Development of
the Artifacts of Culture Change Tool

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Karen Schoeneman, Project Officer

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Contractor
Carmen S. Bowman
Edu-Catering, LLP

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Special Thanks
The opportunity to co-develop this tool with Karen Schoeneman of CMS has been exciting In the course of the project, Karen and I became partners truly developing the Artifacts of Culture Change tool and authoring this report in tandem. This work fills a gap in data collection within the culture change movement thus far. It offers a means for innovative providers to capture the real changes they have made after making a conscious commitment to resident-directed care. To date, what has been collected has largely consisted of clinical data, satisfaction measures and assessment of organizational stages. I would like to thank Karen Schoeneman for her partnership, insight and wise counsel in the writing of this report.

Carmen S. Bowman
Edu-Catering, LLP

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Carmen S. Bowman, MHS, ACC is the owner of the consulting business, Edu-Catering: Catering Education for Compliance and Culture Change in LTC, which provides culture change consultation to nursing homes. She is a nationally-recognized expert in culture change, and is a frequently invited speaker at national industry conferences. She has also made several presentations at Pioneer Network conferences. Carmen was a Colorado state surveyor for nine years, surveying nursing homes, assisted living residences and adult day programs. She is a former policy analyst with CMS where she taught the national CMS Basic Surveyor Training Course. She presented the surveyor segment of the 2000 CMS satellite broadcast "Surveying the Activities Requirements in Nursing Homes" and the 2002 CMS satellite broadcast "Innovations in Quality of Life - the Pioneer Network." The first certified activity professional to become a state surveyor and work at the federal level, Carmen served on the CMS Activities Panel rewriting the interpretive guidelines for tags 248 and 249 and on the CMS Activities RAP Workgroup. Carmen holds a Master's degree in Healthcare Systems and Certificate in Gerontology from Denver University. Carmen is a Certified Validation Worker, Certified Eden Associate and Eden Mentor. In 2002, she co-founded the Colorado Culture Change Coalition and serves on its advisory board. She recently authored five culture change workbooks for Action Pact on Coalition Building, Living Life to the Fullest, Quality of Life Regulations, Regulatory Support for Culture Change and Person-directed Care Planning. Currently serving as a contractor with CMS, she is assisting to develop a culture change tool designed to capture quality of life enhancements for residents and staff.

Karen C. Schoeneman, MPA is a senior policy analyst and project officer with the CMS Division of Nursing Homes, which has the responsibility for survey and certification of nursing homes. At CMS, Karen has worked with the nursing home survey process for the past 16 years, specializing in quality of life. She has trained over 5000 of the surveyors in quality of life, in their Basic training class. Karen is a nationally recognized expert in culture change, and is the CMS lead for this topic in the Survey and Certification Group. She was one of the small group of innovators who began meeting in 1997 to form the culture change network, and its gathering place, the Pioneer Network, and she remains active in the movement, speaking on how the long term care federal regulations support culture change. She has executive-produced several CMS live satellite broadcasts including 2 shows on the activities requirements, the Pioneer Network, a 2-part show on person-centered dementia care and others. She led the development of the new (2006) revision of the activities interpretive guidelines, and co-led the development of a new CMS Psychosocial Outcome Severity Guide, as well as a 2006 satellite broadcast on this topic. She is a member of the Board of the Institute for Caregiver Education, a culture-change training organization based in Pennsylvania. Prior to coming to CMS, she served as a social worker in long term care facilities in Pennsylvania for 17 years. She is a Penn State grad, with a master's degree in public administration.

Contact information:
carmen@edu-catering.com
303-981-7228

Contact information
karen.schoeneman@cms.hhs.gov
410-786-6855

ARTIFACTS OF CULTURE CHANGE DEVELOPMENT

The movement sweeping the country called culture change represents serious reform of institutional culture to one that gives voice like never before to the people living and working in such a culture. Pioneering leaders have adopted principles and worked toward making actual, concrete changes to their policies and practices such as how they manage staff, how they honor those in their care, and environmental changes to create home. Culture change is not a singular item, it is multifaceted with homes deciding to make changes that may be different from other homes. The beauty of becoming more person-centered and less institutional is that it is based on what the persons living and working in each home decide.

> *Envisioning the Future*
>
> *"I'd rather die than live in a nursing home."*
>
> *Let's change that sentiment uttered by so many at the slightest mention of the words "nursing home." As we know, culture change is a journey: there are benchmarks, steps backward, and steps forward. People contribute individual skills, talents, and ideas, while teams, communities, and organizations work together to get there.* (Misiorski, 2004).

Culture is comprised of beliefs and values, basic underlying assumptions, and behaviors and artifacts. In any culture, artifacts are the physical evidences that can be readily seen by an observer: structures for living and working, objects for daily use, rituals and activities, dress, and ways in which people interact (Shein, 1992). The presence of artifacts distinguishes facilities that have progressed in making changes from those that are still in the thinking stages and those that have not begun the culture change journey..

Turnover is perhaps the most researched outcome of culture change. Results thus far, reported by both researchers and providers, is that once culture change is underway and a home has made changes to how it operates, great declines in turnover take place. Homes that have been innovators for many years find that not only is their turnover relatively low, but that the longevity of their nursing staff and their administrator is quite long compared to other homes. (Refer to Outcomes section of this report.)

Recent research shows that implementing culture changes can also affect turnover within a short amount of time. 51 homes took part in the QIO Improving Nursing Home Culture pilot study from August 2004 to October 2005. The baseline quarter of August-October 2004 was compared with the re-measurement quarter of March-May 2005. The homes experienced a 5.6% decline in their annualized turnover rates from 55.2% to 49.6%. Besides showing that turnover can be affected in such a short period of time, the pilot "has proven that transformational changes within nursing homes that will positively affect the lives of residents and staff can take place in a very short span of time (Quality Partners of RI, 2005)."

Purpose

The Artifacts of Culture Change tool fills the purpose of collecting the major concrete changes homes have made to care and workplace practices, policies and schedules, increased resident autonomy, and improved environment. It results from study of what providers and researchers have deemed significant things that are changed and are different in culture changing homes compared to other homes.

There are many entities, including researchers, provider organizations, nursing home chains, and CMS, who desire to compare culture changing homes to all other homes on variables such as deficiencies, Quality Measures/Quality Indicators, turnover, etc. to determine if changing culture has any positive effects. But in order to make these comparisons, it is necessary to first measure the culture changes themselves, in order to array culture changing homes on a continuum of actual changes they have accomplished, rather than lumping together as "culture change homes" all homes that indicate they are on the journey of culture change. Because of this need, the Artifacts of Culture Change tool was developed to collect concrete artifacts of the culture change process that a home has and which they do not have.. The items are not research-validated measures nor are they indicators of something else. They are also purposely not based on resident or staff interviews, thus making collectability simpler. Interview-based tools tend to capture what changes people desire and/or the degree of approval/satisfaction of residents and staff with the home, while the Artifacts tool seeks to directly capture the actual concrete changes themselves. As artifacts of a changed culture, the items on this tool are becoming of more interest to the general public as well since research reveals these are practices and things consumers want, e.g., private rooms versus shared and greater levels of autonomy.

Other Culture Change Tools

There are a few tools developed thus far to distinguish between homes on a culture change journey and homes that are not.

Some measurement tools that are currently available and in use are:

- The Stages Tool developed by Les Grant and LaVrene Norton is a stage model of culture change in nursing facilities. This tool assesses the degree of culture change from an organizational development perspective in the four stages of Stage I - Institutional model, Stage II - Transformational model, Stage III - Neighborhood model and Stage IV - Household model describing the organizational status of Decision Making, Staff Roles, Physical Environment, Organizational Design and Leadership Practices in each.
- Culture Change Staging Tool is a web-based questionnaire that assesses 12 key culture change domains determining the highest model stage (of the four stages of the Grant and Norton Stages Tool) based on a facility's responses.
- Eden Warmth Surveys. Questionnaires are used with Elders, Families and Employees to rate from Strongly Agree to Strongly Disagree items such as participation in decision-making, choices and work has meaning and purpose.

- The Culture Change Indicators Survey developed by the Institute for Caregiver Education indicates to what degree there is a commitment to culture change. For the domains of Environment, Organizational Procedures, Resident Involvement and Staff Empowerment, indicators such as consistent staff assignments, involving residents in the day-to-day operations of the home, care planning in the first person and kitchen accessibility 24/7 are rated by staff on a five point scale from Not Even Considered to Fully Implemented.
- Some researchers have developed tools specific to their studies such as the QIO Person Centered Care Pilot and the Colorado QIO culture change study (CFMC, 2006), but none concentrates solely on concrete changes.

The Artifacts of Culture Change tool is not intended to replace any available tools, only to add to them an instrument to collect actual policy and building changes that many culture change innovators are making. The change process represents change in heart, mind and attitude. The change process includes vision and leadership, but these elements are not visible. What results from these non-visible elements are concrete changes facilities have made, and are in the process of making, which demonstrate the principles behind them. These concrete changes are the markers and artifacts of the change of mind that occurs in a journey toward home (Schoeneman, 2006).

Artifacts of Culture Change Tool Development

This tool was first conceived in 2001 by Karen Schoeneman and Mary Pratt of CMS, who were co-project officers of the CMS Quality of Life study, "Measures, Indicators, and Improvement of Quality of Life in Nursing Homes" led by Dr. Rosalie Kane of the University of Minnesota. The tool was conceived as an additional proxy for quality of life, which had no set of "indicators." Schoeneman and Pratt completed an initial draft of the tool and tested it in a volunteer facility in Pennsylvania. Following this test, the tool was edited by co-developers Karen Schoeneman and Carmen Bowman while Ms. Bowman was working at CMS in 2001. These items were refined through collaboration with Dr. Rosalie A. Kane of the University of Minnesota, who conducted a larger test of many of the items for collection feasibility and clarity, as part of the the Quality of Life study (Chapter 9). Results of Dr. Kane's work were studied, and development continued through the award of a contract by CMS to Carmen S. Bowman of Edu-Catering in 2005. Karen Schoeneman and Carmen Bowman then co-developed and completed the Artifacts of Culture Change tool. All items represent actual changes observed, read or heard of by the developers and highlighted by those who implemented them as important changes and effective components of a changed culture.

Four focus facilities were recruited to complete the tool and provide feedback as to the collectability and instructions for each item, and the items in general. Since we had a need to select homes that had many of the tool items, we selected three nationally prominent culture change leading homes that the authors had personally visited and verified the concrete results of their culture change efforts, and the fourth as an Eden facility and on a culture change journey but small, independently owned.

The focus facilities and administrators/CEOs who worked with the tool were:

- Ken Arneson, NHA Evergreen Retirement Community Oshkosh, WI
- Sister Pauline Brecanier Teresian House, Abany NY
- Garth Brokaw, CEO Fairport Baptist Home Fairport, NY
- Donna Zunker, NHA GranCare Nursing Center, Green Bay, WI

Five researchers volunteered to be commenters on the value of the items, clarity of language and the structure and scoring of the tool:

- Joe Angelelli, PhD, Pioneer Network Director of Networking and Development. Prior to joining the Pioneer Network, Dr. Angelelli was a Penn State professor of Long-term Care Management and Research Methods.
- Maggie Calkins, PhD, IDEAS Institute and SAGE (Society for the Advancement of Gerontological Environments). Maggie is a renowned design expert on the long-term care environment and SAGE board member.
- Les Grant, PhD, University of Minnesota. Dr. Grant developed the Culture Change Staging Tool with LaVrene Norton that has been used by the Beverly Corporation and My Innerview. Dr. Grant has conducted research on some of the earliest pioneering homes such as Big Fork Valley.
- Yael Harris, PhD, CMS, OCSQ, Quality Improvement Organization Culture Change Initiative Lead
- Vivian Tellis-Nayak, PhD, My InnerView. Dr. Tellis-Nayak is known for extensive research done on the CMS-672 Resident Census and Conditions collection tool used in each standard survey and is the Vice President of Research at My Innerview.

The invited researchers were selected as commenters for their expertise in applying research methods to culture change practices.

Analysis of both focus facilities' and researchers' comments resulted in some items being deleted and others added or reworded. From the suggestion of a researcher, a scoring system was added to the tool. Thus, a baseline for each facility is a score of zero, having none of the artifacts of culture change, and a benchmark becomes the total possible score for a home that has achieved a perfect score, having them all.

Artifact Categories and the HATCh Model

The HATCh - Holistic Approach to Transformational Change – model was successfully used by the QIO Person Centered Care pilot (Quality Partners, 2005) and currently as part of the 8th scope of work with nursing homes in all states. The HATCh model domains were selected to categorize the Artifacts of Culture Change so as to be consistent with a model already endorsed by CMS and familiar to many homes across the country.

The HATCh model uses six domains that lead to personal, organizational, community, and systems changes, all of which are necessary for a transformation from institutional to individual care. The HATCh model is also depicted as a diagram to show the inter-relatedness of the domains. The center domains are the overlapping areas of Workplace

Practice, Care Practice, and Environment. Leadership surrounds them. Each nursing home is encircled by Family and Community, and lastly by the domain of Regulations and Government. The QIO pilot hypothesized that specific changes within these domains could affect the movement from institutional to individualized care:

> "Transformational change requires first a change in the Domain of Workplace Practice. We based our curriculum in this domain on the research of the late Susan Eaton, who identified five key management practices that made the difference between high and low turnover for nursing homes in the same labor market. In the Domain of Care Practice, we drew on the work of Joanne Rader who has transformed practice in our field, first with her work on individualized dementia care, then in rethinking the use of restraints, and most recently in the area of bathing practices…. Judith Carboni's 1987 work on home and homelessness among nursing home residents provided the framework for the Domain of the Environment…. Her finding that home is where a 'fluid, intimate, dynamic relationship exists between person and place' provided nursing homes a yardstick for their efforts in this domain. These domains all operate within the Domain of Leadership. In addition to Eaton, we relied on the work of Kouzes and Posner and Jim Collins. Their field guides to leadership facilitated our transfer of knowledge into practice…. A dynamic shift in relationships with family members, close friends, community organizations and volunteers is captured in the Domain of Family and Community. Lori Todd and her staff from Loomis House, and Carolyn Blanks from the Massachusetts Extended Care Federation provided powerful examples to support efforts in this domain. The Domain of Regulation and Government grounds HATCh in the requirements of OBRA'87, that each facility 'must provide care and services to attain or maintain the highest practicable physical, mental, and psychosocial well-being of each resident. (Quality Partners, 2005).

The HATCh Domain of Care Practice explores ways to restore to elders as much control, choice, and normalcy as possible. The Domain of Environment seeks to create a meaningful relationship between the person and her/his living environment. The Domain of Family and Community seeks to embrace and draw family members into a shared partnership of supporting and caring for the resident. Domain of Workplace Practice entails management practices that affect a culture of retention. The Domain of Leadership recognizes it takes the willingness to change policies, systems and practices and the Domain of Regulation/Government includes the regulatory piece and connection.

Because the Artifacts of Culture Change tool represents concrete changes, the tool's leadership section is small since much of leadership is intrinsic and hard to capture as concrete items, and the HATCh Domain of Regulation is not applicable for this tool, since it deals with outcomes in terms of survey results, rather than concrete changes homes have made.

ARTIFACTS OF CULTURE CHANGE CATEGORIES AND ITEMS

Care Practice Artifacts

Dining has traditionally been one of the most institutional practices of nursing home life and work - telling people when and what they will eat. And it is the one event that happens the most every day. Offering more common dining practices such as restaurant, family and buffet styles and opening up dining times has had many positive outcomes such as weight gain, savings in unwasted food, and increased resident choice as experienced by Providence Mt. St. Vincent (Ronch and Weiner, 2003) and Crestview (Rantz and Flesner, 2004). Many homes have also transitioned to having the kitchen open and/or pantries and snack bars where food is available 24 hours a day, often pointing out we all have "refrigerator rights" at home. Another source documents that as residents are able to eat food they desire, weight loss declines (Rantz and Flesner, 2004). Additionally, homes have realized the value of baking in resident living areas. Aromas increase appetite, and residents eat better, as already experienced by the Green Houses (The Green House Project DVD, 2005).

One intervention that is becoming popular in culture changing homes is aromatherapy, which is being used as either decorative felt pads attached to clothing or in small diffusers, when a whole room affect is desired. An example of the use of specific aromatherapy formulas occurred in 2001, when Patricia Bishop, a nurse at the Mattie C. Hall Nursing Home in Aiken, SC contracted with an aromatherapist to develop a set of oils for appetite stimulation and relief from sun-downing, among other issues. The home conducted a small study using the oils and had excellent results. From October, 2001 to September 2002, in this 44 resident home, the rate of residents losing 3 or more pounds per month dropped from 10 to 2 and the rate of residents using psychotropic medications dropped from 9 to 2. From September 2003 to March 2006 Mattie C. Hall reports zero residents with weight loss and zero with psychotropic drugs. "One resident diagnosed with dementia, constantly yelled out without apparent reason. This resident's behavior was unresponsive to several psychotropic medications. …. The staff applied two drops of [a selected blend of oils] on a towel and draped the towel over her shoulders like a shawl. The resident sniffed, sniffed again, and then sniffed deeply. She smiled, stopped yelling and sat down in a rocking chair where she slept for approximately thirty minutes. This home won South Carolina's Best Practice Award in 2003 for their aromatherapy program. Two university-based research studies are currently in process at East Carolina University and Texas State University, regarding this particular set of aromatherapy blends, which are now in use in over 300 homes, nationwide and 6 in Great Britain. One home, the Lutheran Home in Frankenmuth, MI reports success using an appetite stimulating oil blend: "All 10 of our weight loss residents have either gained or maintained their weights. One resident was found to be more alert and is now conversing with others. She gained 7.3 pounds in just 8 weeks!" (Farnell, 2006)

More and more homes are also recognizing the value of massage and offering it to residents. It has been found that hand massage and gentle touch reduce anxiety (Buschmann, 1999) and agitation (Snyder, 1995).

The prevalence of animals in nursing homes is growing. As documented by the Eden Alternative, among many other benefits, animals help eliminate loneliness, depression, and medical ailments, increase socialization and motivate residents to become more active (Haleigh's Almanac, 2002). In the Quality of Life study, of the 1,988 residents in 40 homes, only 2% had a dog, cat or other pet (Cutler et al, 2006).

Just as people did prior to living in a nursing home, they should have the opportunity to follow their personal routine. The QIO 2004-2005 culture change pilot report summarized this as follows, "People now wake up, spend their days, and go to bed according to their own routines, and as they are restored to their own rhythms, they are thriving. So are those who care for them. As work is reorganized to follow the pace of each resident, instead of a rigid institutional routine, workers are able to fulfill their intrinsic motivation to care for others, and to experience respect and care from their organizations" (Quality Partners of Rhode Island, 2005).

Bathing without a Battle concepts comprise another avenue to honor each person, and there is much documented evidence, including video scenarios, of the value of individualized techniques. It no longer is acceptable to force people to bathe if it indeed causes them stress or "a battle." Evidence also shows that such "battles" are not only distressing for residents but for staff as well and lead to burn out (Rader et al, 2002)..

A common care practice change that culture changing homes are beginning to make is a move from the medical model care plan to care plans in the voice of the resident. Homes that utilize this new "I" format care planning, write about the resident's issues, problems, desires, and goals as if the resident is directly reporting what they need and want. Thus, the medical model "problem" statement that the resident "wanders, is transformed into "I like to walk." Users of this new "I" format report it is a "powerful" tool for assisting staff in better knowing and understanding residents (Tschop, 2003). And it is a method that puts the resident's wishes, rather than staff's decisions, into the driver's seat.

Environment Artifacts

The most dramatic change in environment being made by culture change innovators is the physical renovation from staff-centered, long, impersonal and noisy hallways to small, intimate, resident-centered households and the use of household designs in new construction The physical design of a household is a small home setting with a full kitchen, dining room, living room and work area for a small number of residents and their dedicated staff, with the institutional nurses' station eliminated (Calkins, 2002).

A household model naturally creates a "family life" where staff can support resident choices and decisions about their daily life such as meals and activities. For staff, tools and supplies are decentralized helping them to give more efficient care. Typical of household models, staff are cross-trained, roles are blended and staff consistently work with the same residents. "Residents are walking more and they can sleep in if they want to. We also enjoy group planning of special events and home cooking and snacks" as explained by a certified household resident assistant of Fairport Baptist Home. "Perhaps

the most dramatic news has been residents' discovery that they have a voice. This has always been true – but in a household of no more than 12 residents, it is much easier for one's voice to be heard!"(Fairport Homes News, 2002.) Because the household design and model affects life and work globally as an advanced stage of culture change, it is given an advanced level of points in this tool.

The neighborhood model to some, and according to the Stages Tool, reflects a step along the way of moving into a household model. Features of this model include dining on the neighborhood, consistent staff, and practices such as Community meetings without structural changes. Neighborhoods are also referred to in the culture change movement as clusters of households and include common community areas reflective of a neighborhood in the community at large such as libraries, beauty/barber shops, community rooms, courtyards, cafes and snack bars, and shared staff spaces (Calkins, 2003). Neighborhoods are not used in the Artifacts tool so as to not cause confusion and because they include no structure change. The other aspects of the neighborhood such as consistent staff assignment and dining in the neighborhood are covered in other sections of the Artifacts tool The physical design aspects of the household model are included in the Environment section and given a significant number of points due to the significant commitment of resources that it takes to move from corridors and units to a household design.

One feature of nursing home living people have expressed they do not want is to share a room with a stranger. As such, private rooms were given a higher score in this tool also reflective of the commitment of the home to make structural changes, give up shared rooms for private or the foresight of original construction into private rooms.Some homes dedicated to culture change have eliminated all or the majority of shared rooms for private ones. The Quality of Life study showed that those facilities deemed to have high quality of life had the most private rooms and that residents who were interviewed greatly preferred private rooms to shared rooms. (Kane et al, 2003).

A 2005 study by Calkins & Cassella found moderate to strong evidence supporting the benefits of private rooms in terms of

- clinical factors - especially nosocomial infection rates,
- psychosocial factors -, preferences for privacy, better family visiting, especially at end of life, more control over personal territory,
- operational factors - less time spent managing roommate conflict, easier to market and
- building/construction factors - The difference in construction costs between private and traditional shared room can be made up in approximately 14 months if beds are occupied, and in less than 22 months if a bed remains unoccupied because someone refused to live with a stranger (www.IDEASInstitute.org).

Privacy enhanced rooms where residents can access their own space without trespassing through a roommate's space feel like a private room and result in fewer instances of roommate conflict in the traditional shared bedrooms (www.SAFEFederation.org). Crestview's experience is that residents preferred the privacy enhanced rooms because

they had privacy and "someone else was there." They were more requested than private rooms (Haider, 2001). The typical semi-private room only offers a cloth curtain for privacy. Some homes have made a commitment to privacy by designing shared rooms with a wall between the two sides of the room giving residents privacy while sharing a common bathroom and closet area. Of 40 homes in the Quality of Life study, only 2 had privacy enhanced shared rooms (Cutler et al, 2006).

> "Often the first thing people see when they visit the traditional medical model nursing home is the nurses' station. It is the control center amid a buzz of activity, and it stands as a physical barrier separating the nursing staff from residents and family members as if to say, 'We (staff) are in charge.' Recreating spaces to be shared by residents reduces the barrier between residents and staff created by the titanic nurses' station. Caregivers are more available to residents and family members. Together they can sit in the comfort of the living room to discuss care plans instead of standing at a large desk in the lobby area. Responses from residents, families, and workers in nursing homes that have made these changes are primarily positive…. Now, with room to converse, play cards, host visitors, and interact with staff, once-listless residents are awakening to the possibilities of friendships and community…. Simply put, 'If it looks like a hospital, we'll feel like a patient. If it looks like a house, we'll feel at home (Norton, 2005).

Removal of traditional nurses' stations is included as an item with a higher level of points, due to the dedication, physically and monetarily, to removing such barriers to creating a changed community.

The environment in most nursing homes does not support residents autonomy to the fullest extent possible. In many nursing homes, sensory deprivation and lack of control over the environment cause boredom, anxiety, and depression, and may induce learned helplessness because of residents' perceptions that they have no control over their lives (Langer & Rodin, 1976; Seligman, 1976). In the Quality of Life study, the following lacking items were discovered. Of the 1,988 residents studied in 40 homes, 82% had wheelchair clearance under their sinks, but only 10% had a mirror suited for a wheelchair user, and only 1.5% had a refrigerator in the room. 48% of the of the entry doors had lever-type hardware and sink hardware was "rarely lever style." Although 65% of the individuals used wheelchairs, only 7% of the closet rods were located 36-48 inches from the floor. 52% of resident rooms had adjustable heat and 46% adjustable air conditioning. Only 23% of the resident rooms provided the opportunity to control the intensity of the light with a dimmer switch and heat lamps were in only 15% of the shower rooms (Cutler et al, 2006). Each of these features is an Environment Artifacts item.

Making computers and the Internet accessible to residents has impacted residents of all cognitive functioning levels. From watching screen savers to researching topics of interest, residents experience increase in communication, socialization, enhanced self-esteem, increase in group activity attendance and self-expression either verbally or using adaptive keyboard and less agitation (Dunning, 2001).

Some homes dedicated to re-creating home have replaced traditional call systems with telephone call systems. Resident calls register directly with the appropriate staff member and staff can communicate directly with each other. Results are reduced overhead paging, improved staff response time to assist residents, and reduced complaints that call bells were not answered in a timely fashion, (Brokaw, 2006).

An environmental feature and practice of transforming homes that is becoming more popular is the elimination of overhead paging. Fairport Baptist Home reports that it improves the working environment, creates a more normal living environment by significantly decreasing white noise throughout the facility and this in turn has decreased resident agitation especially of those dealing with dementia (Brokaw, 2006).

A positive environmental feature to households is installing household washers and dryers for residents' personal laundry as has been done by Teresian House and Fairport Baptist Home. Each report a decrease in lost clothing and complaints, residents have the opportunity to do their own laundry and/or family members can stay and visit while doing laundry, shrinkage and wrinkling is eliminated and even if clothing is not marked, staff can identify who it belongs to due to the smaller number of residents staff care for on the neighborhood/household (Brecanier, 2005). Useable outdoor areas is another feature of well-being that is lacking in many nursing homes.

As found in the Quality of Life study done for CMS, although 97.5% of the 40 facilities had an outdoor space, in reality only 44.3% of the residents in these homes had access to the space. Of 1068 who were able to complete an interview regarding how often they get outdoors, 32.2 % went outdoors less than once a month, 13.4% less than once a week, 16.8 % about once a week, 15.8% several times a week and 21.8% everyday. Also discovered was that most often direct access to outdoor spaces was locked and residents were only able to use the space if escorted by staff or family or "on the rare occasion when outdoor activities were scheduled."

Family and Community Artifacts

Items befitting to this category include regularly scheduled intergenerational programming, making space available for community groups, having a private guestroom for resident guest, a café/restaurant/tavern/canteen where anyone can purchase food, a special dining room for resident gatherings and a kitchenette or kitchen area were baking and cooking can take place.

The Eden Alternative teaches that children give residents the opportunity to give care, and help to diminish loneliness and boredom. Participation in activities with small children lowers residents' agitation levels (Activities, Adaptations and Aging, 1996).

Homes with a café/restaurant/tavern/canteen, give residents the opportunity to dine in a normal community setting out of the traditional dining room and to "give back." Residents appreciate the opportunity to once again "foot the bill" in a restaurant setting (Brecanier, 2001). Kitchenette and kitchen areas can afford residents the opportunity to

cook and bake for others. Elders experience joy when able to prepare a favorite recipe for friends and once a gain share meals with families (Bump, 2005).

Homes that have successfully integrated many of these approaches have been named “generative communities,” the first example being the original Eden home in NY, Chase Memorial Home. "More than 200 birds, four cats, two dogs, dozens of plants, a child care centre, a garden, and a visiting school-children's program help create what founder Dr. Bill Thomas and his wife Judy call 'a holistic environment….' One of the principles they enacted is that people need to give care as well as receive care to feel valuable…. Compared to a nearby control facility, the Thomas’s documented statistically significant reductions in mortality and in illness as well as drug use” (Eaton, 2000).

Leadership Artifacts

Leadership includes the ability to serve, listen to, and honor all those involved in the organization. A simple way to honor CNAs and involve them more deeply in the provision of care is to include them in care conferences. Facilities where CNAs participate in care planning have lower rates of turnover (Eaton, 2001).

Although not all that common yet, some wise pioneers have included residents and family members in their quality assessment and assurance process stating “that family member or resident cares just as much as you do about your home” (Irtz, 2004).

When Evergreen Retirement Community’ Quality Council was formed in 1990, a resident was included as a full member with the same voting rights as all other members, half of which are direct-care, and the other half leadership, staff. “The participation of a resident has always been regarded as important since residents are the primary beneficiaries of our efforts. The QC was originally responsible for implementing Continuous Quality Improvement as the key element of our management philosophy. We recognized that in order to use households as the basic service delivery unit of long-term skilled nursing care we needed a fundamental change in the management philosophy. We could no longer use the traditional direct/inspect management approach. CQI is based on teamwork where each team member has a unique role, and data is the basis of decision making” (Green, 2006).

In addition, Evergreen has had three residents as full voting members of the Board of Directors since 2000. Prior to that, residents served on the board as representatives of the Resident Council for many years. After a board crisis in 1999 where residents had to be excused for executive sessions, Evergreen decided that there needed to be resident board members as they are stakeholders with the greatest investment in the organization. Recognizing the inherent conflict-of-interest as residents, i.e. a potential self-interest agenda, residents accepted the responsibility to wear the hat of board member keeping “the big picture” in mind (Green, 2006).

Another concept becoming popular is a “buddy” or Guardian Angel program where staff check regularly with residents. This approach has dramatically dropped complaints from

residents and families as it builds relationship and matters of concern get tended to quickly (personal experience of co-author Bowman). Two other forms of servant leadership are the use of Learning Circles and Community Meetings which each serve as a means to get people talking, get people to know each other, build community and solve problems.

The idea of community meetings came about to test a simple hypothesis: "Bring the elders together regularly in a community that promotes meaning and connection and it will change their lives and cause a ripple effect that will impact the culture of the institution." Residents grew more aware of one another, became more present, more energetic and responsive. Staff noticed residents whom they had previously assumed were not capable of communication, began to interact with them. "This progress challenged their assumptions about what is possible. They began to act differently, responding to the elders in a more individualized way and helping them to make choices. They shared their perceptions with co-workers and family members, many of whom expanded their expectations and changed the way they related to the elders" (Barkan, 2002).

Workplace Practice Artifacts

Having consistent staff work with the same residents, self-scheduling, career ladders, on-site child day care, awards, sending non-managerial staff to outside training and cross-training all contribute to improving the work culture for staff. In the Eaton Beyond 'Unloving Care' study of high and low quality homes, said one DON at a high quality Quaker facility, "'I take care of my staff, and they take care of the patients. If I treat them badly, they will treat the patients badly'" (Eaton, 2000).

Overwhelmingly, consistent staff is a hallmark of a changed culture. When the same staff care for the same residents, that is when relationships form, staff get to know residents needs and preferences, and staff pick up on resident changes in condition (CMS satellite broadcast, 2002, Misorski). Consistent staffing correlates to low turnover and nurses prefer it (Eaton, 2001). From the Kane study, those facilities determined to have high quality of life implemented permanent CNA staffing. Similarly, self-scheduling has been found to resolve scheduling issues and results in staff being more responsible to each other and to their residents (Eaton, 2001).

As a means to make it clear to employees that a home is committed to transforming into a culture of person-centered care, some homes are including in their employee performance evaluations competencies that reflect a transformed culture. One such home is Pennybyrn at Mayfield in North Carolina, whose performance evaluation covers the areas of Team Builder, Person Centered Relationships, Initiative, Willingness to Grow, Critical Thinking-to-Action and Judgment.

Outcomes

Naturally occurring, unplanned positive outcomes have been experienced by many homes that have made these concrete changes, top on the list being reduction in turnover.

Turnover in nursing homes is high and has traditionally been high. Industry statistics show turnover to be 100% for CNAs, 66% for RNs/LPNs, 50% for Directors of Nursing and 25% for Administrators (IOM 2001).

Culture changing homes have experienced the opposite. Turnover at Providence Mt. St. Vincent reduced from 50 to 22% from 1992 to 2003. Big Fork Valley, formerly Northern Pines Communities, adjusted turnover rate declined from 52 to 13 % with the implementation of communities from 1999 to 2000. The communities celebrated 100% retention of all employees in all positions during the first 6 months of 2000, only three months after transition (Culture Change Now Vol. 1, 2001). Apple Health Care, a small privately owned nursing home chain having implemented culture change practices since 1997, experiences overall staff turnover rates at 30-40% compared to national rates as high as 70% (Ronch and Weiner, 2003). "Substantially reduced staff turnover" was documented in a three year study of two Rochester, NY culture changing homes (Dannefer and Stein, 1999, 2002, reported in CC for LTC, 2003).

In her studies of low and high service quality nursing homes, Susan C. Eaton has documented that for the traditional low-service quality model, aide turnover in usually exceeds the 100% industry annual average and reports that industry informants estimate turnover to cost $4000 per nurse aide (or three months' wages) and has a negative impact on care. "The relationship of turnover to patient care is clear and well documented: higher turnover interrupts continuity of care and is associated with lower patient care outcomes (Harrington 1996 as reported by Eaton, 2000).

Although workforce stabilization was not the objective of Meadowlark's embarking into a culture change journey in 1997, it is one of its significant - and early – outcomes with staff turnover plummeting from 80 percent to 30 percent in the first year and holding that range ever since (Wagner, 2005).

Retention translates into increased efficiency. Retention leads to better quality outcomes. Better quality outcomes lead to lower costs on average $13.50 less PPD and an annual savings (90 residents/day) of $440,000 (Rantz, 2003).

Homes committed to changing their culture also seem to be keeping their staff. Currently the literature reveals little information on longevity. Providers report that longevity increases in pioneering homes. However, there are no large scale longevity figures that have been collected to date. Individual Pioneering homes have reported their home's data but there are no accumulated scores. Thus, the four focus facilities included in this project were used to create a starter average score. From these four homes, longevity averages were:

Home	CNAs	LPNs	RNs	DON	At fac	NHA	At fac
Fairport	5	6	9	1	1	10	19
Evergreen	2.95	12	15	13	1	2	9
Teresian	6.12	6.15	10.15	3	27	18	18
Grancare	8.7	5	5	8	8	18	18
Averages	5.7	7.3	9.8	6.25	9.25	14.5	16.25

Since turnover is usually highest in the categories of nursing and the administrator, these are the categories we also used for longevity, namely CNAs, LPNs, RNs, DON and NHA. For the purposes of this tool, our definition of longevity includes all years worked at the facility, not only the years in their current positions. This idea came from pioneer Sister Pauline Brecanier, NHA of Teresian House in Albany, NY who kept bringing to our attention the dramatic length of staff longevity when staff years in any position are considered. For instance, although her DON has held that position for 6 years, in total she has worked at Teresian House for 26. CNA longevity was the only item of these five, for which we did not include all years in any position since the CNA position is typically a first step position to any career ladder in nursing, and they typically do not serve in any other position before becoming a CNA. In addition, we believed it would be overly burdensome to have a home calculate the total length of service years in any position for CNAs, since they are usually such a large group of staff members.

A recent 2006 study, The Use of Contract Licensed Nursing Staff in U.S. Nursing Homes, found that use of contract nursing staff is relatively rare averaging around 5%. The study did not include CNAs. One recent study reports that one solution homes are using for the staffing shortage is the use of contract nursing staff. “This type of staffing is costly, disrupts continuity of care (Guillard 2000), and may also contribute to poor patient care” (Bourbonniere, 2006). The researchers found that homes employing a higher than 5% proportion of contract nurses, “fell disproportionately into the top quartile ranks of health deficiency citations.” For purposes of this report, because this was the only research based figure found, we used it in the point schematic for the item of agency use; higher than 5 % getting 0 points, 1-5% 3 points and 0% 5 points. Because no information was found in the literature review, the same figure was used for CNA agency use.

Many culture changing homes deliberately try to reduce and eliminate the use of agency staff knowing that care is impacted by staff who are strangers to residents versus consistent facility staff who know the residents. We conferred with the homes in our focus group and other culture change leaders about the best way to calculate a number for the use of agency staff. It was pointed out by Anna Ortigara that agencies typically bill the nursing home monthly for the number of staff shifts that were covered by an agency staff member, with separate totals for CNAs and nurses. A staff shift is defined as one person serving on one shift on one day no matter the length of the shift.

We have adopted this method of calculation in the hope that it will prove to be the least burdensome way of a home answering the question. If the home has, for example, 10 CNAs for day, 7 for evening, and 5 for night shifts per day, then they have a total of 22 CNA shifts for the day. Since weekdays and weekends may typically have a different number of CNAs scheduled, we are asking the home to figure, for the previous month, how many total CNA shifts they had scheduled. Then the next step is determining how many of those shifts were covered last month by agency CNAs, and finally dividing agency shifts by total shifts to result in a percent. The same process is done for nurse shifts, which includes LPNs and RNs grouped together, excluding the DON.

Increase in census is another positive outcome experienced by culture changing homes. According to the most recent data, from the CMS Nursing Home Data Compendium 2005, the average occupancy rate in 2004 was 84.2 %. A two year study of Eden homes showed an 11% increase in census (Ransom, 1999). An increase in private pay census has been experienced by pioneering homes as reported by the Pioneer Network (Culture Change in LTC, 2003, pg. 136). An Artifacts item of occupancy rate is included as an Outcome.

Future of the Artifacts of Culture Change Tool

Both the domains and the line items that the authors have selected are not intended to be comprehensive of all the possible changes a home might make on the culture change journey. We have selected the tool's items based on our findings both from research and from provider communications that these items represented significant concrete changes that many homes have made. In addition we are aware that a bright future lies open for homes to create entirely new innovations as yet not thought of in long term care. We congratulate the many homes that have embarked on the culture change journey. They have stepped out of the box of the institution and are moving toward creating a real home for residents as well as a place where staff and families like to be.

CMS is making this tool available for public use. Although it is to be given away freely, as a CMS developed tool it is to remain in its final form. Changes to the tool should not be made without permission of CMS and Edu-Catering.

This tool has been developed through review of current research and provider literature, as well as personal discussions with several culture change leaders, our focus group of homes and the researchers who commented on both content and structure of the tool. Currently the tool only exists "on paper" as a questionnaire that a home or a chain or group of homes can fill out and score, in order to compare their scores in particular items to what a perfect score would be. We are hopeful that homes on the culture change journey may find items that they have not considered changing and now would like to consider, or perhaps items that they have had in place for a long time, even before they ever heard of culture change. Homes that have started significant changes 10 or 15 years ago may find it useful to complete the tool in retrospect, comparing how they would have completed it before they started to their scores at present, in order to see how much they have changed in these concrete artifacts of culture change. Saying you're a culture

changing home doesn't say how much you've changed. Taking and scoring this tool and its sub-domains may reveal how close to a perfect score a home may be in some domains while being farther away in others. And for researchers who would desire to compare culture change homes to other homes in terms of other variables such as quality measures/indicators or survey process results, it might benefit them from using this tool, among others, to determine which homes belong in a culture change group, based on them passing a threshold they would set for the purpose of their studies.

It would add value to the tool if it is computerized and made available on a website for any facility to complete easily with programmed computations. It is also recommended that a data base be built on a website so a home can compare itself to a normative group of peers who have completed the tool. It would assist researchers, providers and CMS to be able to compare facilities on the same items, features, artifacts, evidences of culture change. And with a data base, it could be seen which homes are scoring above their peers.

This tool has been designed to be used only as a data collection tool for purposes of capturing where a facility is and has been in regards to changing its culture and improving quality of life for both residents and staff. The point assignment to each item is intended to capture whether a facility has a certain thing, is making progress toward it or does not have it at all. Points reflect total change, partial change or no change to individual items. The tool has potential for further work such as assigning weighted points to the prevalence and importance of individual items

Two homes completing the tool may have the same overall score but have two very different focuses. The relevance of the sectional scores then becomes indicating to the facility where they stand with possible changes reflected in that domain or category. It would be good at a future date to have a large group of providers give input as to the importance of items, but that effort is not part of the scope of this contract. For items that have no established prevalence through research, such as such as longevity, it would beneficial to re-set them in the future, after a large pool of homes has filled out this tool on a website from which a pool of data is generated.   We are hopeful that interested providers or stakeholder organizations will wish to take on these efforts.

Innovative providers who have heard of the tool have been asking when they can use it stating they are "hungry" for tools to capture culture change features in their homes. Assisted living providers have also expressed interest in the tool and the idea of possibly working with the authors to modify it to capture items unique to assisted living.

Ohio Quality Improvement Project Leader Jennifer Brezinski, ADN, RNC, CLNC quoted in the Quality Partners of Rhode Island

> "I loved sharing the HOPE that we are in a position to make life in a nursing home a wonderful experience… I learned that I can make an impact… I also learned a humble experience - as much as I had always prided myself on being an accomplished nurse and DON, I had not fully let go of the institutional style of

> managing resident care… But after learning so much from collaborative work and Pioneer conferences, I realized how very much more there is to do…. One of the things that I felt was a very proud moment was when I entered one of the homes that had been in the RCC [Resident Centered Care] collaborative. The change in the atmosphere was so tangible and so different from when I had first been there almost two years before. A resident met me at the door and asked me if I wanted to buy any crafts. Her 'street' was going to have a cookout for their 'care assistants' and she and her 'neighbors' were helping to raise money for the food by selling crafts. At the same time, I heard laughing off in the distance; I noticed one of the residents delivering newspapers - knocking at each doorway and waiting to be given permission to enter. I saw a group of three of four residents conversing in the lounge area; and every resident and staff member that I saw was smiling. Overhead paging had vanished. It was a quiet, calm, but very warm feeling that took hold. I found myself smiling and I could not believe this was the same place that I had first seen. What a long way they came without one structural change! It was all the mindset of the staff and the residents that made the difference (QIO, p. 190).

These honest thoughts from a seasoned long term care professional who admitted to "institutional" thinking, beautifully express that a change in mindset can result in tangible changes that truly improve the lives of those who both live and work in institutional nursing homes.

Main Points regarding the Artifacts of Culture Change Tool

1. The tool is not connected to enforcement, is not punitive, and no surveyors will be collecting data using this tool.
2. This is a government product that homes and provider organizations can freely use to showcase positive changes they are making.
3. The tool is a concrete set of changes homes make to practice and policies in the process of transforming an institutional culture into one that resembles home and that takes seriously the residents' direction of their own lives.
4. The tool affords the opportunity for an individual home to gauge its progress and do its own benchmarking of where they are on a culture change journey.
5. The tool is a data collection instrument meant to reflect progress by a simple points structure of total change, partial change or no change to specific items.
6. The tool may change in the future if a sufficient number of homes complete it and the information from each home is captured in an online data base that could generate more information about averages and prevalence
7. This tool is a CMS developed product. As such it is to remain in its final form but to be given away freely.

APPENDIX A

ARTIFACTS OF CULTURE CHANGE TOOL

Artifacts of Culture Change

Home Name ____ Date _______________

City _______________________ State ___________ Current number of residents _________

Ownership: _____ For Profit _____ Non-Profit _____ Government

Care Practice Artifacts	
1. Percentage of residents who are offered any of the following styles of dining: ▪ **restaurant style where staff take resident orders;** ▪ **buffet style where residents help themselves or tell staff what they want;** ▪ **family style where food is served in bowls on dining tables where residents help themselves or staff assist them:** ▪ **open dining where meal is available for at least 2 hour time period and residents can come when they choose; and** ▪ **24 hour dining where residents can order food from the kitchen 24 hours a day.**	_____ 100 – 81 % (5 points) _____ 80 – 61% (4 points) _____ 60 – 41% (3 points) _____ 40 – 21% (2 points) _____ 20 – 1% (1 point) _____ 0 (0 points)
2. Snacks/drinks available at all times to all residents at no additional cost, i.e., in a stocked pantry, refrigerator or snack bar.	_____ All residents (5 points) _____ Some (3 points) _____ None (0 points)
3. Baked goods are baked on resident living areas.	_____ All days of the week (5 points) _____ 2-5 days/week (3 points) _____ < 2 days/week (0 points)
4. Home celebrates residents' individual birthdays rather than, or in addition to, celebrating resident birthdays in a group each month.	_____Yes (5 points) _____ No (0 points)
5. Home offers aromatherapy to residents by staff or volunteers.	_____Yes (5 points) _____ No (0 points)
6. Home offers massage to residents by staff or volunteers.	_____Yes (5 points) _____ No (0 points)

7. Home has dog(s) and/or cat(s).	_____ At least one dog or one cat lives on premises (5 points) _____ The only animals in the building are when staff bring them during work hours (3 points) _____ The only animals in the building are those brought in for special activities or by families (1 point) _____ None (0 points)
8. Home permits residents to bring own dog and/or cat to live with them in the home.	_____Yes (5 points) _____ No (0 points)
9. Waking times/bedtimes chosen by residents.	_____ All residents (5 points) _____ Some (3 points) _____ None (0 points)
10. ***Bathing without a Battle*** **techniques are used with residents.**	_____ All (5 points) _____ Some (3 points) _____ None (0 points)
11. Residents can get a bath/shower as often as they would like.	_____Yes (5 points) _____ No (0 points)
12. Home arranges for someone to be with a dying resident at all times (unless they prefer to be alone) - family, friends, volunteers or staff.	_____Yes (5 points) _____ No (0 points)
13. Memorials/remembrances are held for individual residents upon death.	_____Yes (5 points) _____ No (0 points)
14. "I" format care plans, in the voice of the resident and in the first person, are used.	_____ All care plans (5 points) _____ Some (3 points) _____ None (0 points)

Care Practice Artifacts Subtotal: Out of a total 70 points, you scored __________.

Environment Artifacts	
15. Percent of residents who live in households that are self-contained with full kitchen, living room and dining room.	_____ 100 – 81 % (100 points) _____ 80 – 61% (80 points) _____ 60 – 41% (60 points) _____ 40 – 21% (40 points) _____ 20 – 1% (20 points) _____ 0 (0 points)

16. Percent of residents in private rooms.	_____ 100 – 81 % (50 points) _____ 80 – 61% (40 points) _____ 60 – 41% (30 points) _____ 40 – 21% (20 points) _____ 20 – 1% (10 points) _____ 0 (0 points)
17. Percent of residents in privacy enhanced shared rooms where residents can access their own space without trespassing through the other resident's space. This does not include the traditional privacy curtain.	_____ 100 – 81 % (25 points) _____ 80 – 61% (20 points) _____ 60 – 41% (15 points) _____ 40 – 21% (10 points) _____ 20 – 1% (5 points) _____ 0 (0 points)
18. No traditional nurses' stations or traditional nurses' stations have been removed.	_____ No traditional nurses stations (25 points) _____ Some traditional nurses' stations have been removed (15 points) _____ Traditional nurses' stations remain in place (0 points)
19. Percent of residents who have a direct window view not past another resident's bed.	_____ 100 – 51% (5 points) _____ 50 – 0 % (0 points)
20. Resident bathroom mirrors are wheelchair accessible and/or adjustable in order to be visible to a seated or standing resident.	_____ All resident bathroom mirrors (5 points) _____ Some (3 points) _____ None (0 points)
21. Sinks in resident bathrooms are wheelchair accessible with clearance below sink for wheelchair.	_____ All resident bathroom sinks (5 points) _____ Some (3 points) _____ None (0 points)
22. Sinks used by residents have adaptive/easy-to-use lever or paddle handles.	_____ All sinks (5 points) _____ Some (3 points) _____ None (0 points)
23. Adaptive handles, enhanced for easy use, for doors used by residents (rooms, bathrooms and public areas).	_____ All resident-used doors (5 points) _____ Some (3 points) _____ None (0 points)

24. Closets have moveable rods that can be set to different heights.	_____ All closets (5 points) _____ Some (3 points) _____ None (0 points)
25. Home has no rule prohibiting, and residents are welcome, to decorate their rooms any way they wish including using nails, tape, screws, etc.	_____Yes (5 points) _____ No (0 points)
26. Home makes available extra lighting source in resident room if requested by resident such as floor lamps, reading lamps.	_____Yes (5 points) _____ No (0 points)
27. Heat/air conditioning controls can be adjusted in resident rooms.	_____ All resident rooms (5 points) _____ Some (3 points) _____ None (0 points)
28. Home provides or invites residents to have their own refrigerators.	_____Yes (5 points) _____ No (0 points)
29. Chairs and sofas in public areas have seat heights that vary to comfortably accommodate people of different heights.	_____ Chair seat heights vary by 3" or more (5 points) _____ Chair seat heights vary by 1 3" (3 points) _____ Chair seat heights do not vary in height (0 points)
30. Gliders which lock into place when person rises are available inside the home and/or outside.	_____Yes (5 points) _____ No (0 points)
31. Home has store/gift shop/cart available where residents and visitors can purchase gifts, toiletries, snacks, etc.	_____Yes (5 points) _____ No (0 points)
32. Residents have regular access to computer/Internet and adaptations are available for independent computer use such as large keyboard or touch screen.	_____ Both Internet access and adaptations (10 points) _____ Access without adaptations (5 points) _____ Neither (0 points)
33. Workout room available to residents.	_____Yes (5 points) _____ No (0 points)
34. Bathing rooms have functional and properly installed heat lamps, radiant heat panels or equivalent.	_____ All bathing rooms (5 points) _____ Some (3 points) _____ None (0 points)
35. Home warms towels for resident bathing.	_____Yes (5 points) _____ No (0 points)

36. Protected outdoor garden/patio accessible for independent use by residents. Residents can go in and out independently, including those who use wheelchairs, e.g. residents do not need assistance from staff to open doors or overcome obstacles in traveling to patio.	_____Yes (5 points) _____ No (0 points)
37. Home has outdoor, raised gardens available for resident use.	_____Yes (5 points) _____ No (0 points)
38. Home has an outdoor walking/wheeling path which is not a city sidewalk or path.	_____Yes (5 points) _____ No (0 points)
39. Pager/radio/telephone call system is used where resident calls register on staff's pagers/radios/telephones and staff can use it to communicate with fellow staff.	_____Yes (5 points) _____ No (0 points)
40. Overhead paging system has been turned off or is only used in case of emergency.	_____Yes (5 points) _____ No (0 points)
41. Personal clothing is laundered on resident household/neighborhood/unit instead of in a general all-home laundry, and residents/families have access to washer and dryer for own use.	_____ Available to all residents (5 points) _____ Some (3 points) _____ None (0 points)

Environment Artifacts: Out of a total 320 points, you scored ___________.

Family and Community Artifacts	
42. Regularly scheduled intergenerational program in which children customarily interact with residents at least once a week.	_____Yes (5 points) _____ No (0 points)
43. Home makes space available for community groups to meet in home with residents welcome to attend.	_____Yes (5 points) _____ No (0 points)
44. Private guestroom available for visitors at no, or minimal, cost for overnight stays.	_____Yes (5 points) _____ No (0 points)
45. Home has café/restaurant/tavern/canteen available to residents, families, and visitors at which residents and family can purchase food and drinks daily.	_____Yes (5 points) _____ No (0 points)
46. Home has special dining room available for family use/gatherings which excludes regular dining areas.	_____Yes (5 points) _____ No (0 points)
47. Kitchenette or kitchen area with at least a refrigerator and stove is available to families, residents, and staff where cooking and baking are welcomed.	_____Yes (5 points) _____ No (0 points)

Family and Community Artifacts Subtotal:

Out of a 30 possible points, you scored __________ points.

Leadership Artifacts	
48. CNAs attend resident care conferences.	_____ All care conferences (5 points) _____ Some (3 points) _____ None (0 points)
49. Residents or family members serve on home quality assessment and assurance (QAA) (QI, CQI, QA) committee.	_____Yes (5 points) _____ No (0 points)
50. Residents have an assigned staff member who serves as a "buddy," case coordinator, Guardian Angel, etc. to check with the resident regularly and follow up on any concerns. This is in addition to any assigned social service staff.	_____ All new residents (5 points) _____ Some (3 points) _____ None (0 points)
51. Learning Circles or equivalent are used regularly in staff and resident meetings in order to give each person the opportunity to share their opinion/ideas.	_____Yes (5 points) _____ No (0 points)
52. Community Meetings are held on a regular basis bringing staff, residents and families together as a community.	_____Yes (5 points) _____ No (0 points)

Leadership Artifacts Subtotal: Out of a total 25 points, you scored __________.

Workplace Practice Artifacts	
53. RNs consistently work with the residents of the same neighborhood/household/unit (with no rotation).	_____ All RNs (5 points) _____ Some (3 points) _____ None = 0 points.
54. LPNs consistently work with the residents of the same neighborhood/household/unit (with no rotation).	_____ All LPNs (5 points) _____ Some (3 points) _____ None (0 points)
55. CNAs consistently work with the residents of the same neighborhood/household/unit (with no rotation).	_____ All CNAs (5 points) _____ Some (3 points) _____ None (0 points)
56. Self-scheduling of work shifts. CNAs develop their own schedule and fill in for absent CNAs. CNAs independently handle the task of scheduling, trading shifts/days, and covering for each other instead of a staffing coordinator	_____ All CNAs (5 points) _____ Some (3 points) _____ None (0 points)

57. Home pays expenses for non-managerial staff to attend outside conferences/workshops, e.g. CNAs, direct care nurses. Check yes if at least one non-managerial staff member attended an outside conference/workshop paid by home in past year.	_____ Yes (5 points) _____ No (0 points)
58. Staff is not required to wear uniforms or "scrubs."	_____ Yes (5 points) _____ No (0 points)
59. Percent of other staff cross-trained and certified as CNAs in addition to CNAs in the nursing department.	_____100 – 81 % (5 points) _____ 80 – 61% (4 points) _____ 60 – 41% (3 points) _____ 40 – 21% (2 points) _____ 20 – 1% (1 point) _____ 0 (0 points)
60. Activities, informal or formal, are led by staff in other departments such as nursing, housekeeping or any departments.	_____ Yes (5 points) _____ No (0 points)
61. Awards given to staff to recognize commitment to person-directed care, e.g. Culture Change award, Champion of Change award. This does not include Employee of the Month.	_____ Yes (5 points) _____ No (0 points)
62. Career ladder positions for CNAs, e.g. CNA II, CNA III, team leader, etc. There is a career ladder for CNAs to hold a position higher than base level.	_____ Yes (5 points) _____ No (0 points)
63. Job development program, e.g. CNA to LPN to RN to NP.	_____ Yes (5 points) _____ No (0 points)
64. Day care onsite available to staff.	_____ Yes (5 points) _____ No (0 points)
65. Home has on staff a paid volunteer coordinator in addition to activity director.	_____ Full time (30 hours/week or more) (5 points) _____ Part time (15-30 hours/week) (3 points) _____ No paid volunteer coordinator (0 points)
66. Employee evaluations include observable measures of employee support of individual resident choices, control and preferred routines in all aspects of daily living.	_____ All employee evaluations (5 points) _____ Some (3 points) _____ None (0 points)

<u>Workplace Practice Artifacts Subtotal</u>: Out of a total 70 points, you scored __________.

Outcomes	
67. Average longevity of CNAs. Add length of employment in years of permanent CNAs and divide by number of staff.	_____Your CNA average longevity Above 5 years (5 points) 3-5 years (3 points) Below 3 years (0 points)
68. Average longevity of LPNs (in any position). Add length of employment in years of permanent staff LPNs and divide by number of staff.	_____Your LPN average longevity Above 5 years (5 points) 3-5 years (3 points) Below 3 years (0 points)
69. Average longevity of RN/GNs (in any position). Add length of employment in years of all permanent RNs/GNs and divide by number of staff.	_____Your RN/GN average longevity Above 5 years (5 points) 3-5 years (3 points) Below average (0 points)
70. Longevity of the Director of Nursing (in any position).	_____ Longevity as DON _____ Longevity at home Above 5 years (5 points) 3-5 years (3 points) Below average (0 points)
71. **Longevity of the Administrator (in any position)**.	_____ Longevity as NHA _____ Longevity at home Above 5 years (5 points) 3-5 years (3 points) Below average (0 points)
72. Turnover rate for CNAs.	Number of CNAs who left, voluntary or involuntary, in previous 12 months divided by number of total CNAs employed = turnover rate Your home's figure ________________ 0 percent (5 points) 20-39 % (4 points) 40-59 % (3 points) 60-79 % (2 points) 80-99 % (1 point) 100% and above (0 points)
73. Turnover rate for LPNs.	Number of LPNs who left, voluntary or involuntary, in previous 12 months divided by number of total LPNs employed = turnover rate Your home's figure ________________ 0 – 12 % (5 points) 13-25 % (4 points) 26-38 % (3 points) 39-51 % (2 points) 52-65 % (1 point) 66 % and above (0 points)

74. Turnover rate for RNs.	Number of RNs who left, voluntary or involuntary, in previous 12 months divided by number of total RNs employed = turnover rate Your home's figure _______________ 0 – 12 % (5 points) 13-25 % (4 points) 26-38 % (3 points) 39-51 % (2 points) 52-65 % (1 point) 66 % and above (0 points)
75. Turnover rate for DONs.	______ Number of DONs in the last 12 months 1 (5 points) 2 (3 points) 3 (0 points)
76. Turnover rate for Administrators.	______ Number of NHAs in the last 12 months 1 (5 points) 2 (3 points) 3 (0 points)
77. Percent of CNA shifts covered by agency staff over the last month.	Total number of CNA shifts in a 24 hour period (all shifts no regardless of hours in a shift) _____________ Multiplied by number of days in last the last full month _____________ Of this number, number of shifts covered by an agency CNA _______ ________ Your percentage (agency shifts/total number X days X 100) 0 % (5 points) 1-5% (3 points) Over 5% (0 points)
78. Percent of nurse shifts covered by agency staff over the last month.	Total number of nurse shifts in a 24 hour period (all shifts no regardless of hours in a shift) _____________ Multiplied by number of days in last the last full month _____________ Of this number, number of shifts covered by an agency nurse _______ _______ Your percentage (agency shifts/total number X days X 100) 0 % (5 points) 1-5% (3 points) Over 5% (0 points)

79. Current occupancy rate.	_____Your home figure Above 86 % (5 points) At average 83-85 % (3 points) Below 83 % (0 points) (Using the national 2004 average of 84.2% from CMS)

<u>Outcomes Subtotal</u>: Out of a total 65 points, you scored _______________.

Artifacts Sections	**Potential Points**	**Your Subtotal Scores**
Care Practices	70	
Environment	320	
Family and Community	30	
Leadership	25	
Workplace Practice	70	
Outcomes	65	
Artifacts of Culture Change	**580**	**Grand Total**

Developed by the Centers for Medicare and Medicare Services and Edu-Catering, LLP. For more information contact Karen Schoeneman at karen.schoeneman@cms.hhs.gov or Carmen S. Bowman at carmen@edu-catering.com.

APPENDIX B

ARTIFACTS OF CULTURE CHANGE SOURCE INFORMATION FOR LINE ITEMS

Artifacts of Culture Change

Source Information for Line Items

Line Items	Source
1. Percentage of residents who receive any of the following styles of dining: ▪ **restaurant style where staff take resident orders;** ▪ **buffet style where residents help themselves or tell staff what they want;** ▪ **family style where food is served in bowls on dining tables where residents help themselves or staff assist them:** ▪ **open dining where meal is available for at least 2 hour time period and residents can come when they choose; and** ▪ **24 hour dining where residents can order food from the kitchen 24 hours a day.**	Food and drinks were available at any time including access to the kitchen in the evening and on the night shift. As the residents were able to eat food they desired whenever they desires, weight loss declined. (Rantz and Flesner, 2004, p.25). At Providence Mt. St. Vincent, "far less food is wasted" due to residents choosing foods each meal at fully functioning neighborhood kitchens. Average number of residents with weight loss in 1995 was twenty and in 2001, only three (Ronch and Weiner, 2003). Sixteen Texas Transition Health Services homes started in 2002 and in four years is one of the leading culturally transformed provider organizations in the country. These homes have embraced liberalized dining, I-Format care plans, individualized bathing practices, full-time live-in animals, and neighborhood teams. Outcomes in these homes include improved surveys, increased census, reduced employee attrition and increased overall elder and team member satisfaction. In addition to providing a career path structure for nursing assistants, personal growth programs for all employees, in-services solutions and mentoring programs to these homes, the Institute for Caregiver Education also provided Culture Change training. (Institute for Caregiver Education, 2006).
2. Snacks/drinks available at all times to all residents at no additional cost, i.e. in a stocked pantry, refrigerator or snack bar.	Open dining resulted in decreased dietary costs and less food waste since residents choose foods they liked and they ate them (Rantz and Flesner, 2004, p. 51). "Food is the heart of the home... The ideal is to have what the residents want to eat available 24 hours a day, seven days a week with the opportunity to eat with whom they wish, in places they choose to be" (Bump, 2005).
3. Baked goods are baked on resident living areas.	Aromas of baked goods increase appetite and residents eat better (The Green House Project DVD, 2005).
4. Facility celebrates residents' individual birthdays rather than, or in addition to, celebrating resident birthdays in a group each	Most Pinon Management managed homes, 16 in Colorado, celebrate individual residents' birthdays instead of in a large monthly group party (Irtz, 2006).

month.	Individual residents' birthdays are celebrated in each household at Evergreen Retirement Community instead of the traditional all-facility monthly group birthday party (Green, 2006).
5. Facility offers aromatherapy to residents by staff or volunteers.	Studies have shown that use of essential oils reduced anxiety and improved quality of life in cancer patients (Cerrato); relieved signs of distress, anxiety, and agitation in nursing home residents with Alzheimer's disease (Brown University, 1998); significantly reduced agitation, without producing the side effects that may come with the use of drugs, in people with dementia (Futurist, 2003); and helped one very anxious nursing home resident who could not sleep to develop good sleep patterns (Healthcare Review, 2001). Buckle (1999), in her review of nine studies utilizing aromatherapy to address pain in a range of patients, found that subjects reported positive effects including perceptions of reduction in pain, improved sleep patterns, and improved ability to cope. She suggests there is sufficient evidence to demonstrate that aromatherapy can play a complementary role in pain management (Kunstler, 2004). In a monitored and documented study on the Alzheimer's Unit at Mattie C. Hall Health Care Center in Aiken, South Carolina, special blends of essential oils used at certain times of the day improved appetites; all but stopped "sun-downing" which results in increased noise and disruptive behaviors in the early evening; decreased pain and insomnia; and stimulated short-term memory so that patients could enjoy activities. Additionally, from October 2001 to September 2002, there was a decrease from 10 to 2 residents with weight loss of 3 pounds or more per month and a decrease in residents receiving psychotropic medications from 9 to 2. By May 2005, there were no residents with weight loss problems and no residents using psychotropic medications (www.scentsiblesolutions.net website). The East Carolina University in North Carolina research study *The Influence of Aromatherapy on the Biological and Behavior Markers of Individuals with Alzheimer's Disease* is using the Scents-ible Solutions Aromatherapy Program protocol in 14 nursing homes with 144 residents with Alzheimer's disease beginning June 2005. Initial results suggest the essential oils used have shown some decrease

	in medication levels and slight decrease in aggression (screaming and physical contact with others) and non-aggressive behavior such as pacing (North Carolina Coalition for Long Term Care Enhancement, in press, to be published in Spring-Summer 2006 issue).
6. Facility offers massage to residents by staff or volunteers.	Hand massage and gentle touch reduces anxiety (Buschmann, 1999) and agitation (Synder et al, 1995).
7. Facility has dog(s) and/or cat(s).	See below, 5 and 6 combined
8. Facility permits residents to bring own dog and/or cat to live with them in the facility.	From the Quality of Life study, homes with high quality of life had the most house pets (Kane et al, 2004) Benefits to companion animals: 1. Lower blood pressure and pulse rate 2. 21% fewer visits to doctor 3. Less depression 4. Easier to make friends (enhanced social opportunities) 5. Seniors become more active 6. Pets offer affection and unconditional love 7. Pets ease the loss of a loved one 8. Pets fight loneliness 9. Taking better care of themselves 10. Sense of security (Haleigh's Almanac, 2002, pp. 61-63). "In 1990, Judith Siegal from the University of California, Los Angeles, reported in the Journal of Personality and Social Psychology that elderly people who owned a pet needed fewer doctor visits… Her examination of almost 1000 Medicare recipients took into account a person's living conditions, underlying chronic disease, education and other factors known to influence health… She found that people without pets average 9.49 visits to the doctor in one year, while pet owners had only 8.42 visits during the year studied" (Haleigh's Almanac, 2002, pp. 61-63). From "Pets and Your Health" from the Mayo Clinic Health Oasis Newsletter, July 20, 2000, Edward T. Creagan, M.D. onocologist at Mayo Clinic, Rochester, MN says: "A study published in the March of 1999 Journal of the American Geriatrics Society showed that senior citizens who own pets are less likely to be depressed, are better able to tolerate social isolation, and are more active than those who do not own pets. And these increased levels of activity

	are not explained solely because dog owners take their dogs for a walk. Cat owners are equally active. We all need something to live for and something to focus on, besides ourselves…Pets offer us unconditional love, which is significant to our over all well-being" ((Haleigh's Almanac, 2002, pp. 61-63). From "Pet Owners are a Healthy Breed," Richard Avanzino, President, San Fransisco SPCA, "One ten-month study that focused on general health turned up some interesting differences between pet owners and non-pet owners. Researchers found that pet owners reported fewer headaches, fewer bouts of indigestion and less difficulty sleeping…"(Haleigh's Almanac, 2002, pp. 61-63). Sixteen Texas Transition Health Services homes started in 2002 and in four years is one of the leading culturally transformed provider organizations in the country. These homes have embraced liberalized dining, I-Format care plans, individualized bathing practices, full-time live-in animals, and neighborhood teams. Outcomes in these homes include improved surveys, increased census, reduced employee attrition and increased overall elder and team member satisfaction. (Institute for Caregiver Education, 2006).
9. Waking times/bedtimes chosen by residents.	"The environment under PCC promotes autonomy for both the residents and employees of Crestview. Residents who have control of their lives and schedules are found to have increased overall morale (as reported by Ryden 1984) (Rantz and Flesner, 2004, p.61). "People now wake up, spend their days, and go to bed according to their own routines, and as they are restored to their own rhythms, they are thriving. So are those who care for them. As work is reorganized to follow the pace of each resident, instead of a rigid institutional routine, workers are able to fulfill their intrinsic motivation to care for others, and to experience respect and care from their organizations." (Quality Partners of Rhode Island of Rhode Island. 2005 p. 5).
10. *Bathing without a Battle* techniques are used with residents.	"Both teams found that when we individualized the bath and the bathing care plan we were able to dramatically reduce the aggressive behaviors" (Rader et al, 2002).

	Sixteen Texas Transition Health Services homes started in 2002 and in four years is one of the leading culturally transformed provider organizations in the country. These homes have embraced liberalized dining, I-Format care plans, individualized bathing practices, full-time live-in animals, and neighborhood teams. Outcomes in these homes include improved surveys, increased census, reduced employee attrition and increased overall elder and team member satisfaction. (Institute for Caregiver Education, 2006). Hickory Creek Healthcare Foundation, IN implemented Bathing without a Battle as corporate program for all their facilities (Quality Partners of Rhode Island, 2005).
11. Residents can get a bath/shower as often as they would like.	Examples of changes within the domain of Care Practices included: Resident-inclusive choices in the areas of … daily routine which included bathing - frequency, time, and method (Quality Partners of Rhode Island of Rhode Island. 2005, p. 13). Wellstar Paulding Nursing Center in GA sets bathing schedules according to residents' wishes (Quality Partners of Rhode Island of Rhode Island, 2005).
12. Facility arranges for someone to be with a dying resident at all times (unless they prefer to be alone) - family, friends, volunteers or staff.	"Yet facility managers or social workers could work on helping people deal with the inevitable approach of death for at least some of their residents. Attending to death carefully and explicitly is a practice that is drawing increasing attention, both for staff and residents, in the 'culture change' community in long-term care" (Eaton, 2001). Included in the Improving Nursing Home Culture Pilot training to 51 facilities, was "the change to I-format care plans" (Quality Partners of Rhode Island, 2005).
13. Memorials/remembrances are held for individual residents upon death.	Included in the Improving Nursing Home Culture Pilot training to 51 facilities, was "valuing life through a dignified death" (Quality Partners of Rhode Island, 2005).
14. "I" format care plans, in the voice of the resident and in the first person, are used.	In the Improving Nursing Home Culture Pilot study, under the domain of Care Practices, the 51 homes were encouraged to consider innovative, creative care solutions including "I" format care plans" and included in the Pilot training was "the change to I-format care plans"

	(Quality Partners of Rhode Island, 2005). Apple Health Care corporation homes (25) and homes trained by the Institute for Caregiver Education utilize I format care planning and report that it is a "powerful" tool for assisting staff in better knowing and understanding residents. (Carol Tschop, Pioneer Network conference 2003). Sixteen Texas Transition Health Services homes started in 2002 and in four years is one of the leading culturally transformed provider organizations in the country. These homes have embraced liberalized dining, I-Format care plans, individualized bathing practices, full-time live-in animals, and neighborhood teams. Outcomes in these homes include improved surveys, increased census, reduced employee attrition and increased overall elder and team member satisfaction (Institute for Caregiver Education, 2006).
15. Percent of residents who live in households that are self-contained with full kitchen, living room and dining room.	Teresian House, Evergreen Retirement Community, Big Fork Valley, Meadowlark Hills, Fairport Baptist Home all operate and physically renovated into the household model. A household model naturally creates a "family life" where staff can support resident choices and decisions about their daily life such as meals and activities. For staff, tools and supplies are decentralized helping them to give more efficient care. Typical of household models, staff are cross-trained, roles are blended and staff consistently work with the same residents. "Residents are walking more and they can sleep in if they want to. We also enjoy group planning of special events and home cooking and snacks" as explained by a certified household resident assistant of Fairport Baptist Home. "Perhaps the most dramatic news has been residents' discovery that they have a voice. This has always been true – but in a household of no more than 12 residents, it is much easier for one's voice to be heard!"(Fairport Homes News, 2002.)
16. Percent of residents in private rooms.	Recent study by Calkins & Cassella found moderate to strong evidence supporting the benefits of private rooms in terms of clinical factors (especially nosocomial infection rates), psychosocial factors (preferences for privacy, better family visiting, especially at end of life, more control over personal territory), operational factors (less time spent managing room mate conflict, easier to market) and building/construction factors (difference in construction costs between private and traditional shared room can be

	made up in approximately 14 months if beds are occupied, and in less than two months if a bed remains unoccupied because someone refused to live with a stranger). Paper available at www.IDEASInstitute.org From the Quality of Life study, homes with high qulity of life had the most private rooms at 23.6% (Kane et al, 2004). A remodel in the late 1990's of Teresian House into neighborhoods, included conversion of all shared rooms into private rooms, resulting in 300 private rooms (Ronch and Weiner, 2003, p. 227). Evergreen Retirement Community has two neighborhoods with 4 household each. In the 36 resident neighborhood, 20 residents have private rooms. In other words, of 28 rooms, 20 are private. In the 44 resident neighborhood, 28 residents have a private room. I other words, of the 36 rooms, 20 are private. The original SNF unit, opened in 1967, has 25 rooms, all originally intended as semi-private. Three are larger and used as doubles but the remaining 22 rooms are now all private (Green, 2006). In the Green Houses in Tupelo, MS, 10 elders live in self-contained houses with private rooms and baths (Kane et al, 2005).
17. Percent of residents in privacy enhanced shared rooms where residents can access their own space without trespassing through the other resident's space. This does not include the traditional privacy curtain.	In Post-Occupancy Evaluation at Freedom House, Air Force Village, San Antonio, a resident is an enhanced bedroom said she felt like she had a private room but shard a bathroom. Staff reported fewer instances of roommate conflict in the enhanced bedrooms shared bedrooms than in the traditional shared bedrooms. Results presented at 2005 AAHSA conference. Presentation available at www.SAFEFederation.org. Crestview's experience is that residents preferred the enhanced privacy rooms because they had privacy and "someone else was there." They were more requested than private rooms (Haider, 2001). "Privacy is the most significant thing" (Kaup, 2005). Only two of 40 homes in the Quality of Life study, had double room configurations with an almost complete floor-to-ceiling wall separating the two sides of the room, and a window for each resident; only the bathroom and closet area were shared but each resident accessed those spaces

	without traversing the other resident's space (Cutler et al, 2006).
18. No traditional nurses' stations or traditional nurses' stations have been removed.	"We want to go back to the neighborhood concept, get rid of the nurses' station. We believe we will retain staff in the future because of this (Administrator/CEO)." "We will remove the nurses' station so it is less institutional and has a more home like look. We are hoping that there will be space for people to sit and visit. We have to think outside the box, there are tons of ideas! (Administrator)" (Eaton, 2001). The Village in Indianola, a Wesley Retirement Community, was building households but staff was impatient. As a result, they removed the nurses' station before remodeling and captured over 600 square feet of living space for a resident living room (Norton, 2006). Facility examples: Special Care Center at Heather Hill, Creekview at Evergreen Retirement Community, Oshkosh, WI; Green Houses, Tupelo, MS (Norton, 2006). In the Measures, Indicators, and Improvement of Quality of Life in Nursing Homes: Final Report, nurses stations were identified as an "Environmental Problem Area" along with a recommendation to consider removing the high counter nurses' stations since they physically separate residents and staff (Kane et al, 2004).
19. Percent of residents who have a direct window view not past another resident's bed.	Common nursing home room design consists of two beds arranged in such a manner that one resident must look past the other in order to see out the window. Because a thin privacy curtain may be pulled, the view may be blocked at some or all times depending on the pattern and considerations of the resident with the window view and/or staff. Evergreen Retirement Community has two neighborhoods. 8 rooms in each neighborhood are shared. In the shared rooms, each resident has the same square footage as in a private room, and both have windows. (Green, personal correspondence, 2006). In focus groups conducted by Calkins & Cassella, residents mentioned window view (open or blocked by curtain) was one of the issues that sometimes caused conflict with roommate. Paper available at www.IDEASInstitute.org. In a well documented study of the effects of a window

	view of nature on outcomes for surgical patients by Ulrich in 1984 found that those with the view went home three-quarters of a day earlier, had reduced costs, used fewer heavy medications, had fewer minor complications such as nausea and exhibited better emotional well-being as compared to patients in identical rooms who viewed a bring wall as reported by Barry et al, 2004 (Brawley, 2006).
20. Resident bathroom mirrors are wheelchair accessible and/or adjustable in order to be visible to a seated or standing resident.	Based on the real experience living as a resident in a nursing home for three days, interior designer and gerontologist Migette Kaup discovered that many usual amenities most take for granted were missing. For example, she could only see the top of the head in the mirror over the sink while sitting in a wheelchair (Kaup, 2005). In the Quality of Life study, of the 1,988 residents in 40 homes, only 10% had a mirror suited for a wheelchair user (Cutler et al, 2006).
21. Sinks in resident bathrooms are wheelchair accessible with clearance below sink for wheelchair.	In the Quality of Life study, of the 1,988 residents in 40 homes, 82% had wheelchair clearance under their sinks (Cutler et al, 2006). Teresian House installed sinks that can be adjusted for a taller or shorter person (observed by co-developers 2002).
22. Sinks used by residents have adaptive/easy-to-use lever or paddle handles.	In the Improving Nursing Home Culture Pilot study, under the domain of Environment the 51 homes were encouraged to consider changes such as: designing for accessibility; diminishing barriers…" (Quality Partners of Rhode Island, 2005, p. 13). Of 40 homes in the Quality of Life study, sink hardware was rarely lever style (Cutler et al, 2006).
23. Adaptive handles, enhanced for easy use, for doors used by residents (rooms, bathrooms and public areas).	In the Improving Nursing Home Culture Pilot study, under the domain of Environment the 51 homes were encouraged to consider changes such as: designing for accessibility; diminishing barriers…." Quality Partners of Rhode Island, 2005, p. 13). Of the 40 homes in the Quality of Life study, only 48% of the entry doors had lever-type hardware (Cutler et al, 2006).
24. Closets have moveable rods that can be set to different heights.	Out of a review of 1,988 resident rooms, adjustable closet rods or those placed 3-4 feet from the floor was found in only 137 or 6.9% cases...." (Kane et al, 2004). Of the1,988 residents in 40 homes in the Quality of Life

	study, although 65% of the individuals used wheelchairs, only 7% of the closet rods were located 36-48 inches from the floor (Cutler et al, 2006).
25. Facility has no rule prohibiting, and residents are welcome, to decorate their rooms any way they wish including using nails, tape, screws, etc.	In the Improving Nursing Home Culture Pilot study, under the domain of Environment the 51 homes were encouraged to consider changes such as the creation of sanctuary, shelter and peace that provides a sense of community, safety and free of unwanted intrusions; the creation of beauty and comfort;… encourage personal items that reflect individuality; personal items such as refrigerators, calendars, pictures, comforters, personal space, shrines…." (Quality Partners of Rhode Island, 2005, p. 13).
26. Facility makes available extra lighting source in resident room if requested by resident such as floor lamps, reading lamps, etc.	In the Improving Nursing Home Culture Pilot study, under the domain of Environment the 51 homes were encouraged to consider changes such as: attention to adequate lighting…" (Quality Partners of Rhode Island. 2005, p 13). Architect David Dillard portrayed an elder living with early dementia for 24 hours and discovered "a poorly lit room" and vowed to plan "better lighting (no more bluish florescent!)" in his future designs (Dillard, 2005). Lighting is notoriously bad in many facilities. There is clear and solid evidence that older people need three times the amount of light as younger individuals to see as clearly. Closets, for instance, are an area that are often much too dark. It is no wonder people need so much assistance with dressing when they cannot see their clothing in the wardrobe or dresser (Calkins, 2002). Of the 40 homes studied in the Quality of Life study, only 23% of the resident rooms provided the opportunity to control the intensity of the light with a dimmer switch (Cutler et al, 2006).
27. Heat/air conditioning controls can be adjusted in resident rooms.	Bigfork Valley in Bigfork, MN decided that if residents were going to be in charge of their own lives, that it was a must that they control the temperature in their physical environment. Thus, each room has a thermostat (Norton, 2006). In the Quality of Life study, 52% of resident rooms had adjustable heat, 46% adjustable air conditioning (Cutler et al, 2006).
28. Facility provides or invites residents to have their own refrigerators.	Teresian House invites residents to bring a refrigerator if they so desire. This affords residents the opportunity to have their own snacks and specialty items that may not be

	offered at the facility such as a specific kind of soda, for families to bring ethnic foods which staff then warm at meal times; also affords families the opportunity to bring picnic food items and have a place to store them. In the Improving Nursing Home Culture Pilot study, under the domain of Environment the 51 homes were encouraged to consider changes such as the creation of sanctuary, shelter and peace including personal items such as refrigerators.” (Quality Partners of Rhode Island. 2005, p. 13). Food is intertwined with practically every aspect of our being. With a little refrigerator and a microwave in a resident’s room almost everyone can have a mini-kitchen (Bump, 2005)." In the Service Houses at Lyngblomsten Care Center, and at Bigfork Valley, skilled nursing residents not only have refrigerators in their rooms but a sink and microwave as well (Norton, 2006). Of the 1,988 residents living in the 40 homes in the Quality of Life study, only 1.5% had a refrigerator in the room (Cutler et al, 2006).
29. Chairs and sofas public areas have seat heights that vary to comfortably accommodate people of different heights.	“It is important to specify chairs with the right seat height, pitch of the back and arms that make them comfortable and easy to get in and out of. What we need are chairs that fit and support. Chairs should be sized to the person; a resident’s feet should be flat on the floor when seated. A chair that is comfortable for a six-foot-tall man will most likely not be comfortable for a five-toot-tall woman. Just as you might find in the home, a variety of chair styles and sizes should be available.” Hip joints can be shattered and broken when frail elderly individuals attempt to rise from an inappropriate chair and it can be difficult to rise from an upholstered chair if the seat is too deep. Chairs of different sizes and varying seating heights should be offered to accommodate residents. To assist older persons to rise from their chairs independently and safely, seating heights should be slightly higher than standard, between 18 and 19.5 inches (Brawley, 1997). While ADA recommends seating at 17.5 – 18.5 inches, this may be too high to be comfortable for shorter women. Thus having some chairs that are lower for shorter

	individuals, and some chairs with higher and deeper seats for taller individuals, will meet the needs of all people (Calkins, 2006).
30. Gliders which lock into place when person rises are available inside the facility and/or outside.	Glider use has been shown to significantly improve emotions and relaxation after 10 minutes of swinging (Snyder, et al, 2001). Rocking chairs can redistribute and cycle the pressure between resident's seat and back, stimulating circulation. The rocking motion also stimulates the vestibular canal in the ear, which creates a calming effect. For residents with Alzheimer's disease who can be aggressive rockers, a rocking chair with a stable base can be calming and therapeutic (Brawley, 1997).
31. Facility has store/gift shop/cart available where residents and visitors can purchase gifts, toiletries, snacks, etc.	Life Care Centers of America (approximately 200 homes) typically have an ice cream parlor and gift shop in newly constructed buildings and usually in any acquired buildings (experience of one of the co-developer Bowman).
32. Residents have regular access to computer/Internet and adaptations are available for independent computer use such as large keyboard or touch screen.	Study by Christian Living Campus, Troy Dunning, ADC of 34 computer lab participant residents from 11/00 – 10/01 who learned to use email, computer use, genealogy, music, news, internet and watching screen savers, games, writing letters, researching topics of interest, online shopping, checking stocks, creating online cards, journaling using adaptive equipment or software. Results were: 65% experienced an increase in communication with family; 44% experienced an increase in socialization with other residents and staff; 24% experienced enhanced self-esteem; 24% experienced in increase in group activity attendance; 18% an increase in self-expression either verbally or using adaptive keyboard; 15% showed a lessening of agitation through visual and mental stimulation (Dunning, 2001 unpublished). **Computer technology provides the opportunity to present a large multimedia database of stimuli to use in reminiscence. CIRCA is an interactive hypermedia-based system designed for people with dementia to facilitate and support conversation and social interactions. The system contains a large database of media presented via a touch screen to act as a prompt for interactions between people with dementia and caregivers. We evaluated the usefulness of CIRCA by comparing it with one-to-one reminiscence sessions conducted using traditional reminiscence stimuli.**

	Unlike traditional reminiscence CIRCA gives people with dementia the opportunity to direct interactions and make choices. This enables them to regain their status as interaction partners. Prompted memories care givers had never heard before, people who reacted poorly to traditional reminiscence, were more involved and alert (Astell et al, 2003).
33. Workout room available to residents.	In 2004, the Creekview Fitness Center and Aquatic Center (and café) were built in the middle of the skilled nursing facility which consists of two neighborhoods of 4 households each: Creekview North and Creekview South. This location makes the fitness center and pool most available to the residents who can benefit the most from both aquatic and land-based exercise. 40% of the SNF residents use the Fitness Center and Aquatic Center on a regular basis (Green, 2006). A structured resistive training program implemented with elderly persons with dementia improved muscle strength and power (Kuiak et al, 2003). A progressive functional fitness strength training program with dumbbells and ankle weights improved muscle strength, functional performance and depression symptoms (Brill et al).
34. Bathing rooms have functional and properly installed heat lamps, radiant heat panels or equivalent.	In the Quality of Life study of 40 homes, heat lamps were in only 15% of the shower rooms (Cutler et al, 2006). Wellstar Paulding Nursing Center in GA added heat lamps, aromatherapy, and music to bathing rooms (Quality Partners of Rhode Island, 2005). Evergreen Retirement Community has claims supplemental heat in their bathing rooms is essential and have discovered residents prefer the temperature to be about 85 degrees. Creekview North and South neighborhoods, both heat lamps over the tub and wall heaters are used. In addition, Creekview South (newer neighborhood which opened in 2004), has an electric fireplace rather than just a standard wall heater, to create more ambiance suggested by the architect (Green, 2006).
35. Facility warms towels for resident bathing.	Ft. Collins Good Samaritan Home Ft. Collins, CO has a midsize industrial towel warmer in their living room making warm towels available to residents at all times, not just during bathing (personal observation of co-developer Bowman).
36. Protected outdoor garden/patio accessible	Outdoor spaces help to maintain a connection with the

for independent use by residents. Residents can go in and out independently, including those who use wheelchairs, e.g. residents do not need assistance from staff to open doors or overcome obstacles in traveling to patio.	natural environment, and provide added opportunities for socialization and outdoor activities (Brawley, 1997). From an architect student who lived as a resident for a month: "A courtyard offered a sunny respite but poorly placed doorways and gaps in the concrete footpath discouraged access by wheelchair and cane." (Kiyota, 2005). Of the 131 unit environments in the Measures, Indicators, and Improvement of Quality of Life in Nursing Homes study, 55.7% had no outdoor amenities items. Of those residents who were physically able to go outdoors, 32% do so less than once a month. "Beyond therapeutic benefits, being outdoors arguably is positively associated with improved perceptions of quality of life. Yet outdoor space, outdoor amenities, and access to outdoor space have often been ignored in the design phase or simply value engineered out of a project due to cost when in reality outdoor spaces are especially important to persons sequestered in institutional settings. When outdoor spaces are available to nursing home residents, most often the accessibility and functionality of those spaces are ignored. It is as if they are not considered an integral part of the overall physical environment. Yet we argue that outdoor spaces have the potential of increasing a resident's quality of life and well-being and should be maximized for the potential of providing additional living spaces (Cutler and Kane, 2006)." Access to a pleasant and safe outside area that provides refuge for residents was found to be a predictor of satisfaction in a study by Greene, Hawes, Wood and Woodsong in 1998 according to how family members define quality of life in long term care settings (Cutler and Kane, 2006). Several hours of outdoor activity in the morning greatly reduced unwanted behaviors later in the day and reduced psychotropic medications 40 % as reported by Gold in 2004 (Cutler and Kane, 2006).
37. Facility has outdoor, raised gardens available for resident use.	Well-designed garden activities including mobility and access can reduce participants' frustrations with gardening and give self-esteem, success, and self-confidence (Kwatch, 2004, pp. 1-13).

	In the Measures, Indicators, and Improvement of Quality of Life in Nursing Homes study, limited access to outdoor space was identified as an "Environmental Problem Area" with only 32% of residents outdoors less than once a month, 13% less than once a week, and "outdoor activities such as gardening in raised planting containers are great but consider access issues such as the difficulty of moving a wheelchair on the grass" (Kane et al, 2004).
38. Facility has an outdoor walking/wheeling path which is not city sidewalk or path.	Clearly defined pathways that circle back to the starting point assist residents in finding their way. Well designed areas allow for wandering while ensuring that an individual is safe and can be easily supervised. Pathways that flow in loops bring residents back to where they started allowing for a safe outdoor journey (Brawley, 1997). Providing a hard surface wandering path at least 3 inches wide for exercise is one principle in the Healing Gardens: Therapeutic Benefits and Design Recommendations by Cooper-Marcus and Barnes 1999 (Brawley, 2006). In the Quality of Life study, of 131 units, only 44.3% had direct access to an outdoor environment, of those, a hard surface walking path at least 3 feet wide was available only 58.6% of the time (Cutler and Kane, 2006).
39. Pager/radio/telephone call system is used where resident calls register on staff members' pagers/radios/telephones and staff can use it to communicate with fellow staff.	Advantages to the Telephone Nurse Call system: Reduced overhead paging by 85%, care staff can call each other for assistance in care delivery, care staff know which resident is calling for help, has reduced complaints that call bells were not answered in a timely fashion to almost zero, improved staff response time to assist residents (Brokaw, 2006). "Wireless call systems are gaining ground in the culture change movement as a tool promoting better services and a more calming environment for residents without the ringing and flashing of call lights" (Bowman, 2005). Brewster Village in Appleton, WI has used personal phone/pager/radios since 2000 when they moved into their new households (Norton, 2006). Each apartment in the Lyngblomsten Service House, St. Paul, MN, has a call system wired directly into the care assistants' pagers. Care assistants are universal workers responsible for housekeeping, food service, activities, and nurse aide assistance (Grant, 2001).

40. Overhead paging system has been turned off or is only used in case of emergency.	The greatest benefit to the Telephone Nurse Call system is that it reduced overhead paging by 85%. It significantly decreases the white noise throughout the facility, decreases resident agitation, especially for those dealing with dementia, improves the working environment, creates a more "normal" living environment in the households and increases privacy." (Brokaw, 2006).
41. Personal clothing laundered on resident household/neighborhood/unit instead of in a general all-facility laundry and residents and families have access to washer and dryer for own use.	Several structurally changed homes have added this feature such as Teresian House, Bigfork Valley, Meadowlark Hills, Evergreen Retirement, and Fairport Baptist Home. Teresian House reports a decrease in lost clothing and complaints. Residents also have the opportunity to do their own laundry. The household washers and dryers have also eliminated shrinkage and wrinkling compared to the industrial washers and dryers. Also, even if clothing is not marked, staff can identify who it belongs to due to the smaller groups of residents staff care for on the neighborhood/household (Brecanier, 2005). Since doing residents' personal laundry in households, calls to the laundry regarding missing clothing diminished from 1-2 calls per day seven days a week and call regarding missing teeth, glasses, ear pieces, money or jewelry to only 8-9 calls annually. "The amount of time which was considerable, spent on looking for lost items has gone to almost nothing" (Brokaw, 2005).
42. Regularly scheduled intergenerational program in which children customarily interact with residents at least once a week.	Fairport Baptist Home, Providence Mt. St. Vincent and Teresian House, and Evergreen Retirement Community have on-site child day cares with resident-involved intergenerational programs. Participation in activities with small children lowered residents' agitation levels (Ward, C., Kamp, L., Newman, S. 1996, pp. 61-76). At Brookhaven in Findley, Ohio, the child day care takes place in the household model where the environment was built with input from residents, asking what they wanted in a children's space where they would visit regularly. The result was "family living spaces" with comfortable chairs and tables for use by adults and children together (Norton, 2006).
43. Facility makes space available for community groups to meet in facility with residents welcome to attend.	Frazee Care Center, Frazee, MN offers and various community groups hold meeting in the facility to enable resident members to attend meetings (personal experience

	of co-author Bowman, 1987-1990). Laguna Honda, San Francisco, CA also allows groups to meet in their home welcoming residents to attend(Harris, 2006) as does Evergreen Retirement Community, Oshkosh, WI (Green, 2006).
44. Private guestroom available for visitors at no or minimal cost for overnight stays.	Teresian House and Providence Mt. St. Vincent have guest rooms. Teresian House reports it is used by families who come from out of town as well as families of residents passing away. There is a nominal fee for the use of the room and meals but much less than a hotel. Residents visit their families in the guest room and even parties are held there (Brecanier, 2005).
45. Facility has café/restaurant/tavern/canteen available to residents, families, and visitors at which residents and family can purchase food and drinks daily.	"A cocktail/coffee shop has become so popular with residents and their families that reservations are now being requested" (Ronch and Weiner, 2003, p. 228). Shalom Village in Overland Park, KS has a kosher café open residents, families, staff and the public (experience of the co-developers, 2001). Food is intertwined with practically every aspect of our being. It can be as simple as a social corner in a living or dining room for cookies, fresh fruit, crackers, and juice; a place to sit quietly with a cup of tea; a coffee shop in the lobby; bringing the community in to share a waffle breakfast" (Bump, 2005).
46. Facility has special dining room available for family use/gatherings which excludes regular dining areas.	Life Care Centers of America (approximately 200 homes nationally) typically have a separate "private dining room" in newly constructed buildings and usually in any acquired buildings (experience of co-developer Bowman).
47. Kitchenette or kitchen area with at least a refrigerator and stove is available to families, residents, and staff where cooking and baking are welcomed.	Elders experience joy when able to prepare a favorite recipe for friends and once a gain share meals with families (Bump, 2005). Most household models with a full household kitchen make it available to residents, families and staff (Norton, 2006).
48. CNAs attend resident care conferences.	"Recent research has confirmed that facilities where CNAs participate in care planning have lower rates of turnover compared to facilities where they do not. Yet in virtually no facility, high or low turnover, were CNAs actively involved in care planning" (Eaton, 2001). LEAP research by Linda Hollinger-Smith, Mather Lifeways 6/02-6/03 shows that nursing staff who are the

	most satisfied in their community "…feel part of decision-making … feel they are encouraged to share ideas" (Linda Hollinger-Smith, 2003).
49. Residents or family members serve on facility quality assessment and assurance (QAA) (QI, CQI, QA) committee.	Former NHA Beth Irtz included residents and family members in the home's QA and A process and explained "that family member or resident cares just as much as you do about your home" (Irtz, 2004). When Evergreen Retirement Community' Quality Council was formed in 1990, a resident was included as a full member with the same voting rights as all other members, half of which are direct-care, and the other half leadership, staff. "The participation of a resident has always been regarded as important since residents are the primary beneficiaries of our efforts. The QC was originally responsible for implementing Continuous Quality Improvement as the key element of our management philosophy. We recognized that in order to use households as the basic service delivery unit of long-term skilled nursing care we needed a fundamental change in the management philosophy. We could no longer use the traditional direct/inspect management approach. CQI is based on teamwork where each team member has a unique role, and data is the basis of decision making" (Green, 2006).
50. Residents have an assigned staff member who serves as a "buddy," case coordinator, Guardian Angel, etc. to check with the resident regularly and follow up on any concerns. This is in addition to any assigned social service staff.	Most of the Life Care Centers Mountain Region facilities (23) have a Guardian Angel program that has resulted in decreased resident/family complaints and increased relationships (experience of co-developer, Bowman).
51. Learning Circles or equivalent are used regularly in staff and resident meetings in order to give each person the opportunity to share their opinion/ideas.	I would say the 100% of the 80 facilities that we work with use the Learning Circle - with staff, residents and families (Norton, 2006). Lead supporter of Learning Circles, LaVrene Norton explains it as a leveling technique that can get everyone involved (residents, staff, families) and that "encourages quiet people to speak, talkative people to listen and everyone to share in making decisions." Staff and residents in households often use the circle daily to "connect with each other, address concerns and work through problems" (Ronch and Weiner, 2003, p. 287)

52. Community Meetings are held on a regular basis bringing staff, residents and families together as a community.	The idea of community meetings to test a simple hypothesis: "Bring the elders together regularly in a community that promotes meaning and connection and it will change their lives and cause a ripple effect that will impact the culture of the institution." Residents grew more aware of one another, became more present, more energetic and responsive. Staff noticed residents whom they had previously assumed were not capable of communication, began to interact with them. "This progress challenged their assumptions about what is possible. They began to act differently, responding to the elders in a more individualized way and helping them to make choices. They shared their perceptions with co-workers and family members, many of whom expanded their expectations and changed the way they related to the elders" (Barkan, 2002). Community Meetings take place in all of the Pinon Management homes, 16 in Colorado giving voice to residents and staff (Irtz, 2006).
53. RNs consistently work with the residents of the same neighborhood/household/unit (with no rotation).	"Nurses also like the patient contact. 95 % like one unit as opposed to moving around" (Eaton, 2001).
54. LPNs consistently work with the residents of the same neighborhood/household/unit (with no rotation).	"Still among the care practices that were observed to vary (from low to high turnover) in the course of this study in the nine facilities were the following: floating staff and consistent vs. irregular assignment" (Eaton, 2001). At the Center for Nursing and Rehabilitation, "rather than float, staff are consistently assigned to the same neighborhood team, and instead of knowing residents only by diagnosis, they develop personal relationships with each resident in the neighborhoods" (Ronch and Weiner, 2003).
55. CNAs consistently work with the residents of the same neighborhood/household/unit (with no rotation).	CNAs "permanent assignment" to unit correlated with high quality of life (Kane et all, 2004). "Particularly for residents with dementia, continuity of relationship with direct caregivers is important" (Wunderluch and Kohler, 2001). Meeting of Pioneers in Nursing Home Culture Change, Fagan et al 1997. Misiorski: "We started a CNA empowerment program whereby they now have primary care assignments; they are no longer rotated. That was a huge change for us, a real huge change and met with some

	resistance, as all change sometimes is. But the overall outcome has just been amazingly positive. And people who were negative about it in the beginning have become huge advocates of that program." "In summary, the problem with the work organization and care practices observed in most of the facilities was that they didn't seem to be allowing the caring for people as they wished to be cared for, even if they could so communicate. And where they could not communicate, the assignment system of rotation diminishes the likelihood of making a positive match between nurse's aides and residents" (Eaton, 2001). Of the 111 designated culture change homes in the CFMC study that responded regarding staff working consistently with the residents of a neighborhood/household/unit, 55 reported they do it throughout the whole building, 32 reported they do it in some areas of the building (CFMC, 2006).
56. Self-scheduling of work shifts. CNAs develop their own schedule and fill in for absent CNAs. CNAs independently handle the task of scheduling, trading shifts/days, and covering for each other instead of a staffing coordinator	"Nursing facility organizational research literature has suggested that self-scheduling is the preferred way to resolve scheduling for CNAs. … In those cases, workers felt more responsible to each other, and to their residents, to come to work on the shifts they had committed to work" (Eaton, 2001). At the Meeting of Pioneers in Nursing Home Culture Change, in 1997, Sue Misiorski, nurse consultant with Apple Health Care shared, "We also implemented the CNAs doing their own patient assignments as well as their own work schedules, which has just been amazingly fantastic. It has reduced call outs, they replace themselves; it just solved all kinds of problems for us and that is all benefiting the residents, which is why we are all there" (Fagan et al, 1997). In the first Eden facility, Chase Memorial in NY, Dr. Bill Thomas asked the nurse aides to make their own schedules and "immediately, staff attendance improved as people worked out their responsibilities at home and at work for themselves rather than having these imposed on them by a supervisor" (Eaton, 2000).
57. Facility pays expenses for non-managerial staff to attend outside conferences/workshops, e.g. CNAs, direct care nurses. Check yes if at	In the Improving Nursing Home Culture QIO Pilot study, "Other Workplace Practices encouraged and adopted "becoming a learning organization by sharing the wealth

least one non-managerial staff member attended an outside conference/workshop paid by facility in past year.	and value of education by sending staff to conferences, workshops…" (Quality Partners of Rhode Island, 2005, p. 14).
58. Staff is not required to wear uniforms or "scrubs."	At the Center for Nursing and Rehabilitation, to foster a team mind-set, "separate uniforms that define roles were eliminated. Now everyone, regardless of function, dresses in the same manner, in multi-colored tops and matching pants or skirts, with only name badges to identify an individual as an RN, LPN or CNA" (Ronch and Weiner, 2003). Homes that do not require uniforms include St. John's in Milwaukee, WI (Almost Home PBS special 2006) and Providence Mt. St. Vincent where for 6 years no staff have worn uniforms, this includes ancillary and contract staff (Boyd, 2006). Illinois ombudsman Tammy Wacker reports that one of the changes she is seeing in nursing homes in the QIO culture change pilot is the elimination of staff uniforms (Clements, 2004).
59. Percent of other staff cross-trained and certified as CNAs in addition to CNAs in the nursing department.	Regarding the Providence Mt. St. Vincent. neighborhoods: "Activity planning, assistance with individualized food preparation, and social and rehabilitation planning were integrated into resident aide jobs on each neighborhood. Also aides' job descriptions now include talking with residents, attending to requests for companionship, and helping them eat at times of their choice. This required that aides be cross-trained as nursing assistants, so they could help with toileting and bathing at times when residents preferred, not on an institutional schedule" (Eaton, 2000).
60. Activities, informal or formal, are led by staff in other departments such as nursing, housekeeping or any departments.	"Still among the care practices that were observed to vary (from low to high turnover) in the course of this study in the nine facilities were the following: activities – extent and type, aide's involvement" (Eaton, 2001). In household models like Meadowlark Hills in Manhattan, KS all staff have been trained and have the responsibility to facilitate activities (Norton, 2006).
61. Awards given to staff to recognize commitment to person-directed care, e.g. Culture Change award. This does not include Employee of the Month.	Christopher House in Wheat Ridge, CO awards a Culture Change award to any staff member who shows an observable commitment to changing the institutional culture and only when warranted, e.g., not monthly (personal experience of co-developer Bowman).
62. Career ladder positions for CNAs, e.g.	From Mather Lifeways current website: LEAP - Learn

CNA II, CNA III, team leader. There is a career ladder for CNAs to hold a position higher than base level.	Empower, Achieve, Produce – structures for advancement. An evaluation study of forty communities who have completed 6 and 12 month post LEAP surveys showed improved resident satisfaction measures (www.matherlifeways.org). Sixteen Texas Transition Health Services homes started in 2002 and in four years is one of the leading culturally transformed provider organizations in the country. THS provides a career path structure for nursing assistants and personal growth programs for all employees. (Institute for Caregiver Education, 2006). Career ladders for all staff is an area that distinguishes between low vs. high turnover (Eaton, 2001). Notre Dame nursing home in MA designed a CNA career ladder training. Providers in Modesto, CA are funding a CNA career ladder program. 150 nursing homes, nearly 25 percent, of the Massachusetts Extended Care Federation have participated in state-funded career ladder programs, which so far have trained 3500 CNAs.... Holyoke Community College in MA has a partnership with 4 facilities to offer a CNA professional development career ladder. When student staff members pass the modules, they get pay raises (Wagner, 2005).
63. Job development program, e.g. CNA to LPN to RN to NP.	Notre Dame nursing home in MA designed an LPN program for their staff. Providers in Modesto, CA are funding a nursing program. Holyoke Community College in MA partners with 4 facilities to offer LPN training and have graduated 16, with 9 in process. Each of the four facilities report dramatic rises in employee retention. They hope to add an LPN to RN course, and help RNs get master's degrees (Wagner, 2005).
64. Day care onsite available to staff.	Having a preschool on site correlated with high quality of life (Kane et all, 2004). A new model of long-term care should include “specialized assistance for child care” as an "essential element" of a stable paraprofessional job (“Direct-care health workers; The Unnecessary Crisis in Long-term Care,” 2001.) Pioneering homes with on-site day care available to staff: Teresian House, Fairport Baptist Home, Providence Mt. St. Vincent.
65. Facility has on staff a paid volunteer	The volunteer coordinator for Elms Haven Nursing Center

coordinator in addition to activity director.	in Thornton, CO calculated the volunteer hours she was able to bring in for the last half of the year 2001, 3,044 and multiplied them by $8.00/hour to come up with a figure of $24,352.00 that would have otherwise cost the facility if there was no volunteer coordinator (Brown, 2002)
66. Employee evaluations include observable measures of employee support of individual resident choices, control and preferred routines in all aspects of daily living.	Pennyburn at Mayfield performance evaluation covers the areas of Team Builder, Person Centered Relationships, Initiative, Willingness to Grow, Critial Thinking-to-Action and Judgment (from actual performance evaluation).
67. Average longevity of CNAs. Add length of employment in years of permanent CNAs and divide by number of staff.	In a comparison study, "the share of staff with more than 3 years' service varied from only 19% in the most problematic home to 80% of employees in the no-deficiency home."(Eaton, 1997). 2003 Crestview RNs averaged 5.1 years of employment (Rantz and Flesner, 2004). An average of 5.7 years for CNA longevity was calculated using longevity figures from the four focus facilities used in this report.
68. Average longevity of LPNs (in any position). Add length of employment in years of permanent staff LPNs and divide by number of staff.	2003 Crestview LPNs averaged 5.6 years of employment (Rantz and Flesner, 2004). An average of 7.3 years for LPN longevity was calculated using longevity figures from the four focus facilities used in this report.
69. Average longevity of RNs/GNs (in any position). Add length of employment in years of all permanent RNs/GNs and divide by number of staff.	2003 Crestview CNAs averaged 3.0 years of employment (Rantz and Flesner, 2004). An average of 9.8 years for RN longevity was calculated using longevity figures from the four focus facilities used in this report.
70. Longevity of the current Director of Nursing (in any position).	2003 Crestview Administration average was 7.2 years. (Rantz and Flesner, 2004). Staff turnover averages 50% for DONs (Wunderluch and Kohler, 2001). Of 109 designated culture change homes in the CFMC culture change study that responded, the mean tenure for DONs was 5.7 years (CFMC, 2006). An average of 6.25 years for NHA longevity as the NHA and 9.25 years working at the home in total was calculated using longevity figures from the four focus facilities used in this report.

71. Longevity of the current Administrator (in any position).	2003 Crestview Administration average was 7.2 years. (Rantz and Flesner, 2004). Staff turnover averages 25% for administrator (Wunderluch and Kohler, 2001). The employment stability of nursing home administrators ranges from 20% to 50% (Singh & Schwab 1998)" as reported by (Rantz/Flesner, M.K. 2004) An administrator in place for 2 yrs or more correlated with high quality of life (Kane et all, 2004). Of 108 designated culture change homes in the CFMC culture change study that responded, the mean tenure for administrators was 7.8 years (CFMC, 2006). An average of 14.5 years for NHA longevity as the NHA and 16.25 years working at the home in total was calculated using longevity figures from the four focus facilities used in this report.
72. Turnover rate for CNAs.	AHCA 2002 National Turnover: RNs = 50%. Staff turnover averages 66% for RNs and LPNs (Wunderluch and Kohler, 2001.) Reduced staff turnover has been reported by many culture changing homes (see Artifacts of Culture Change report).
73. Turnover rate for LPNs.	AHCA 2002 National Turnover rate for LPNs is 50%. Staff turnover averages 66% for RNs and LPNs. (Wunderluch and Kohler, 2001.)
74. Turnover rate for RNs.	AHCA 2002 National Turnover rate for CNAs is 70%. Staff turnover averages 100% for CNAs. A careful study has shown the average cost to be about $3200 in 1992 (Zahrt, quoted in Straker and Atchley, 1999) (Eaton, 2001). Findings suggest that pressure ulcer incidence rates are lower in facilities with lower staff turnover and higher retention relative to facilities with higher turnover and higher retention. Although both types of facilities reported that more than 50% of their nurse aide staff had tenure of 2 or more years, outcomes were poorer for those with higher turnover. One possible explanation for this is that the time and effort required to

	continually train new nurse aides in the high-turnover homes, where on-the-job training may involve peer mentoring, could be invested in direct resident care by experienced nurse aides. This supports the finding of Bowers, Esmond, and Jacobson (2000), in which experienced nurse aides reported that working with new staff parallels that of working "short staffed," often compromising resident care (Barry et al, 2005, pg. 309). "Turnover rates among nurse assistants range from 40% (Phillips 1987; Surpin 1988) to 100% to 400% (Harrington 1987; 1991; IOM 1996) (Rantz and Flesner, 2004, p. 1). From "Direct-care health workers; The Unnecessary Crisis in Long-term Care," Submitted by the Paraprofessional Healthcare Institute. The Aspen Institute Domestic Strategy Group. January 2001. "…more than 40 states now report critical shortages of paraprofessionals. Turnover rates range between 40 and 100 percent annually. Vacancies and turnover are dangerously high..." "Staff vacancies and high turnover create 1) high recruitment and orientation costs, 2) high retention costs, 3) high separation costs, 4) high temporary replacement costs, and 5) foregone revenues."
75. Turnover rate for DONs.	50% for Directors of Nursing (Wunderluch and Kohler, 2001).
76. Turnover rate for NHAs.	25% for Administrators (Wunderluch and Kohler, 2001).
77. Percent of CNA shifts covered by agency staff over the last month.	"Most facilities in this study had stopped using agency staff, because they found them both to be more expensive and less reliable than was acceptable." "Still among the care practices that were observed to vary (from low to high turnover) in the course of this study in the nine facilities were the following: use of agency staff" (Eaton, 2001). "Staffing at the right level in this study was not just a matter of more bodies. For instance, agency staff were sometimes felt to be more trouble than they were worth since they had to be trained and supervised and usually, they did not know the residents, did not know where their dentures are, whether they wore glasses, how they needed to be fed, dressed and toileted. Yet agency staff were paid almost twice as much for every hour on the job as regular staff, and often brought with them a negative attitude about anyone who would do this kind of work for less than they did, according to both managers and CNAs" (Eaton, 2001).

	Of 111 designated culture change homes in the CFMC culture change study, the median yearly agency hours over the last 12 months for CNAs was 220, for LPNs is 649 and for RNs is 80 (CFMC, 2006).
78. Percent of nurse shifts covered by agency staff over the last month.	A recent 2006 study, The Use of Contract Licensed Nursing Staff in U.S. Nursing Homes, found that use of contract nursing staff (not CNAs) is relatively rare averaging around 5%. The study did not include CNAs. One recent study reports that one solution homes are using for the staffing shortage is the use of contract nursing staff. "This type of staffing is costly, disrupts continuity of care (Guillard 2000), and may also contribute to poor patient care" (Bourbonniere, 2006).
79. Current occupancy rate.	Average 2004 occupancy rate: 84.2 % (Nursing Home Data Compendium, 2005).

Developed by the Centers for Medicare and Medicare Services and Edu-Catering, LLP. For more information contact Karen Schoeneman at karen.schoeneman@cms.hhs.gov or Carmen S. Bowman at carmen@edu-catering.com.

APPENDIX C

ARTIFACTS OF CULTURE CHANGE REFERENCES

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