilities implementing the resident centered care (RCC) model with 10 non-resident centered care (non-RCC) facilities. The 17 facilities were part of the

same corporation and located in two states. A base-line and post-test design were used with site visits to the facilities and mailed surveys to the staff at baseline, 6 months and 12 months. Mailed surveys were completed by 812 staff and 950 residents were interviewed. Secondary data about the financial performance of the facilities were obtained.

The Culture Change Assessment Tool was used to interview administrators to assess the extent that culture change practices were implemented at each facility. The results indicated that none of the RCC facilities were implementing practices that categorized them in the neighborhood model (Stage 3). However, they were able to implement culture change practices associated with a movement from the institutional stage (Stage 1) to a transformational stage (Stage 2).

The 48-item Culture Change Scale (CCS), completed by staff, found that RCC facilities improved over time in terms of system-wide culture change, resident choice, organizational design, and overall CCS scores. The non-RCC facilities did not show improvement. Selection bias was noted by the researcher as a factor that contributed to the differences between the RCC and non-RCC facilities, even though facilities were matched on a number of variables at baseline. Staff also completed a satisfaction survey to evaluate their satisfaction with training, supervision, management and the work environment. Similarly, staff in RCC facilities had higher satisfaction than staff in non-RCC facilities.

Residents were interviewed using 30 questions to assess resident choice/autonomy and dignity. Differences in scores between RCC and non-RCC facilities were statistically significant at 12 months for resident choice/autonomy. The researchers noted a potential contamination effect in that the facilities were in close geographic proximity to each other.

Although the researchers attributed financial differences between the two types of facilities to selection bias, the RCC facilities had higher profits per resident day and higher earnings before interest, taxes, depreciation, and amortization (EBITDA) per resident day than did non-RCC facilities. While there were some limitations to the design of this study resulting in issues such as selection bias and a contamination effect, the evidence suggests that implementing a resident centered care approach in a nursing facility has a positive impact on resident, staff and organizational outcomes.

Elliot (2007) compared nursing facilities participating in the Pioneer Network with non-participating facilities and examined differences in quality of care and financial outcomes. Facilities participating in the Pioneer Network demonstrated better quality of care outcomes as well as better profitability.

In summary, the evidence demonstrating the impact of nursing home culture change models is weak, at best. However, the studies with larger samples and quasi-experimental designs (Grant, 2008; Kane et al, 2007; Elliot, 2007) all demonstrated positive improvements in resident, staff and organizational outcomes.

Nurses and Nursing Home Culture Change

The literature on the role of nursing and nursing home culture change is almost non-existent. There is a general perception among non-nurse proponents of NHCC that nurses are potential or actual barriers to resident directed care. A lesson learned in the Wellspring model was that the commitment of staff nurses to work with and mentor nursing assistants was one of the most important determinants of success in implementing and sustaining quality clinical practices (Stone et al, 2002). Scalzi et al (2006) found that the greatest barrier to implementing NHCC was excluding nurses from culture change activities.

The Green House model initially separated the clinical support team (e.g. nurses, social workers, dieticians) from the Shahbazim (certified nursing assistants functioning as universal workers and supervised by a guide/administrator). The clinical support team acts as a resource to the elders and Shahbazim, but is expected to behave as guests in a private home (Rabig et al, 2006). The nurse has no supervisory role to the Shahbazim except in treatment issues as required by nursing home regulation. This organizational structure initially met with resistance from the professional staff resulting in strategies to engage the professional staff in the new organizational philosophy and practices and resulting in improved and respectful working relationships. However, the organizational structure and reporting relationships did not change (Rabig, et al, 2006).

Bellot's (2007) dissertation study surveyed licensed nurses in Wellspring facilities and found three significant issues identified by nurses related to the culture change initiative: 1) confusion over the role of the licensed nurse in culture change; 2) conflict over the integration of a traditional care model to a resident-centered care model, and 3) reconciling individualized care with quality nursing care. Bellot noted the perception by administrators that nurses are resistant to NHCC may be related to the struggled licensed nurses experience in understanding their roles in the change process toward resident-directed care.

Mueller (2007) developed a questionnaire to examine the role and responsibilities of directors of nursing and nursing home culture change. This 57-item questionnaire was developed from the literature, the LEAP curriculum (Mather Lifeways, 2008), and interviews with directors of nursing in nursing homes deeply embedded in NHCC. The questionnaire was piloted with 20 directors of nursing from facilities that provided care and services that were resident-directed and in which culture change was deeply embedded in the organization and 13 directors

of nursing from traditional model nursing facilities. There was no difference in the scores from the instrument between the two groups. However, there were specific role responsibilities that were rated higher by directors of nursing in NHCC organizations that were consistent with empowerment of staff: 1) effectively communicating information; 2) assisting staff with decision making; 3) enabling care teams to make decisions; 4) building consensus; 5) fostering a culture of respect and team behaviors. Directors of nursing in traditional nursing homes rated responsibilities higher than NHCC directors of nursing that were consistent with moving from a traditional model of care to a resident-centered model of care (e.g. identifying and addressing barriers to resident directed care; supporting and clarifying roles of team members). The questionnaire needs further development to discriminate roles of directors of nursing in NHCC organizations. Social desirability may have been operating as a potential reason there was no difference between the two groups of directors of nursing.

The role and associated responsibilities of the licensed nurse, particularly the registered nurse and the director of nursing, in NHCC is an underdeveloped area of research. Given that that the “heart and soul” of nursing is that the patient/resident is the central focus, NHCC values and practices are truly consistent with the practice of nursing. Nurses have viewed the nurse-patient relationship as the foundation of their practice (Koloroutis, 2004). Compassionate, person-centered quality nursing care requires “clinical proficiency based on a sound knowledge based an understanding of the theories and science of practice” (p. 11).

Recommendations

The diffusion of innovation to transform U.S. nursing homes from an institutional, regulatory directed organization to a place where residents can live and thrive in an environment that is homelike and promotes a life that is continuous with their past and living preferences/

routines has been slow. Rigorous study of NHCC is in its infancy, but the research to date is providing beginning evidence that residents' quality of life is better, staff are satisfied with their work and the care they provide residents, and organizations are not experiencing negative financial outcomes. There remain significant questions about the role and responsibilities of licensed nurses in organizations that are integrating the NHCC philosophy and associated care practices. Rahman and Schnelle (2008) proposed a research agenda to strengthen the culture change movement's scientific agenda and noted that the culture change movement has spread in advance of a solid research based to support its claims. However, the transformation of nursing homes is too important to be slowed down for a research agenda. The current living situation of the great majority of residents in nursing homes is unacceptable and must be attended to. Researchers are encouraged to also see the urgency in strengthening the empirical base for NHCC and act accordingly.

References

- Bellot, J. (2007). *A descriptive study of nursing home organizational culture, work environment and culture change from the perspective of licensed nurses*. Unpublished PhD, University of Pennsylvania, (200982065)
- Bergman-Evans, B. (2004). Beyond the basics. Effects of the Eden Alternative model on quality of life issues. *Journal of Gerontological Nursing*, 30(6), 27-34.
- Coleman, M. T., Looney, S., O'Brien, J., Ziegler, C., Pastorino, C. A., & Turner, C. (2002). The Eden Alternative: Findings after 1 year of implementation. *Journals of Gerontology Series A-Biological Sciences & Medical Sciences*, 57(7), M422-7.
- Colorado Foundation for Medical Care. (2008). *Measuring culture change*. Retrieved September 12, 2008 from http://www.cfmc.org/nh/nh_mcc.htm
- Colorado Foundation for Medical Care. (August 7, 2006). *Measuring culture change: A literature review* No. PM-411-114 CO 2006. Denver, CO: CFMC.
- Doty, M., Koren, M., & Sturla, E. (May, 2008). *Culture change in nursing homes: How far have we come?* Findings from the Commonwealth Fund: 2007 National Survey of Nursing Homes. New York: Commonwealth Fund.
- Elliot, A. (2007). *An analysis of participation, quality of care and efficiency outcomes of an inter-organizational network of nursing homes*. Unpublished PhD, The Ohio State University,

- Grant, L. (February, 2008). *Culture change in a for-profit nursing home chain: An evaluation*
Commonwealth Fund, pub. no. 1099. New York: Commonwealth Fund.
- Kane, R. A., Kling, K. C., Bershadsky, B., Kane, R. L., Giles, K., Degenholtz, H., et al. (2003).
Quality of life measures for nursing home residents. *Journals of Gerontology Series A-
Biological Sciences & Medical Sciences*, 58A, M240-M248.
- Kane, R. A., Lum, T. Y., Cutler, L. J., Degenholtz, H. B., & Yu, T. C. (2007). Resident outcomes
in small-house nursing homes: A longitudinal evaluation of the initial Green House
program. *Journal of the American Geriatrics Society*, 55(6), 832-839.
- Koloroutis, M. E. (Ed.). (2004). *Relationship-based care: A model for transforming practice* (1st
ed.). Minneapolis, MN: Creative Health Care Management.
- Kruschke, C. (2006). *The Eden Alternative and rosebud nursing center: Does the Eden
Alternative improve resident outcomes in a long-term care setting?* Unpublished EdD,
Cardinal Stritch University, (3240833)
- Lopez, S. (2006). Culture change management in long-term care: A shop-floor view. *Politics and
Society*, 34(1), 55-79.
- Mather Lifeways. (2008). *LEAP: Learn, empower, achieve, produce*. Retrieved September 20,
2008 from http://www.matherlifeways.com/re_leap.asp
- Mueller, C. (2007). Nursing leadership and nursing home culture change. *60th Annual Scientific
Meeting*, San Francisco, CA. , 47

NCB Capital Impact. (2008). *The Green House project*. Retrieved September 12, 2008 from <http://www.ncbcapitalimpact.org/default.aspx?id=146>

Parnell, R. (2005). *Perceived loneliness, helplessness, and boredom of elderly residents in Eden nursing homes*. Unpublished DSN, University of Alabama at Birmingham, (3182089)

Parsons, M. E. (2004). *The impact of the Eden Alternative on quality of life in nursing home residents*. Unpublished PhD, University of Nebraska, (3126962)

Pioneer Network. (2008). Retrieved September 12, 2008 from <http://www.pioneernetwork.net/who-we-are/>

Port, C., Sloane, P., & Zimmerman, S. (March, 2005). *Pragmatic innovations in long-term care: Developing a research agenda*. University of North Carolina-Chapel Hill, NC: Cecil B. Sheps Center for Health Services Research.

Rabig, J. (2007). *The elders of the Green Houses: In their words*. Unpublished PhD, Union Institute and University, (3273541)

Rabig, J., Thomas, W., Kane, R. A., Cutler, L. J., & McAlilly, S. (2006). Radical redesign of nursing homes: Applying the Green House concept in Tupelo, Mississippi. *Gerontologist*, 46(4), 533-539.

Rahman, A. N., & Schnelle, J. F. (2008). The nursing home culture-change movement: Recent past, present, and future directions for research. *Gerontologist*, 48(2), 142-148.

- Robinson, S. B., & Rosher, R. B. (2006). Tangling with the barriers to culture change: Creating a resident-centered nursing home environment. *Journal of Gerontological Nursing*, 32(10), 19-25.
- Rose, L. (2006). *Promoting alignment for culture change in residential care using Eden Alternative philosophy*. Unpublished MA, Royal Roads University, (MR20626)
- Rosher, R. B., & Robinson, S. (2005). Impact of the Eden Alternative on family satisfaction. *Journal of the American Medical Directors Association*, 6(3), 189-193.
- 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.
- Schoeneman, K., & Bowman, C. (April 21, 2006). *Development of the artifacts of culture change tool*, No. HHSM-500-2005-00076P. Baltimore, MD: Centers for Medicare and Medicaid Services.
- Stone, R., Reinhard, S., Bowers, B., Zimmerman, D., Phillips, C., Hawes, C., et al. (August, 2002). *Evaluation of the wellspring model for improving nursing home quality*, No. 550. New York: Commonwealth Fund.
- Thomas, W. (1994). *The Eden Alternative: Nature, hope and nursing homes*. Sherburne, NY: Eden Alternative Foundation.
- White, D. L., Newton-Curtis, L., & Lyons, K. (2008). Development and initial testing of a measure of person-directed care. *The Gerontologist*, 48(1), 114-123.