



CULTURE CHANGE IN A FOR-PROFIT NURSING HOME CHAIN: AN EVALUATION

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ABSTRACT: Beverly Healthcare—one of the nation’s largest nursing home chains—launched a culture change initiative in 2002, called resident-centered care (RCC). This report presents findings from a 12-month evaluation of that initiative. While most prior culture change models had been implemented by nonprofit organizations in a small number of facilities, this project marked a major departure for the culture change movement because it was the first time that a large national for-profit chain implemented culture change. The RCC initiative was successful in that it introduced new organizational practices, made improvements in resident quality of life (e.g., in choice and autonomy), and created better work environments for staff. The RCC initiative did not achieve short-term financial gains. The business case for culture change, however, should be based on long-term goals to reposition the nursing home within an evolving continuum of care.

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EXECUTIVE SUMMARY

Across the United States, new models are emerging that aim to transform the organization of nursing home care. They share the common goals of moving toward more “person-centered” or “resident-directed” care with new operational practices that transform the nursing home environment as much as possible from an institution to a home. In the late 1980s, a national grassroots effort known broadly as the culture change movement started in isolated pockets of the nursing home industry, driven by a variety of independent organizations. Gaining formal status with the formation of the Pioneer Network in 2000, the culture change movement has continued to grow in recent years with the emergence of state culture change coalitions across the country.

Beverly Enterprises, Inc. (BEI) is the parent company of one of the nation’s largest nursing home chains. In 2002, Beverly Healthcare—the BEI subsidiary that manages its nursing facilities—implemented a culture change initiative called “resident-centered care” (RCC). This initiative marked a milestone for the culture change movement because it was the first time that a national for-profit corporation had implemented culture change as part of a quality-improvement strategy. Prior culture change models were implemented by nonprofit organizations in a small number of facilities. Given that the majority of the nation’s nursing home beds are owned or operated by for-profit companies, Beverly Healthcare’s RCC initiative could have broad applications.

This report presents the findings of a 12-month evaluation of that RCC initiative. The evaluation’s objectives were: (1) to describe organizational practices associated with the RCC initiative; (2) to determine the degree to which culture change did or did not occur; and (3) to assess potential impacts of RCC on resident quality of life, staff satisfaction, and financial performance.

METHODS

Because few tools were available to assess culture change progress, we developed two new instruments: a Culture Change Staging Tool (CCST) and a Culture Change Scale (CCS). The CCST—designed to assess culture change practices associated with facilities’ progress through four stages of culture change, as evidenced by staff behaviors or operational practices—was used to collect data from nursing home administrators. The CCST was administered in 7 RCC facilities and 10 non-RCC facilities at three points: baseline (0 months), six-month follow-up, and 12-month follow-up.

Because data collected by the CCST were self-reported, we also developed the CCS in order to assess culture change progress based on staff surveys. The CCS was completed by a total of 812 staff, and we conducted a total of 950 in-person resident interviews, across the three measurement intervals in the 7 RCC and 10 non-RCC facilities. We also analyzed secondary data about financial performance from Beverly Healthcare's internal financial-reporting systems.

FINDINGS

Culture Change Staging Tool. Self-reported data led to the conclusion that RCC facilities, in comparison to their non-RCC counterparts, showed progress by implementing culture change practices in five areas: permanent staff assignment, culture change awareness, informal leadership behavior, resident-directed behavior, and leadership-team behavior.

Culture Change Scale. Staff surveys supported the above conclusion. RCC facilities improved in terms of system-wide culture change, resident choice, organizational design, and overall CCS scores. Non-RCC facilities did not show comparable improvements over time.

Residents' Quality of Life. The RCC initiative had positive effects on two measures of residents' quality of life: choice and autonomy, and dignity. Residents in RCC facilities were afforded more choice in decision-making about their daily lives, and they were treated with greater dignity by staff, compared to residents in non-RCC facilities.

Staff Satisfaction. Staff working in the RCC facilities had greater satisfaction in three areas—training, management, and work environment—and greater satisfaction overall. Most of these differences were attributed to selection bias, as senior leadership at Beverly Healthcare made a strategic decision to implement the RCC initiative in better-performing facilities.

Financial Performance. The RCC facilities had higher profits per resident day and higher earnings before interest, taxes, depreciation, and amortization (EBITDA) per resident day than did non-RCC facilities. There were few differences between RCC and non-RCC facilities in terms of the percentage of private-pay days and the percentage of Medicare days. RCC facilities had a lower percentage of Medicaid days. We attribute these differences in financial performance to selection bias as well.

IMPLICATIONS FOR PRACTICE

The fact that a financially driven corporation, publicly traded on the New York Stock Exchange, implemented a culture change strategy to try to increase its market share suggests that the culture change movement (which started as a grassroots effort) has diffused into broader segments of the nursing home industry.

There can be a long delay, however, between the implementation of culture change practices and the time when resulting improvements in financial performance are realized. Because Beverly Healthcare's RCC initiative indeed had little effect on payer mix, occupancy, and other short-term measures of financial performance, for-profit entities that remain focused on meeting quarterly financial targets are likely to be disappointed by this strategy. The business case for culture change, however, may ultimately be in the long-term competitive advantages that culture change facilities gain in the marketplace.

Nonfinancial justifications for the RCC program probably make a more compelling argument for culture change than do purely financial ones. Companies stand to reap benefits from culture change related to improved quality of life for residents, better work environments for staff, enhanced leadership, and upgraded physical environments.

The RCC program did not lead to higher operating expenditures in the RCC homes. Most of the gains in organizational performance associated with Beverly Healthcare's RCC initiative were achieved without major capital expenditures for physical renovations. The corporation delayed making major capital investments until 2005 when \$7.5 million was budgeted for physical renovations. Most of these renovations were not completed before this study was completed. Most of Beverly Healthcare's investments made during the course of this evaluation (totaling \$2 million) were in additional consultant costs, staff salaries, and the cost of travel associated with attendance at culture change training sessions.

Both RCC and non-RCC homes (which were matched by geographic region) had comparable increases in operating expenses between 2003 (before RCC started) and 2005 (after RCC started). RCC facilities saw smaller increases in operating expenses from 2003 to 2005 and maintained lower operating expenses per resident day during this period. The RCC homes created greater value for residents by enhancing their quality of life, and greater value for staff by improving their levels of satisfaction, while maintaining similar operating costs.

Major investments both in capital and human resources will be necessary, however, to implement culture change successfully over the long term. Strategic investments in these areas may be especially challenging within publicly traded for-profit companies. Because physical renovations are by far the most expensive component of many culture change models, the financial returns on capital investments are especially difficult to justify. Capital expenditures should be viewed as part of a broader corporate strategy to reposition a company within an evolving long-term care market. Excluding capital costs (roughly \$750,000 per facility), the costs of culture change implementation averaged about \$78,413 per facility. Given the lack of immediate financial returns, a more reasonable approach would be to amortize these costs.

Most of Beverly Healthcare's RCC innovations were made with limited capital investments, but its initiative showed success in moving RCC facilities from an *institutional* stage to a *transformational* stage. The high cost of physical renovations necessary to implement *neighborhood* or *household* models, however, is likely to remain a significant barrier to culture change progress for many providers. Organizations contemplating culture change should carefully consider the investments in human and capital resources needed to successfully implement it.

IMPLICATIONS FOR POLICY

The Omnibus Budget Reconciliation Act of 1987 (OBRA 1987) established a federal mandate to improve the quality of life of nursing home residents. To help fulfill OBRA 1987's requirements, culture change initiatives should be supported by public policies, as this study suggests that culture change is an effective strategy that improves resident quality of life by supporting greater resident choice and autonomy.

Existing public policies, which tend to emphasize health and safety at the expense of quality of life, may be misguided. The institutional model of care—with nurses' stations, long double-loaded corridors, and semiprivate rooms—remains the dominant model for organizing nursing home care. Yet this model is associated with poor quality of life for residents and an unsatisfying work environment for staff.

The culture change movement is striving to transform the nursing home environment, but the capital required to implement culture change models is likely to remain a significant impediment. A new set of metrics should therefore be incorporated into value-based reimbursement systems and consumer report cards in order to place greater emphasis on workforce performance and resident quality of life. Such new culture

change metrics would complement more traditional performance metrics such as state-survey compliance and clinical performance.

Still, it will be no simple task for policymakers to balance the competing needs for safety and choice in a way that best meets the current and future expectations of key stakeholders such as residents and their families, consumer advocates, providers, payers, and regulators. The goals of nursing home care pose complex ethical dilemmas that must ultimately be addressed through open public debate.

CULTURE CHANGE IN A FOR-PROFIT NURSING HOME CHAIN: AN EVALUATION

INTRODUCTION

Across the United States, interest is growing in new organizational models to transform the delivery of care in nursing homes. These models, diverse in their methods of implementing change, share common goals of moving toward more “person-centered” or “resident-directed” care (Angelelli, 2006). In particular, the culture change movement, which started at the grassroots level, has grown into numerous statewide culture change coalitions supported through a national organization called the Pioneer Network. These ongoing efforts, aimed at transforming the nursing home environment as much as possible from an institution to a home, promise to enhance the quality of life for residents and improve the quality of the workplace for staff.

Beverly Enterprises, Inc. (BEI), one of the nation’s largest nursing home chains, implemented in 2002 a culture change initiative that it called “resident-centered care” (RCC). This was the first time that a national, publicly traded (on the New York Stock Exchange), for-profit corporation had adopted a corporate strategy to implement culture change; almost all prior culture change efforts were pursued by nonprofit organizations, usually within a small number of facilities. According to the chief operating officer of Beverly Healthcare (the subsidiary that operates BEI’s nursing homes), the company’s goal was to gain a competitive advantage in the marketplace in order to increase market share.

BEI’s RCC initiative marks an important milestone for the culture change movement in the United States. Given that the majority of the nation’s nursing home beds are owned or operated by for-profit companies, the initiative could have widespread implications for the industry.

Some might argue that nonprofit organizations may actually be better positioned than publicly traded companies to implement culture change. The nonprofits, after all, can justify long-term investments of capital and human resources without the pressure from Wall Street to maximize shareholder value, which shortsighted observers see as achieving quarterly financial results. On the other hand, because for-profit companies have easier access to capital, they are in a stronger position to make major capital investments that may be required to implement culture change on a large scale. Regardless of corporate ownership, providers may lose or gain market share depending

on how competitive their services are; and in certain markets, culture change models may yield competitive advantages over the long-established “institutional” models of nursing home care. Beyond short-term financial returns, there may be strategic benefits associated with the RCC initiative that could support BEI’s long term financial position. If RCC enhances the company’s “brand recognition” or repositions the company in the broader marketplace for long-term care, its services could be differentiated from those of its competitors.

This report summarizes an evaluation, conducted by a research team from the University of Minnesota, of Beverly Healthcare’s RCC initiative. The report’s objectives are to:

- Describe organizational practices associated with culture change progress
- Determine the degree to which culture change did or did not occur in BEI’s RCC facilities
- Assess the impacts of the RCC initiative on residents’ quality of life, staff satisfaction, and financial performance.

RESIDENT-CENTERED CARE AT BEVERLY: A BRIEF HISTORY

The RCC initiative was implemented in two stages. During the initial *pilot* phase (2002 to 2004) the feasibility of RCC was tested in 10 facilities across four states (Indiana, Pennsylvania, Wisconsin, and Minnesota). During the *expansion* phase (2004 to 2006), the implementation strategy was streamlined to improve the likelihood that RCC could be successfully adopted elsewhere at lower cost. Corporate policies and procedures were also adapted to better align operational systems throughout Beverly Healthcare’s chain of command—from the corporate office to regional offices to district offices to individual RCC facilities. Starting in 2004, 18 more facilities in seven states (Indiana, Wisconsin, Minnesota, Pennsylvania, Kentucky, Massachusetts, and North Carolina) joined the RCC initiative.

Piloting the Resident-Centered Care Initiative (2002–2003)

In order to implement RCC, Beverly Healthcare sought technical assistance through a request for proposal, as it did not have the technical expertise to develop and deploy a culture change model on its own. In 2002, the company contracted with Action Pact, Inc., a nationally prominent consulting firm, based in Milwaukee, Wis., that specializes in culture change implementation. For Action Pact, the Beverly Healthcare contract was its largest to date.

Not all of the initial 10 facilities achieved the same degree of success in implementing RCC during the pilot phase. Six of these facilities made substantial progress, but four were discontinued from the RCC initiative in 2004 because they demonstrated too little progress in culture change implementation.

Early Lessons Learned

During the pilot phase, corporate leaders gained greater appreciation of the capital and human resources needed to successfully implement culture change. They also developed more realistic expectations about what the RCC initiative could achieve over the short term. Basically, the company leaders learned three main lessons from the pilot program:

1. *Facilities with poor histories of state-survey compliance were not the best candidates for culture change.* Successful facilities tended to have better compliance histories in meeting state and federal regulatory standards. But if a facility had significant problems with compliance, regulatory issues tended to take precedence over everything else; the RCC initiative there was not considered critical to the organization's survival or core mission.
2. *Instability in leadership tended to undermine culture change progress.* Successful RCC facilities were less likely to experience turnover among administrators or directors of nursing compared to their unsuccessful counterparts. Without stability and continuity in leadership, culture change is difficult to implement.
3. *Culture change requires competent leadership.* In comparing the leaders of the four unsuccessful pilot facilities (which were dropped from the RCC initiative in 2004) with those of the six pilot facilities kept in the program, we found statistically significant differences in core leadership competencies such as *focused visionary* (Figure 1), *communication* (Figure 2), and *supporting change* (Figure 3).

Figure 1. Leadership Competency: Focused Visionary

Scale Items:

- Leadership staff sets direction for facility
- Facility has vision that is focus of energies
- All employees support facility's vision
- Leadership staff has clear set of priorities

($p < .001$; Effect size = .95)

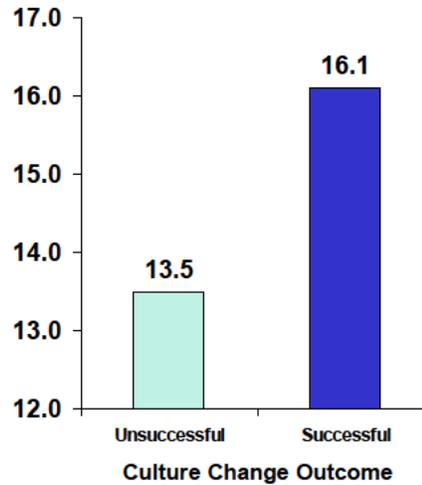


Figure 2. Leadership Competency: Communication

Scale Items:

- Our leadership staff . . .
- Listens to employees
 - Places priority on communication with employees
 - Is approachable
 - Is honest

($p < .001$; Effect size = .62)

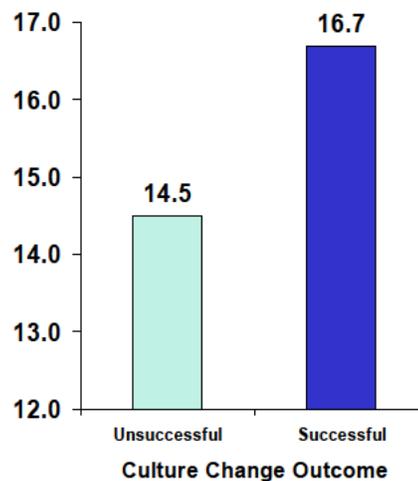
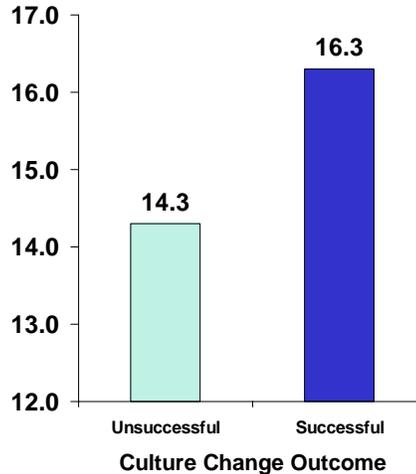


Figure 3. Leadership Competency: Supporting Change

Scale Items:

Our leadership staff . . .

- Encourages learning/growth
- Encourages staff to take on new initiatives
- Is willing to take risks
- Ensures employees adhere to agreed upon standards



($p < .001$; Effect size = .71)

Beverly Healthcare routinely promotes what it considers strong leaders to new positions within the organization. The company also has a practice of reassigning strong leaders so that they may serve as coaches to help troubled facilities improve their performance. This means that the RCC program lost momentum whenever key members of the leadership team at participating facilities were reassigned to new positions. It became evident that corporate policies would need to be reconsidered in order to support the RCC initiative.

Developing a More Cost-Effective Implementation Strategy

Action Pact’s culture change implementation strategy during the pilot phase required considerable time commitments from its consultants, who provided the following services at each of the 10 pilot RCC facilities:

- An initial assessment to identify organizational strengths and weaknesses (e.g., related to leadership, physical plant, and other attributes)
- Six two-day training sessions, on a bimonthly basis, attended by 15 to 20 participants per facility
- Ongoing consultation with facility managers and monthly meetings attended by facility staff

- Leadership development and culture change training sessions provided at each RCC facility
- Assessments and reassessments to provide feedback to leadership teams at each RCC facility through a monthly progress report.

The original contract with Action Pact—estimated at \$500,000 during the pilot phase (or roughly \$50,000 per facility)—made the initiative too expensive for Beverly Healthcare to replicate nationally if the same consulting arrangement were to remain in place.

Expanding Resident-Centered Care (2004–2005)

Beverly’s leaders took the key lessons of the pilot phase to heart. To increase the likelihood of success for the RCC initiative in other facilities, they devised a new implementation strategy. A description of key elements follows.

New application process. Beverly Healthcare became more strategic in its selection of facilities for the RCC initiative. While the 10 original pilot sites represented a “convenience sample,” chosen largely to minimize travel costs for Action Pact consultants, facilities for the program’s expansion phase were selected on the basis of past and current performance. Only facilities with strong leadership, good regulatory compliance histories, and superior track records according to Beverly’s “Scorecard” (i.e., key performance metrics tracked by corporate headquarters to set bonuses) could become RCC facilities. And because individual facilities had to formally apply to the corporate office to participate, candidates’ interest in making RCC work for them was already high.

Cost of renovation. Another consideration in facility selection was that renovating the existing physical plant (i.e., the building footprint and floor plan) couldn’t be too expensive. Initially, \$250,000 per facility was budgeted for capital improvements to support RCC. But when the architectural and interior-design plans for several pilot facilities were developed and put out for bids to building contractors, this dollar amount proved to be insufficient in many older buildings, which required extensive renovations in order to convert traditional nursing units from “institutions” into “homes.” Such changes would typically involve:

- Subdividing units into smaller functional areas by adding more home-like kitchens and dining rooms to serve subgroups of residents—or “neighborhoods”—in place of a centralized dining room
- Upgrading nurses stations into more informal work stations

- Enhancing shower and bathing areas to create bathing “spas” with more personalized fixtures and greater privacy
- Installing new and more attractive lighting in common areas
- Upgrading interior finishes (e.g., carpets, floors, walls, and ceilings)
- Purchasing new furniture and equipment.

Realignment of management systems. Beverly Healthcare made a number of organizational changes in order to support the implementation of RCC throughout the company. These included:

- **Leadership Buy-in.** In a company-wide integrated approach, culture change training was provided to leaders at all levels of the organization—corporate, regional, district, and facility.
- **Corporate Leadership for RCC.** Because a corporate culture change champion was needed to lead the RCC initiative throughout Beverly Healthcare, the senior vice president of operations was given that responsibility.
- **Corporate Steering Committee.** Given that the RCC initiative affected many different departments within the organization, a corporate steering committee for the program was established to provide oversight.
- **Financial Incentives.** As key culture change milestones were reached, facilities—or units within facilities—were recognized for their achievements and rewarded financially.
- **Capital Investments.** The investment of major capital resources was tied to an individual facility’s demonstration of tangible culture change progress. Markers of progress included practices such as having permanently assigned nursing staff, the creation and naming of neighborhoods, and the identification of neighborhood coordinators.
- **Corporate Policies.** Corporate policies were revised to support greater autonomy in decision-making by individual facilities, particularly regarding such issues as reassignment of facility staff, raw food purchases, and outsourced services (e.g., housekeeping).
- **“Train the Trainer” Model.** Rather than depending on Action Pact consultants, Beverly Healthcare adopted a “change agent” training model. This new strategy trained company staff to become internal consultants, responsible for implementing RCC facilities in their region.

- Kick-Off Regional Retreat. The new implementation strategy began with two-day regional retreats, attended by regional vice presidents, district managers, and facility leaders, to reinforce the importance of the RCC initiative to the company. Such retreats took place *before* training was provided to frontline facility staff.
- Standardized Training Modules. A series of 10 two-day workshops schooled the company's "culture change agents" in the training modules, developed by Action Pact, on culture change implementation and leadership development. The agents later used these modules to train leadership teams and frontline staff at each RCC facility.

All told, Beverly Healthcare's revised strategy limited the cost of culture change implementation by means of a more cost-effective operating model. For example, the company reduced the amount of "hands-on" consultation required from Action Pact consultants, simultaneously creating greater ownership of the RCC initiative within Beverly's ranks. As a result, the cost of Action Pact's services dropped from \$160,531 in 2004 to \$115,172 in 2005.

BEI was sold in 2006 to a group of private investors (Fillmore Capital Partners), who merged it with Pearl Senior Care and reorganized the new entity into two core businesses. The first, called Geary Property Holdings, manages the company's real-estate assets. A second, Golden Gate National Senior Care (renamed Golden Living in 2007), operates 263 of the company's nursing facilities and 15 assisted-living facilities. According to senior managers at Golden Living, it remains committed to expanding the RCC initiative.

METHODS

Evaluation of the RCC initiative could not be based on a randomized intervention trial, so a naturalistic study design was used to compare two groups:

- *Experimental homes*: Seven facilities that began RCC during the expansion phase in 2004.
- *Comparison homes*: 10 non-RCC facilities.

All 17 facilities in the evaluation were located in two states: Wisconsin and Pennsylvania. We matched the experimental homes and comparison homes on size, geographic region, payer mix, regulatory compliance, and other performance criteria at baseline (i.e., before the implementation of RCC during the 2004 expansion phase). Our goal in matching

facilities was to minimize any selection bias in the experimental homes—for example, they should not be better performers than the comparison homes at baseline. During the expansion phase, however, senior managers at Beverly Healthcare made a strategic decision to target the RCC initiative to facilities that were more profitable, so selection bias was unavoidable for some of the performance parameters we evaluated.

Primary-Data Collection: A baseline and post-test research design was used, with site visits to all 17 facilities at three points (baseline or 0 months, six months, and 12 months). Research teams interviewed staff and residents and completed observational studies during field visits lasting one to three days. We completed 950 in-person resident interviews during these visits, and a total of 812 staff surveys were completed by mail. Fieldwork was initiated in February 2004 and ended in September 2005.

Secondary-Data Collection: We obtained secondary data about the financial performance of each experimental home and comparison home from Beverly Healthcare’s internal cost-accounting systems. These financial data included revenues, expenses, profitability, payer source, and occupancy.

FINDINGS

Assessing Culture Change Progress

Fulfilling some of the main objectives of this report—to describe how culture change efforts were implemented and to determine the degree to which culture change actually occurred within Beverly Healthcare’s RCC facilities—required tools for assessing culture change progress. Few such tools were available. However, we were able to use two new mechanisms—a Culture Change Staging Tool and a Culture Change Scale—developed by researchers from the University of Minnesota.

Culture Change Staging Tool

A knowledge-elicitation methodology (Gustafson et al., 1992) was used to create a cognitive map of the culture change process, and a decision tree was developed to classify nursing facilities using a heuristic typology of culture change practices. The resulting model is a typology that identifies the four stages of culture change.

- Stage 1, the *institutional stage*, is represented by a traditional medical model organized around a series of nurses’ stations. The typical facility at this stage has one or more such units, usually designated by a name (e.g., Unit B, Station One, or 3rd Floor). Nursing staff, especially nursing assistants, are not permanently assigned to residents or to units. Instead, they rotate across units based on their

daily or weekly schedules. Neither residents nor staff members are empowered in this model—staff inputs into operational processes and resident inputs into their daily activities and choices are limited. The organizational power structure is top down, or hierarchical, descending from administrator to department heads to supervisors to frontline staff. Organizational policies and procedures are designed to support the operational efficiency of the nursing unit.

- Stage 2, the *transformational stage*, is the initial phase of culture change—when awareness and knowledge of culture change spreads among frontline workers, supervisory staff, managers, and the leadership team. A key characteristic of many facilities at this stage is permanent staff assignment to a nursing unit or permanent assignment of nursing staff to the same resident over time and across shifts. Often, symbolic or minimalist (low cost) changes are introduced into the physical environment to make the setting less institutional (e.g., through new furnishings, interior finishes, artwork, and plants).
- Stage 3, the *neighborhood stage*, breaks up traditional nursing units into smaller functional areas and offers decentralized dining in each neighborhood. Given the high cost of kitchen renovations in existing buildings, dining rooms in neighborhoods often lack fully functional kitchens. Therefore many facilities use alternative strategies; for example, steam tables may be used to transport meals to the neighborhood, thereby avoiding the tray-and-line service that is associated with the institutional stage. The role of a neighborhood coordinator is typically formalized during this phase. In addition, neighborhoods are given distinct names (such as Spruce Lane, Willow Grove, or Balsam Place) to replace institutional names (e.g., One South, Two North, or Three West).
- Stage 4, the *household stage*, is represented by self-contained living areas, typically with fewer than 25 residents. Households usually have their own fully functional kitchens, and a shared living room and dining room may be provided as well. Self-directed work teams have greater decisional control over operations within each household, and residents are afforded greater autonomy and choice in their daily schedules and activities. In effect, the hierarchical organizational structure associated with the institutional stage is flattened. While core functions such as nursing, dietary, housekeeping, activities, or food service do remain, staff roles within households become less differentiated through the introduction of blended roles or a cross-trained workforce. Household staff are in fact encouraged to take on new and multiple roles.

Because a set of culture change practices is associated with each stage of the model, the Culture Change Staging Tool (CCST) assesses the extent—as captured through self-reported ratings—to which each practice has been implemented at each facility. In most instances there was no prior language to describe these culture change practices, so the research team working with Action Pact consultants had to define the staff behaviors and operational practices indicative of successful movement toward culture change. Thus the CCST provides key constructs that serve as markers of culture change progress.

The CCST was used, with the cooperation of administrators, at three points: baseline (0 months), six-month follow-up, and 12-month follow-up. We interviewed administrators of 7 RCC (experimental) homes and 10 non-RCC (comparison) homes during in-person or telephone interviews. Typical CCST interviews took about 30 minutes to complete.

High Cost of Physical Renovations

Given the high cost of physical renovations, it soon became apparent to company leaders that it was not feasible for Beverly Healthcare to implement household models (Stage 4). As a result, the goal for managers at the RCC homes was to implement neighborhood models (Stage 3). During the course of this 12-month evaluation, however, few if any facilities in the RCC initiative were able to implement culture change practices associated with neighborhood models. Much of this delay had to do with the time needed to develop construction drawings, get bids from local builders, and sign contracts to make the renovations.

But a major impediment was the capital expenditures necessary to implement neighborhood models. An architectural study found the cost of physical renovations necessary to support neighborhood models to be more expensive than the \$250,000 per facility that had been budgeted. Typical costs were two to four times this amount, depending on the existing physical plant. Nevertheless, RCC facilities were able to implement culture change practices associated with a movement from the institutional stage (Stage 1) to a transformational stage (Stage 2).

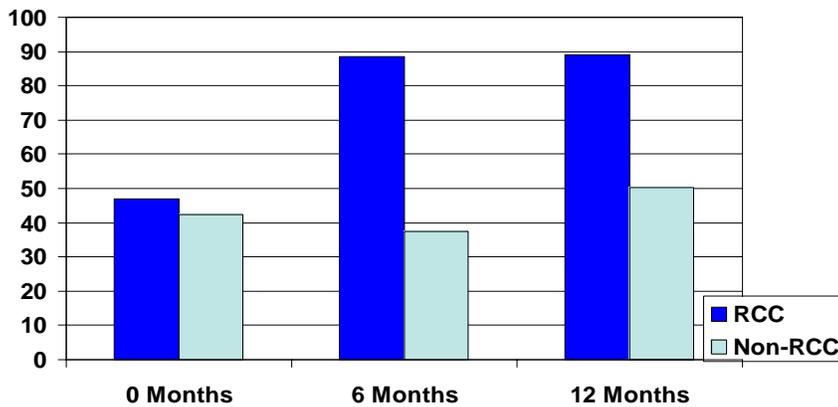
We asked administrators to rate their facility on the following five culture change practices associated with movement from the institutional stage to the transformational stage:

1. Permanent staff assignment: To what extent are nursing staff assigned permanently?
2. Culture-change awareness: To what extent are staff aware of the RCC initiative ?

3. Informal leadership behavior: To what extent do staff demonstrate informal leadership behaviors?
4. Resident-directed behavior: To what extent do staff demonstrate resident-directed behaviors?
5. Leadership-team behavior: Who makes up the leadership team at the facility?
To what extent does each member of the team engage in tasks outside his or her traditional departmental role?

[Table A-1](#) in the Appendix describes how each of these five culture change practices was measured.

Figure 4. CCST Practice: Permanent Staff Assignment



Using the CCST, we assessed the degree to which culture change practices were present in the 7 RCC and 10 non-RCC facilities at baseline, six-month follow-up, and 12-month follow-up. Figure 4 shows the extent to which these facilities implemented permanent staff assignment, defined as the percentage of time that staff with permanent assignments actually worked where they were so assigned (it is common practice to temporarily divert staff to other areas of the facility that are “working short”).

At six months and 12 months, the RCC facilities implemented permanent staff assignment to a far greater extent than did the non-RCC facilities. In the RCC facilities, the mean proportion of nursing staff with permanent staff assignment increased from 47.1

percent at baseline to 88.6 percent at six-month follow-up and to 89.0 percent at 12-month follow-up. In the non-RCC facilities, the mean proportion of nursing staff with permanent staff assignment averaged 43.3 percent across the three measurement intervals.

Figure 5. CCST Practice: Culture Change Awareness

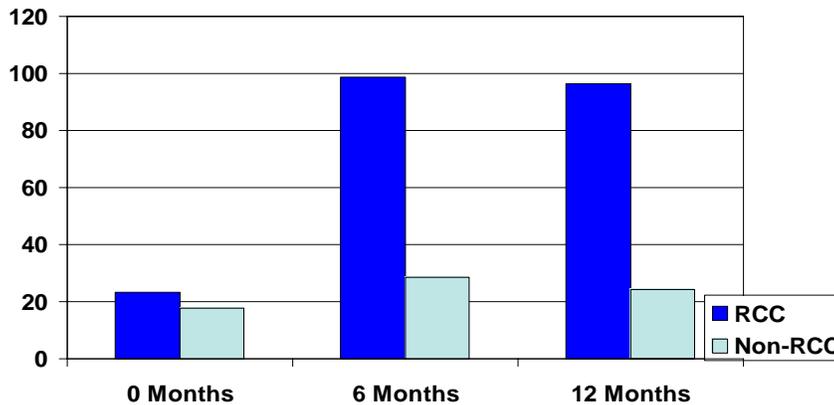


Figure 5 shows scores on culture change awareness, defined as the percentage of staff in the facility who are cognizant of the RCC initiative. In the RCC facilities, this measure increased from 23.4 percent at baseline to 98.6 percent at six-month follow-up, and it dipped slightly to 96.4 percent at 12-month follow-up. Even with intensive and continuing training programs for the RCC initiative, it is difficult to get culture change awareness to 100 percent because of staff turnover. Among non-RCC facilities, culture change awareness remained low (17.7 percent at baseline, 28.4 percent at six months, and 24.3 percent at 12 months).

Figure 6. CCST Practice: Informal Leadership Behavior

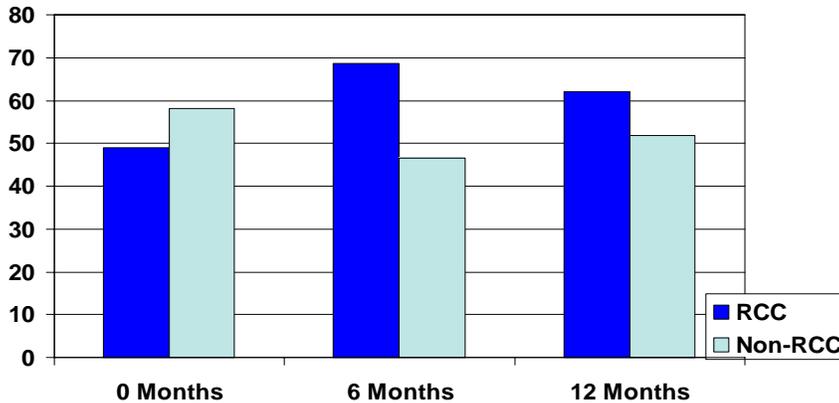


Figure 6 shows change in informal leadership behavior, defined as the percentage of staff in the facility who are not in formal leadership positions but who routinely help their coworkers “do things in the right way.” At baseline, the non-RCC facilities reported a higher degree of informal leadership behavior than did the RCC facilities (58.2 percent versus 49.0 percent). But at six months and 12 months, this pattern reversed. Among RCC facilities, the mean proportion of staff who demonstrated informal leadership behavior increased from 49.0 percent at baseline to 68.6 percent at six-month follow-up, and it was 62.1 percent at 12-month follow-up.

The difference in informal leadership behavior was not that pronounced between RCC and non-RCC homes, especially at 12 months. Anecdotal evidence suggests that informal leadership behavior is difficult to instill through staff-training programs, as it is reflective of a core personality trait. Even in facilities at more advanced stages of culture change, informal leadership behavior can be limited by staff turnover and the need to constantly reinforce these behaviors.

Figure 7. CCST Practice: Resident-Directed Behavior

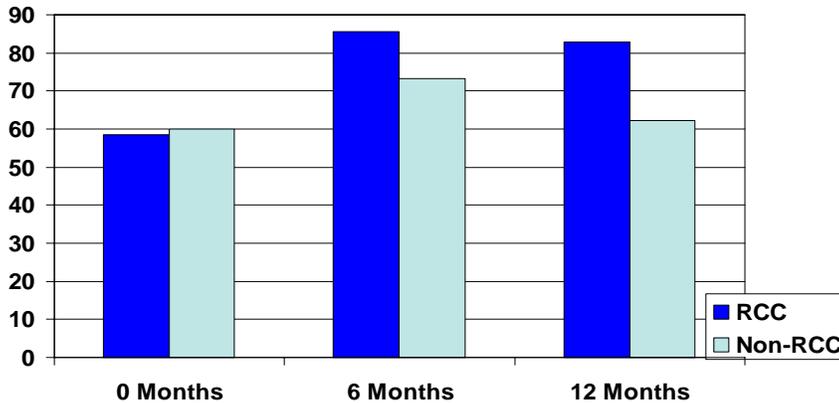
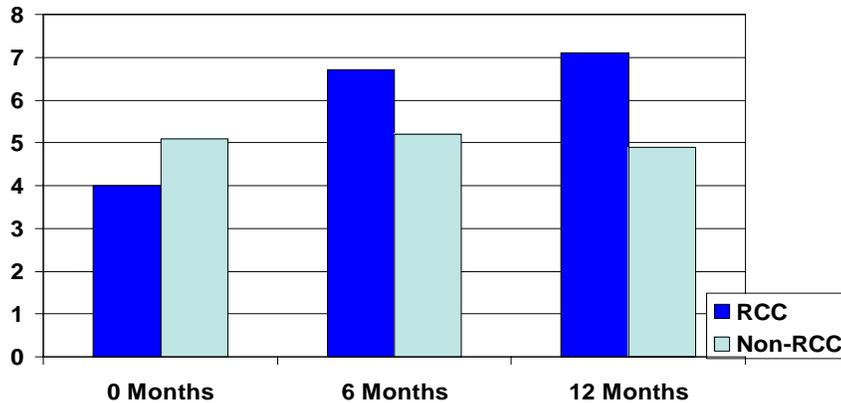


Figure 7 shows changes in resident-directed behavior, defined as the percentage of staff who make good-faith efforts to fulfill special resident requests—things such as foods, outings, activities, religious services, events, personal items, celebrations, daily choices, or anything else that is not routinely offered by the facility. At baseline, the RCC and non-RCC facilities reported just about the same degree of resident-directed behavior (58.6 percent and 60.0 percent, respectively). But differences between them developed over time, with the RCC facilities increasingly dominating. The mean proportion of RCC-facility staff who demonstrated resident-directed behavior grew to 85.6 percent at six-month follow-up and was 82.9 percent at 12-month follow-up.

Figure 8. CCST Practice: Leadership Team Behavior



Leadership-team behavior refers to the number of staff on the leadership team reported by administrators to engage in tasks that go beyond their primary departmental role. Because many of the facilities in this study were small rural homes, it was not uncommon for members of the leadership team to regularly get involved in wider-ranging tasks. In the words of one administrator, all department heads have to work as a “jack of all trades.” Figure 8 shows change in leadership-team behavior over time. Among RCC facilities, the mean number of staff who demonstrated leadership-team behavior increased from 4.0 at baseline to 6.7 at six-month follow-up to 7.1 at 12-month follow-up. Similar increases were not seen in leadership-team behavior among the non-RCC facilities, where the measure held steady at about five members.

Culture Change Scale

The data cited in the above section, collected from nursing-home administrators with the aid of the CCST, are limited by the fact that self-reported data tends to be “socially desirable” information; RCC-facility administrators in particular may even have been encouraged by corporate-office executives to provide a positive slant. In order to address this limitation, the research team also used a scale to assess culture change progress based on staff interviews.

The Culture Change Scale (CCS), based on factor analysis and reliability analysis of data, was originally developed by the principal investigator for another study, which

involved culture change and leadership development in the Wellspring Alliances. The CCS has six subscales: 1) system-wide culture change, 2) resident choice, 3) organizational design, 4) empowering supervision, 5) job design, and 6) decision-making. [Table A-2](#) in the Appendix provides information about each item in the CCS. All six subscales of the CCS have excellent psychometric properties, with Cronbach’s alpha ranging from 0.80 to 0.97 in the RCC study sample.

A total of 812 staff in 7 RCC facilities and 10 non-RCC facilities completed the CCS by means of a mail survey administered at three points—baseline (0 months), six-month follow-up, and 12-month follow-up—and a series of ANOVAs (analyses of variance) was used to compare scores between the facilities for three of the subscales and the overall CCS.

Figure 9. CCS: System-wide Culture Change

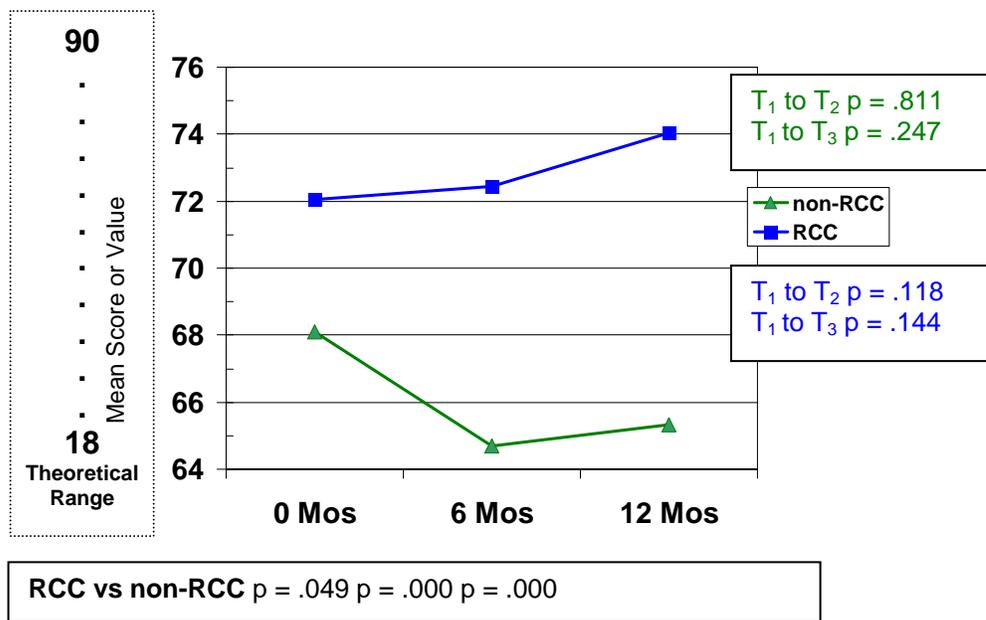


Figure 9 shows the results of ANOVAs regarding system-wide culture change. This subscale includes items related to organizational innovation, staff training and career development, interdepartmental problem solving, evidence-based quality-management practices, and organizational or leadership commitment to resident-directed care. System-wide culture change is comprised of 18 items measured on a five-point scale, so the theoretical range is from 18 to 90 (Cronbach’s Alpha = .97).

Statistically significant differences in system-wide culture change were found between RCC and non-RCC facilities across all three time intervals. We attribute these differences to the selection bias resulting from Beverly Healthcare’s decision to target the RCC initiative to better-performing facilities. Even though experimental and comparison homes were matched on a number of parameters at baseline, differences in system-wide culture change still existed between RCC and non-RCC facilities at the start of the RCC initiative in 2004. These differences became greater over time, though the increase in mean score for RCC facilities (from 72.1 at baseline to 74.1 at 12 months) was not statistically significant.

Scores on system-wide culture change declined in the comparison homes from baseline to 12 months, but this change too was not statistically significant. We attribute the decline to the impending sale of BEI to outside investors and the consequent lowering of staff morale. The fact that scores actually increased in RCC facilities suggests that demoralization may have been mitigated among staff involved in culture change efforts.

Figure 10. CCS: Resident Choice

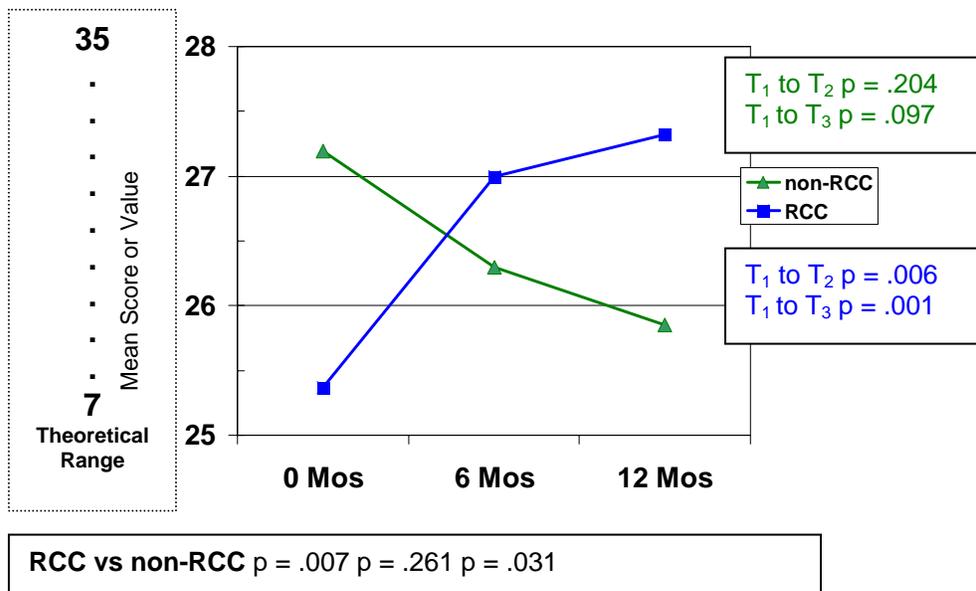


Figure 10 shows the results of ANOVAs comparing RCC and non-RCC facilities on resident choice, which is comprised of seven items related to choices in food and dining, daily activities such as getting up and going to bed, and resident decision-making (Cronbach’s Alpha = .88). Statistically significant differences were found between RCC and non-RCC facilities at 0 months and 12 months. At baseline, resident choice was higher in non-RCC facilities than in RCC facilities. By six months, this pattern had

reversed, and resident choice continued to increase at RCC facilities through the next six months. At the 12-month follow-up, resident choice was significantly greater in the RCC facilities than in the non-RCC facilities ($p < .05$). Resident choice showed dramatic improvements from baseline to six-month follow-up ($p < .01$) and from baseline to 12-month follow-up ($p < .01$). Over the same period, resident choice declined in the non-RCC facilities.

Figure 11. CCS: Organizational Design

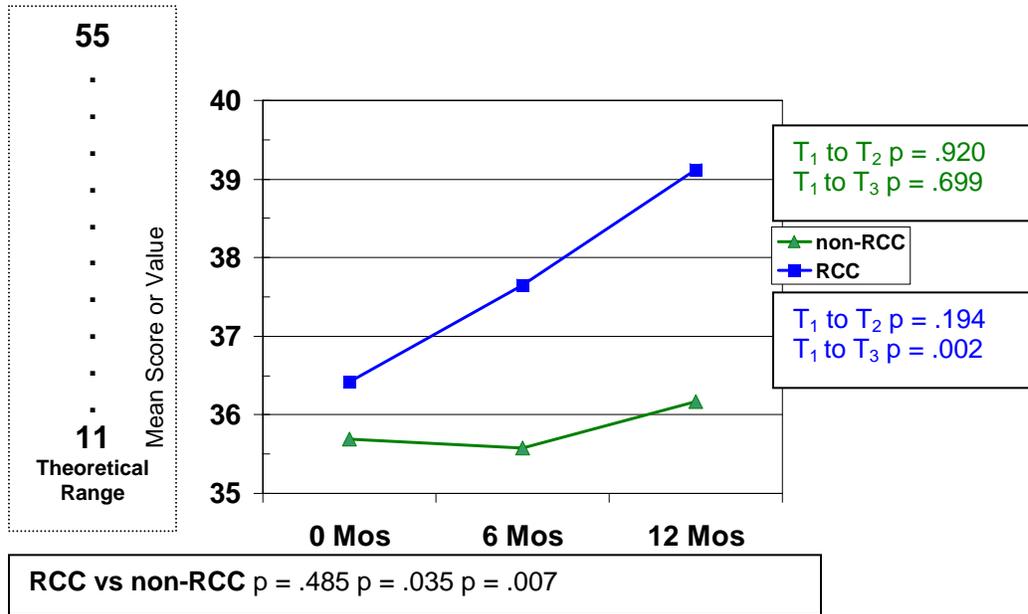


Figure 11 shows the results of ANOVAs for organizational design. This subscale is comprised of 11 items related to staff input into organizational decision-making (including use of group processes, staff scheduling, staff involvement in resident care and service delivery, and staff influence in developing organizational policies and procedures); staff roles; and staff participation in problem solving (Cronbach's Alpha = .88). Statistically significant differences were found in organizational design between RCC and non-RCC facilities at six months and 12 months. Differences in organizational design were not statistically significant at baseline. Among RCC facilities, difference in scores over time was statistically significant between baseline and 12 months ($p < .01$). Similar improvements in organizational design were not seen in the non-RCC facilities.

Figure 12. CCS: Overall Scale

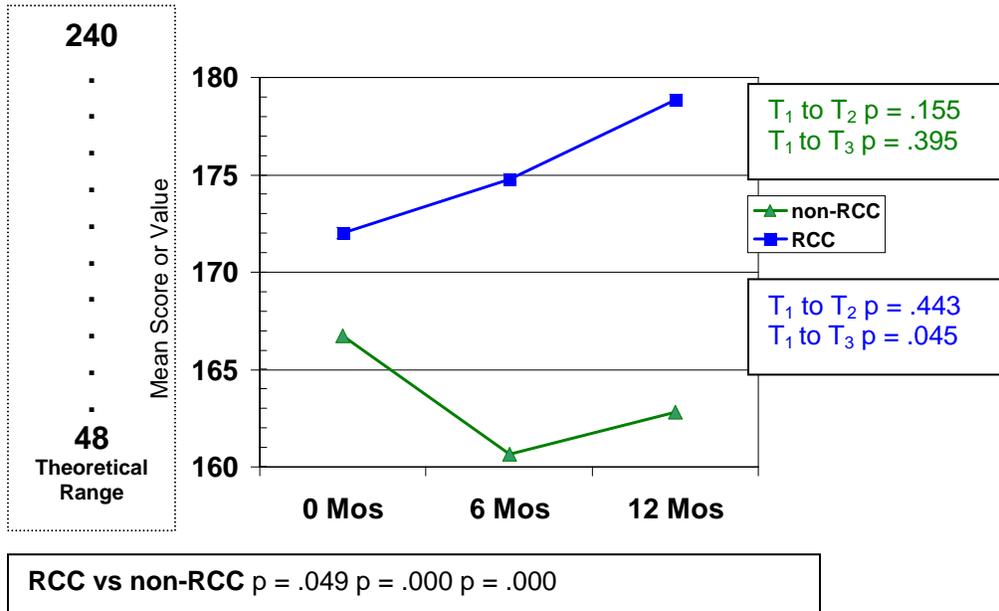


Figure 12 shows the results of ANOVAs comparing overall CCS scores, which take into account all 48 items of the six CCS subscales. Differences in the overall CCS score between RCC and non-RCC facilities were statistically significant across all three time intervals. Again, we attribute these differences to the fact that Beverly Healthcare selected better-performing facilities for the RCC initiative. The RCC facilities showed statistically significant improvements in the overall CCS score from baseline to 12 months ($p < .05$). Non-RCC facilities showed an overall decline over the same 12-month period, though that drop was not statistically significant.

The CCS was developed to assess culture change as reported by staff working in nursing facilities. Using this tool, we found that RCC facilities improved over time in terms of system-wide culture change, resident choice, organizational design, and overall CCS scores. Non-RCC facilities did not show similar improvements, though selection bias explains some of the differences. Nevertheless, these data support earlier conclusions, based on the CCST, that RCC facilities made progress in culture change implementation relative to their non-RCC counterparts.

Impacts of Resident-Centered Care

Another main objective of this report is to evaluate how the RCC initiative may have affected resident quality of life, staff satisfaction, and financial performance.

Effects of Resident-Centered Care on Quality of Life

To assess the potential impact of the RCC initiative on residents' quality of life, a total of 950 face-to-face resident interviews were completed at baseline, six months, and 12 months. Two quality-of-life measures were tested: resident choice/autonomy and resident dignity.

Resident choice/autonomy is based on 20 questions (Cronbach's Alpha = .80) that address, for example, how residents decide when to go to bed and get up, what to wear, when and what to eat, when to take showers or baths, how to decorate their rooms, when care routines are done, who helps them with daily care, and how to spend time pursuing activities of their choosing.

Resident dignity is based on 10 questions (Cronbach's Alpha = .78) related to whether staff call residents by their preferred names, residents feel they are treated with respect and politely by staff, residents are handled gently by staff during care, staff respect resident modesty, staff refrain from talking to residents as if they were children, staff remember to do things that they were asked to do by residents, staff take the time to listen, staff spend enough time with the resident, and staff respect the resident as a person.

[Table A-3](#) in the Appendix shows the questions comprising these two scales.

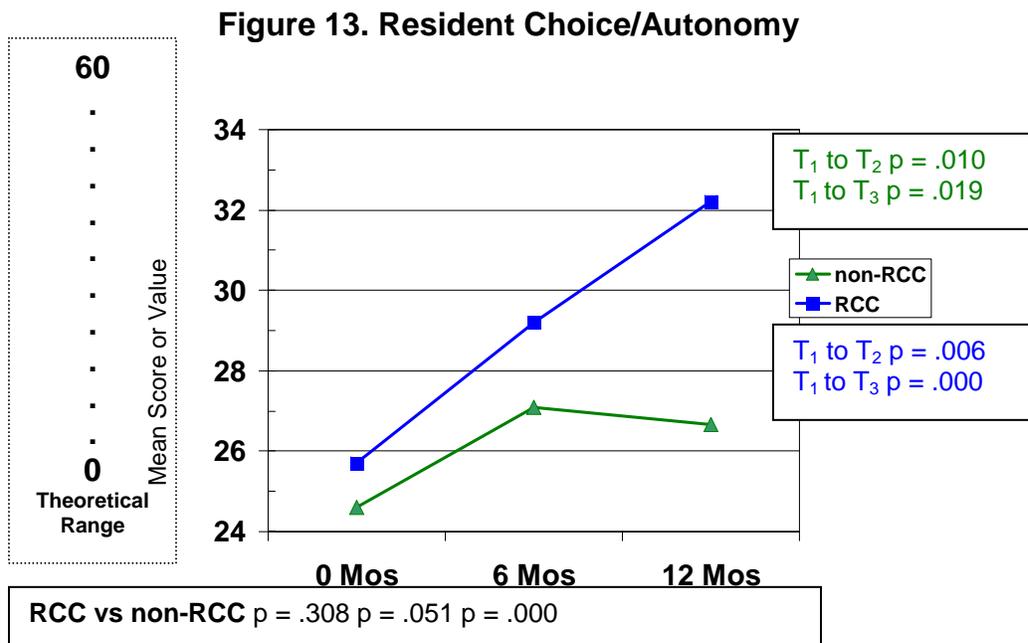


Figure 13 shows the results of ANOVAs comparing resident choice/autonomy scores of the RCC and non-RCC facilities. Differences in scores at baseline were not statistically significant between the two types of facilities, but they did approach statistical significance ($p = .051$) at the six-month follow-up and were statistically significant at 12 months ($p < .001$). Differences in scores from baseline to six months and from baseline to 12 months were statistically significant both for the RCC and non-RCC facilities.

These findings point to a potential contamination effect, however, at the comparison homes. Because RCC facilities were matched with non-RCC facilities in close geographic proximity, it is possible that residents in the non-RCC facilities (which tend to share the local culture with the RCC facilities) were also afforded greater choice and autonomy over time. Nevertheless, the degree of resident choice/autonomy increased to a greater extent in the RCC facilities than in non-RCC facilities. And while improvements continued through 12 months in the RCC facilities, resident choice/autonomy declined slightly from six to 12 months in the non-RCC facilities.

Figure 14. Resident Dignity

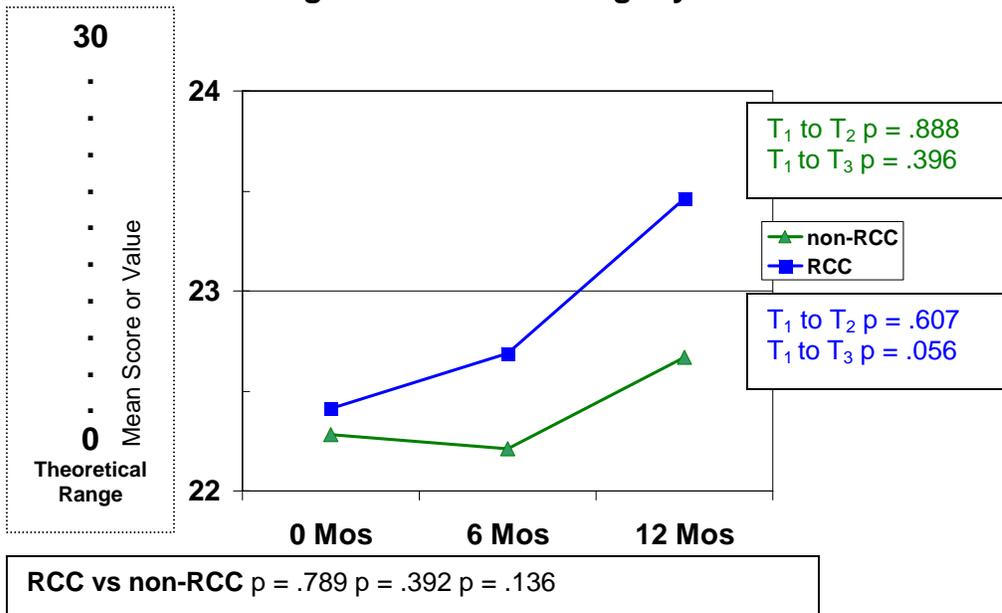


Figure 14 shows the results of ANOVAs comparing resident-dignity scores of RCC and non-RCC facilities. Differences in the scores between the two types of facilities, which increased over time, were not statistically significant. Differences in RCC facilities' scores at baseline to 12 months did show a weak trend toward statistical significance ($p = .056$), though both groups improved their scores over this period. Again,

the pattern suggests a potential contamination effect similar to that of resident choice/autonomy.

Effects of Resident-Centered Care on Staff Satisfaction

A total of 812 mail surveys were completed at baseline, six months, and 12 months to assess the impact of the RCC initiative on staff satisfaction. The survey was based on an instrument, developed by the principal investigator of this study, that has been widely used by the nursing-home industry to assess staff satisfaction in facilities across the country (My InnerView, 2007).

This instrument has four subscales: 1) training, 2) supervision, 3) management, and 4) work environment. Training is comprised of four items (Cronbach's Alpha = .89) related to orientation, in-service training, and training to deal with difficult residents or family members. Supervision has three items regarding how supervisors care, show appreciation, and communicate important work-related information (Cronbach's Alpha = .89). Management has two items (Cronbach's Alpha = .93) pertaining to how management listens to employees and shows that it cares about them. Work environment has nine items having to do with pay, safety in the workplace, adequacy of equipment and supplies, making a difference in people's lives, relationships with coworkers, fairness of performance evaluations, staff respect for residents, job stress and burnout, and communication between shifts (Cronbach's Alpha = .88). In addition to these 18 items, the instrument includes 3 items related to global satisfaction. The overall scale, with 21 items, has strong psychometric properties (Cronbach's Alpha = .96).

[Table A-4](#) in the Appendix provides information about the items included in this staff-satisfaction instrument.

Figure 15
Staff Satisfaction: Training

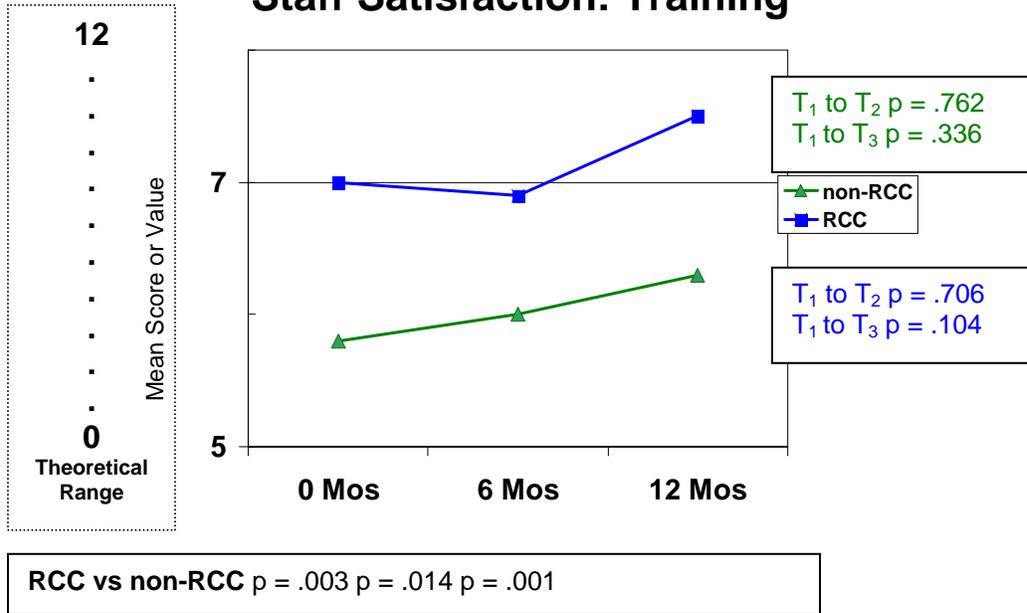


Figure 15 shows the results of ANOVAs for staff satisfaction with training. Staff in RCC facilities reported higher scores, across all three time intervals, than did staff in non-RCC facilities, and these differences were statistically significant. Given Beverly Healthcare’s strategy of selecting better-performing facilities for the RCC initiative, it is plausible that staff satisfaction with training was consistently higher in RCC facilities than in non-RCC facilities. Both RCC and non-RCC facilities showed improvements in satisfaction with training over 12 months; however, none of these improvements reached statistical significance.

Figure 16. Staff Satisfaction: Management

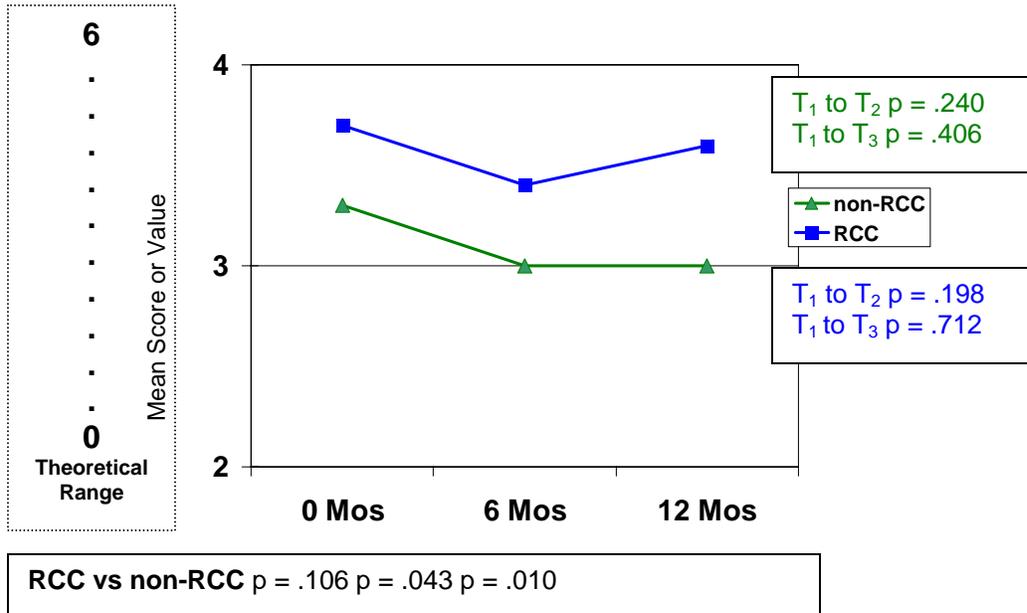


Figure 16 shows the results of ANOVAs comparing the RCC and non-RCC facilities with respect to staff satisfaction with management. Staff in RCC facilities reported higher satisfaction with management than did their counterparts in non-RCC facilities, across all three time intervals. These differences, not statistically significant at baseline, reached statistical significance at six months ($p < .05$) and 12 months ($p < .05$). The decline in staff satisfaction with management from baseline to six months is attributed to the staff's distrust of management due to the pending sale of BEI. The RCC initiative may have mitigated some of these negative effects at 12 months.

Figure 17
Staff Satisfaction:
Work Environment

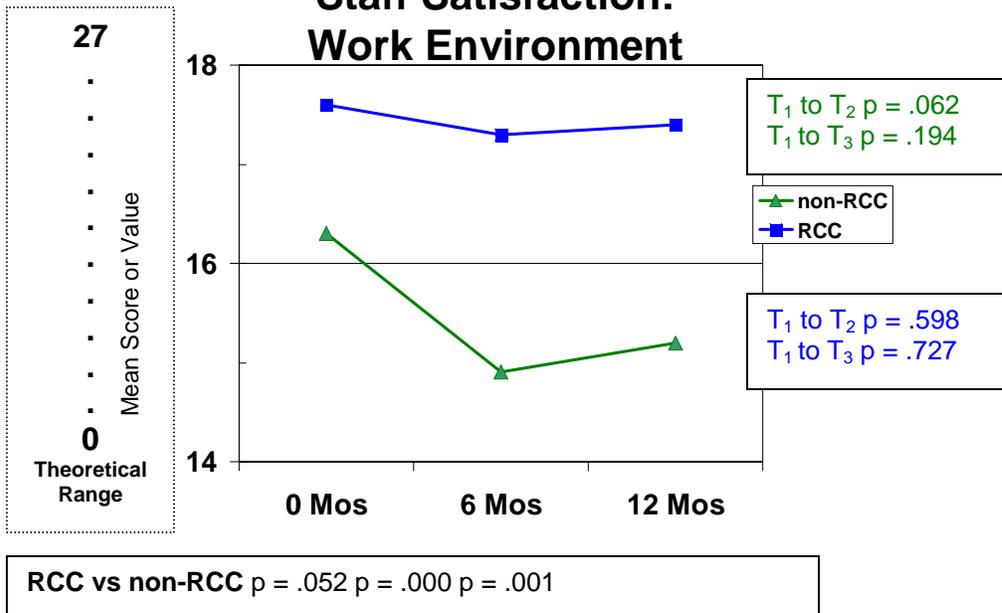


Figure 17 shows the results of ANOVAs comparing staff satisfaction with the work environment. Staff in RCC facilities consistently reported higher satisfaction with the work environment across all three time intervals. These differences approached statistical significance at baseline ($p = .052$) and reached statistical significance at six months ($p < .001$) and 12 months ($p < .01$). Among staff in non-RCC facilities, there was a sharp decline in satisfaction with the work environment from baseline to six months. This decline, which showed a trend toward statistical significance ($p = .062$), was attributed to staff dissatisfaction associated with the pending sale of BEI. The fact that staff satisfaction with the work environment in RCC facilities remained largely unchanged over the 12-month period suggests that the RCC program may have buffered some of these negative effects.

Figure 18. Staff Satisfaction: Overall Scale

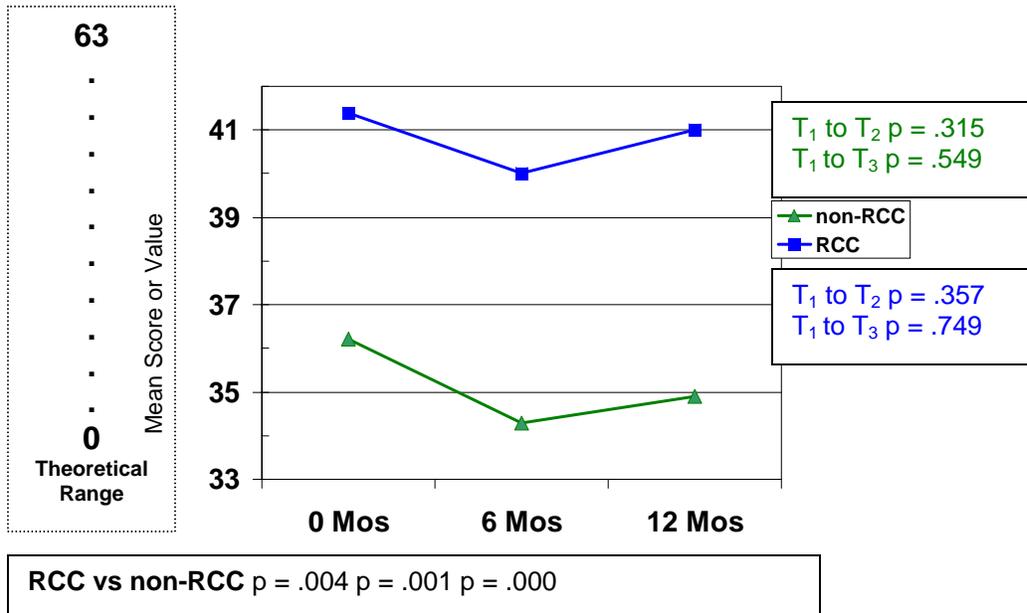


Figure 18 shows the results of ANOVAs for the overall staff satisfaction scale, which includes all 21 items. Staff in RCC facilities reported higher overall satisfaction than did staff in non-RCC facilities at baseline ($p < .01$), six months ($p < .01$), and 12 months ($p < .001$). Again, these differences are attributed to potential selection bias. In both RCC and non-RCC facilities, overall staff satisfaction declined from baseline to six months and improved slightly from six months to 12 months. None of these differences across time intervals were statistically significant.

The Business Case for Resident-Centered Care

From the perspective of its board, senior officers, and shareholders, BEI must remain a financially driven corporation. Indeed, shortsighted observers might argue that the real job of BEI's leadership is to maximize shareholder value by meeting Wall Street's quarterly financial expectations. It may seem counterintuitive, then, that Beverly Healthcare chose RCC as a strategy to improve market share, as many culture change experts believe that the culture change process requires a long-term investment of human and capital resources that can take three or more years to pay off. Meanwhile, the culture change strategy is likely to undermine financial performance during those quarters when large capital investments are being made.

Thus one of the greatest challenges facing senior management at BEI is making the "business case" for the RCC initiative. Ultimately, the performance of RCC facilities must meet rigorous financial expectations. Without increasing economic value for the

company (e.g., by boosting market share, revenues, or profits) or decreasing costs, it will become increasingly difficult to sustain the RCC initiative.

As noted in the brief history of the RCC program, the cost of renovations to support the RCC program turned out to be far greater than expected. As a result, the company delayed making capital investments until 2005, when it budgeted \$7.5 million to pay for physical renovations in 10 RCC facilities. This delay frustrated many RCC-facility administrators and staff, who tended to view the situation as another false promise from corporate leadership.

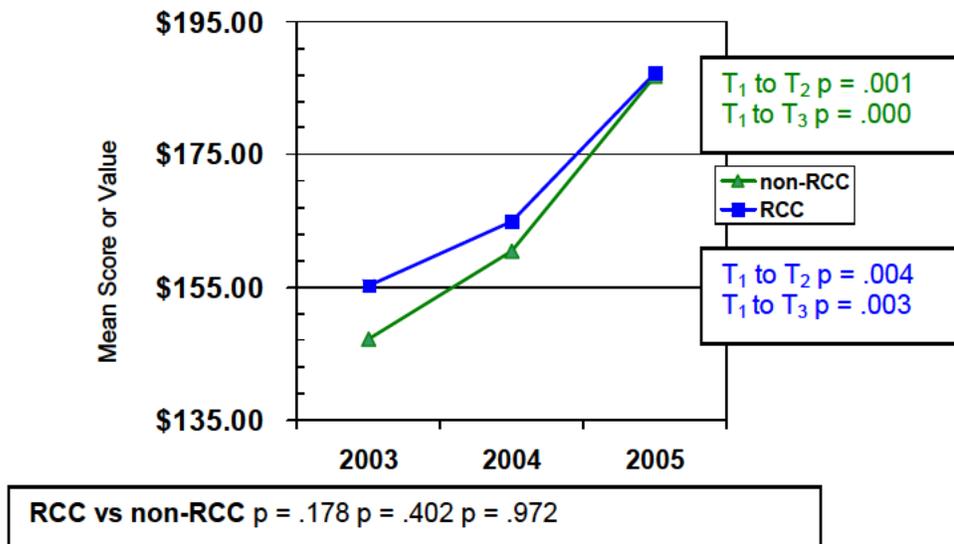
Although physical-plant renovations were occurring during the 12-month follow-up visits, we were unable to get information about the dollar amounts actually spent for capital improvements. However, we obtained information about non-capital-related costs of the RCC program for the 10 original pilot sites and the 18 sites that were added during the expansion phase. These costs were estimated at \$600,000 during the initial pilot phase (2002 to 2003) and \$1.14 million during the expansion phase (2004 to 2005). As detailed in [Table A-5](#) in the Appendix, they included consultant fees to Action Pact, Inc.; additional staff salaries paid during training sessions and regional retreats; and travel expenses.

Many factors are likely to affect financial performance of the RCC and non-RCC facilities. Financial gains might be attributed to the RCC initiative if there are enhanced revenues, gains in operational efficiencies, changes in payer mix, improvement in occupancy rates, or reductions in staff turnover at RCC facilities. To explore the effects the RCC initiative had on financial performance, secondary data from Beverly Healthcare's financial accounting systems were analyzed. Annualized data for four quarters of 2003 (the year before the RCC program was implemented), four quarters of 2004 (the year when the RCC program was implemented), and four quarters of 2005 (the year after the RCC program was implemented) are analyzed in this report. We used independent-samples T tests to examine differences between RCC and non-RCC facilities and paired-samples T tests to look at differences between years.

Revenues and Expenses

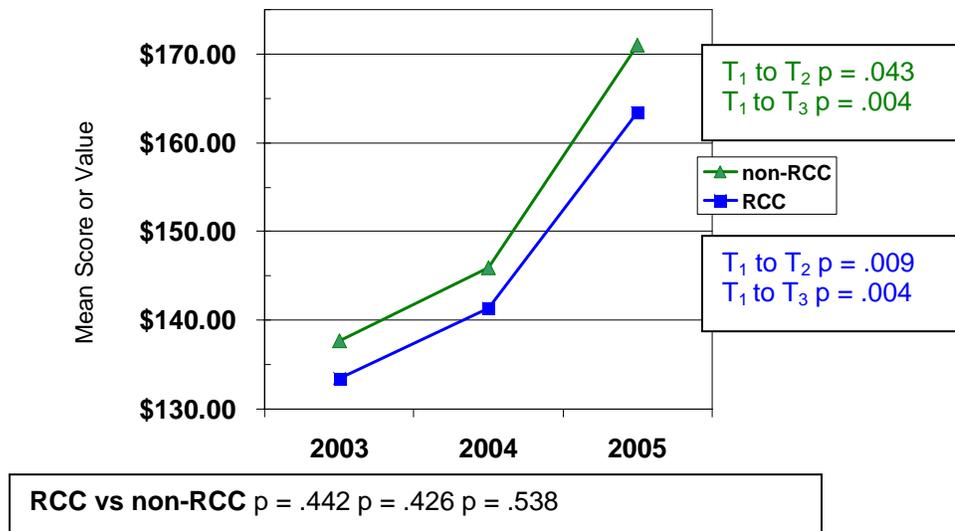
Figure 19 compares the 7 RCC and 10 non-RCC facilities with respect to annualized revenues per resident day. Both types saw statistically significant increases. In the RCC facilities, revenues per resident day were \$155.29, \$164.88, and \$187.32 in 2003, 2004, and 2005, respectively. In the non-RCC facilities, revenues per patient day were \$147.23, 160.50, and \$186.81 in 2003, 2004, and 2005, respectively. Although RCC facilities consistently generated more revenues, these differences were not statistically significant.

Figure 19. Revenues per Resident Day



When it came to generating new revenues, the non-RCC facilities improved to a greater degree than did the RCC facilities. The explanation is that annualized occupancy rates, which have a direct impact on revenues, improved among the non-RCC facilities but remained basically unchanged among RCC facilities. In the non-RCC facilities, the annualized occupancy rates were 89.2 percent, 89.1 percent, and 91.4 percent in 2003, 2004, and 2005, respectively, while the rates for those successive years in RCC facilities were 95.4 percent, 94.6 percent, and 94.2 percent. Because corporate leaders made a decision to pick better-performing facilities for the RCC initiative, it was more difficult for the RCC facilities to demonstrate further financial gains by increasing occupancy rates.

Figure 20. Expenses per Resident Day



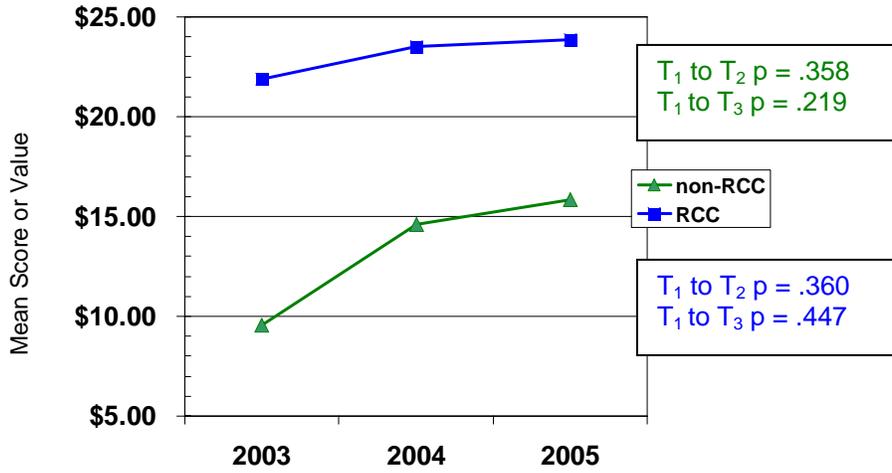
It was hypothesized that efficiency of operations resulting from RCC might yield financial gains by reducing operating costs. To explore this question, we looked at operating expenses per resident day in both types of facilities. As shown in Figure 20, the expenses were lower in the RCC facilities than in the non-RCC facilities. However, these differences between facilities were not statistically significant. Both RCC and non-RCC facilities saw sharp increases in operating expenses from 2003 to 2005, and these differences across *years* were all statistically significant. Non-RCC facilities saw greater increases in operating expenses (\$33.31) over this period compared to RCC facilities (\$30.01). However, these findings indicate that the differences in operating expenses between RCC and non-RCC facilities were not noteworthy.

Profits and Earnings

For a publicly traded company like BEI, changes in quarterly profits and earnings are critical, likely to affect its market valuation. Figure 21 shows that profits per resident day—calculated as the difference between revenues per resident day and expenses per resident day—were greater in the seven RCC facilities than in the 10 non-RCC facilities. These differences were not statistically significant during 2003, but they reached statistical significance in 2004 and 2005. Although profits in non-RCC facilities rose more quickly than in RCC facilities, as a group the RCC facilities outperformed non-RCC facilities. For the non-RCC facilities, profits were \$9.55 per resident day in 2003, \$14.48 in 2004, and \$15.83 in 2005. For the RCC facilities profits were \$21.86 per resident day in 2003, \$23.50 per resident day in 2004, and \$23.88 per resident day

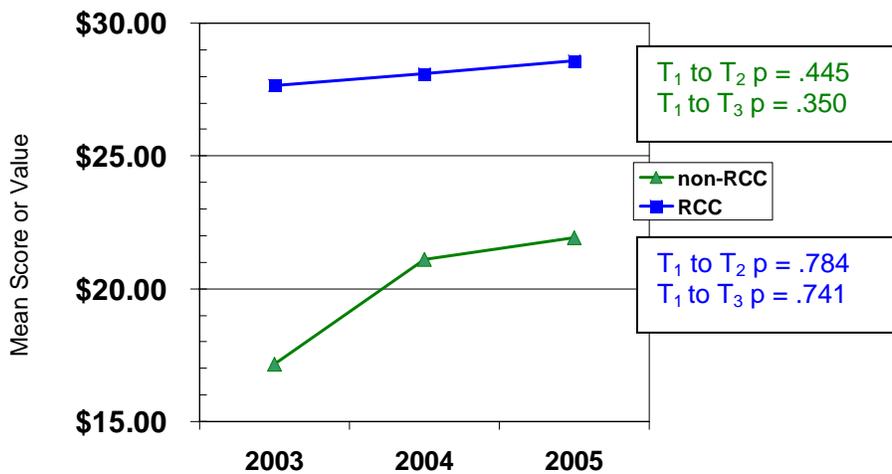
in 2005. Differences in profits per resident day were not statistically significant across years.

Figure 21. Profits per Resident Day



RCC vs non-RCC p = .093 p = .020 p = .037

Figure 22. EBITDA per Resident Day



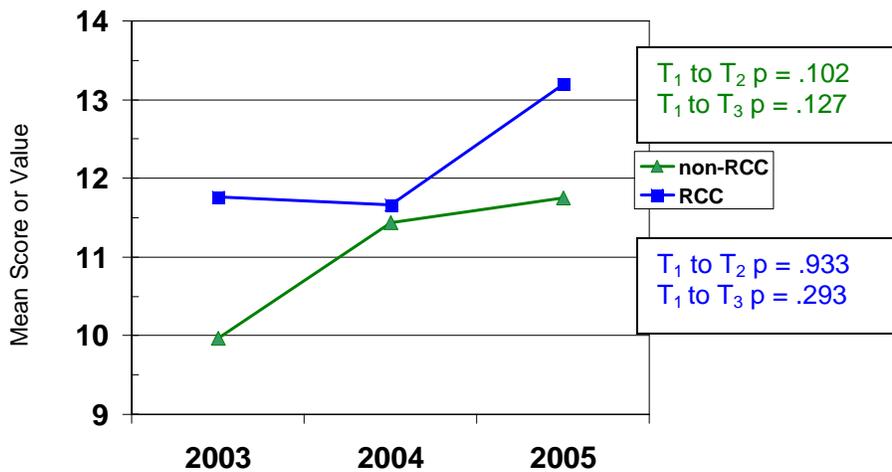
RCC vs non-RCC p = .120 p = .036 p = .072

The measure of earnings before interest, taxes, depreciation, and amortization (EBITDA) is a fairer picture of profitability because it represents cash-based earnings before capital costs. Figure 22 shows that the RCC facilities consistently outperformed the non-RCC facilities on EBITDA per resident day. These differences were not statistically significant in 2003 but reached statistical significance in 2004 and showed a trend toward statistical significance ($p = .072$) in 2005. For non-RCC facilities, EBITDA per resident day was \$17.17 in 2003, \$21.09 in 2004, and \$21.91 in 2005. For RCC facilities, EBITDA per resident day was \$27.66 in 2003, \$28.12 in 2004, and \$28.57 in 2005. Differences in EBITDA per resident day were not statistically significant across years.

Payer Mix

Aside from improvements in occupancy rates, additional revenues can be generated if payer mix is enhanced. Medicare residents are generally more profitable than private-pay residents, who in turn are generally more profitable than Medicaid residents. In 2003, Medicare reimbursement in the 17 facilities included in this report averaged \$198.45 per day, compared to \$152.74 per day for private pay and \$120.39 per day for Medicaid. In 2004, Medicare reimbursement averaged \$208.09 per day, while private-pay rates averaged \$159.54 per day and Medicaid rates averaged \$127.12 per day. In 2005, Medicare rates averaged \$218.96 per day compared to \$167.68 per day for private pay and \$136.55 per day for Medicaid.

Figure 23. Percentage Medicare Days



RCC vs non-RCC $p = .122$ $p = .900$ $p = .237$

Figure 23 shows trends in the percentage of resident days covered by Medicare from 2003 to 2005. The RCC facilities had a greater proportion of Medicare days than did non-RCC facilities, though the latter had higher gains. None of these differences, however, were statistically significant.

Figure 24. Percentage Private-Pay Days

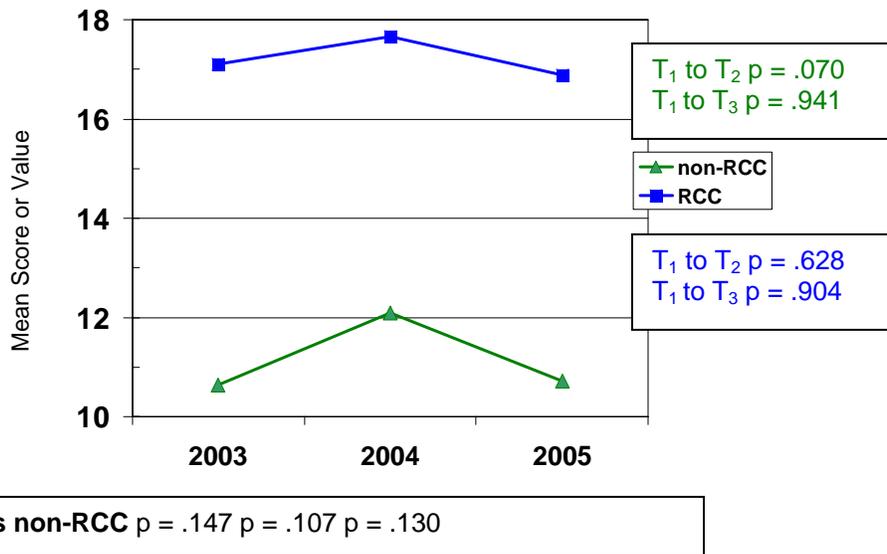


Figure 24 shows trends in the percentage of days for private-pay residents from 2003 to 2005. Although RCC facilities consistently had a higher proportion of private-pay days than did non-RCC facilities, these differences were not statistically significant. Moreover, RCC and non-RCC facilities showed little change in percentage of private-pay days across years.

Figure 25. Percentage Medicaid Days

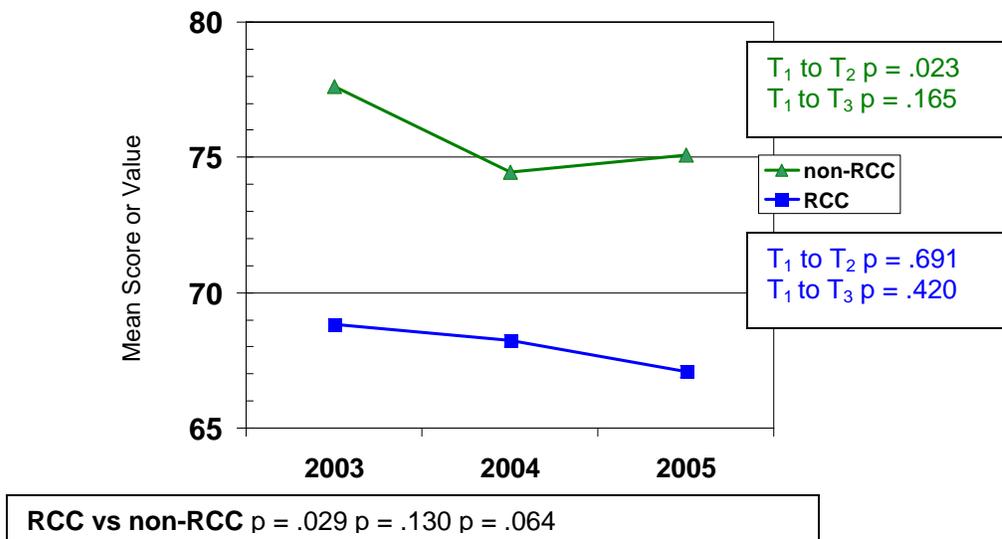


Figure 25 shows the percentage of resident days paid for by Medicaid from 2003 to 2005. RCC facilities had a lower proportion of Medicaid days than did non-RCC facilities across all years. These differences were statistically significant in 2003 and showed a trend toward statistical significance in 2005 ($p = .064$). Among non-RCC facilities, there was a statistically significant decline in the percentage of Medicaid days from 2003 to 2004 ($p < .05$). There was a slight decline in the percentage of Medicaid days among the RCC facilities, but these differences across years were not statistically significant.

IMPLICATIONS/CONCLUSIONS

This evaluation of Beverly Healthcare’s RCC initiative was complicated by the sale of its corporate parent BEI, which was unfolding at the same time that the RCC initiative was expanding. Although the actual sale did not close until after the research was done, once this pending transaction became public knowledge it was impossible to separate its effects from those of RCC. The pending sale tended to undermine staff morale and job satisfaction, it exacerbated staff distrust in management, and it may have created unintentional impediments to culture change progress. On the other hand, the RCC initiative may possibly have mitigated some of the negative effects on staff satisfaction.

The new company (Golden Living) maintains that it is committed to expanding the RCC initiative, but the change in senior management at the restructured company

presents a potential setback, given that the two corporate champions for RCC (the chief operating officer and senior VP of operations) left in 2006. It remains to be seen how much of an investment the new owners will make to expand and sustain RCC. Because short-term financial gains were not realized from the initiative, the business case for culture change is difficult to make. Then again, as Golden Living is not a publicly traded company, it is not under pressure from Wall Street to maximize quarterly returns. So there may be greater opportunities to sustain RCC for the long term.

Indeed, the business case for culture change should primarily be based on long-term financial goals. Like many other culture change models, the RCC initiative involves a series of small incremental changes spanning years. Accordingly, for-profit organizations that remain focused on meeting quarterly financial targets are likely to be disappointed by this strategy. Excluding capital costs, which are roughly \$750,000 per facility, the costs of culture change implementation averaged about \$78,413 per facility. Given the lack of immediate financial returns on this investment, a reasonable approach would be to amortize these costs so that they are spread across multiple years.

Still, the fact that the RCC initiative was implemented incrementally raises questions about just what the appropriate timeframe should be for making the baseline and post-test comparisons. This issue is especially problematic for financial outcomes, as there is likely to be a lag between the implementation of culture change practices and any consequent improvements in financial performance. A limitation of this study is the relatively short span of the evaluation, which covered just the first 12 months of the initiative.

The RCC facilities started out being more profitable than the non-RCC facilities, as senior managers at Beverly Healthcare had made the strategic decision to focus the RCC initiative on better-performing facilities. Both profits and earnings per resident day were subsequently greater in the RCC homes than in the non-RCC homes, but the “selection bias” resulting from management’s strategy makes it difficult to show that the superior financial returns resulted from RCC—the facilities involved were higher-performing to begin with.

Given that the RCC initiative had little effect on payer mix and occupancy, it was unlikely to affect market share in the short term. But beyond short-term financial gains there are other potential benefits—long-term ones—that are difficult to monetize because of their indirect nature. They include improved quality of life for residents, better work environments for staff, enhanced leadership, and upgraded physical environments.

Several of these nonmonetary benefits were achieved by the RCC initiative, and they may offer competitive advantages that help reposition the company for long-term financial success.

Because physical renovations are the most expensive component of many culture change models, including Beverly Healthcare's RCC initiative, the financial returns on capital investments are especially difficult to justify. Capital expenditures should be viewed as part of a broader corporate strategy to keep the organization competitive within a changing market. Such investments are undoubtedly difficult to make within publicly traded for-profit companies.

Yet it is remarkable that most of the gains in organizational performance associated with Beverly Healthcare's RCC initiative were achieved *without* the infusion of major capital resources for physical renovations. During the study period, most of the company's financial investments in the initiative were for developing human resources—including consultant costs, additional staff salaries paid during culture change training sessions, and the associated cost of travel. Physical renovations had not been completed at the close of this study.

The RCC program did not appear to heighten operating expenses per resident day. In fact, the non-RCC facilities saw greater increases in operating expenses between 2003 and 2005 than did the RCC facilities. The RCC homes were apparently able to create greater value for residents (by enhancing their quality of life) and for staff (by improving their satisfaction) without disproportionate increases in costs.

RECOMMENDATIONS

The Federal Nursing Home Reform Act from the Omnibus Budget Reconciliation Act of 1987 (OBRA 1987) created a federal mandate for skilled nursing facilities to emphasize residents' quality of life along with quality of care. But while there is evidence that the quality of care has improved in a number of clinical areas post-OBRA 1987, evidence of improvements in the quality of life is far more limited.

This study suggests that culture change is an effective strategy for improving resident quality of life, especially through the support of resident choice and autonomy, which are among the key goals of resident-centered care programs. But because current public policies tend to emphasize health and safety at the expense of quality of life, they not only are flawed (Kane, 2001) but in noncompliance with OBRA 1987. To help fulfill

the law's requirements, culture change initiatives must be supported by state and federal policies.

A major challenge is that the creation of new living environments to meet current requirements, as well as future customer expectations, remains problematic. Many skilled nursing facilities are older buildings that were built to support an institutional model of care, with nurses' stations, long double-loaded corridors, and semiprivate rooms. Although symbolic aspects of the physical environment can be changed at relatively low cost, the comprehensive changes necessary to implement "neighborhood" or "household" models are simply too expensive for many providers to afford.

Financial incentives, such as value-based reimbursement systems, should therefore be created to complement traditional performance metrics—state survey compliance and clinical performance, for example—with new culture change metrics. As the culture change movement strives to transform the nursing-home environment to enhance the quality of life for residents and improve the quality of the workplace for staff, a more balanced set of metrics is needed.

POSTSCRIPT

Corporate support for the RCC initiative that began in 2002 started to wane in 2006 after parent-company BEI was sold and a new management team took over; Beverly Healthcare's chief operating officer and the senior vice president of operations, who spearheaded the RCC initiative, left shortly after the sale. Golden Living, the subsidiary that now operates 263 former Beverly Healthcare nursing facilities, continues to undergo restructuring as its parent is reorganized into smaller operating units. Nevertheless, according to senior managers at Golden Living, culture change practices are beginning to diffuse throughout the new corporation, albeit unevenly and in new forms.

Evolution of Resident-Centered Care at Golden Living

Most of the 24 facilities involved in the RCC expansion that began in 2004 have continued on their culture change journey, with limited corporate direction and input. An assessment of culture change progress done in 2006, using a Web-based version of the CCST, showed that culture change progress was not consistent across these sites. Turnover in key leadership positions at many of these facilities was undermining further progress in culture change implementation.

Despite these setbacks, the present owners and senior-management team at Golden Living remain committed to the principles of resident-centered care. In fact, new

initiatives to implement culture change company-wide have emerged. Recall that during the pilot phase (2002–2004), Beverly Healthcare’s implementation strategy was based on an “external consultant” model—Action Pact, Inc. provided hands-on consultation to 10 pilot sites. During the expansion phase (2004–2005), although the company made an effort to internalize culture change expertise, streamline the culture change process, and replicate the model on a region-by-region basis, the strategy still focused on a limited number of facilities. By contrast, Golden Living’s new strategy for culture change implementation reflects an effort to institute universal best practices across the entire company rather than concentrate efforts in an incremental fashion within a small number of facilities.

Such practices include new company-wide programs that support more consistent staff assignment—first by assigning the same nursing assistant to the same unit, and, ultimately, by assigning the same nursing assistant to the same resident. New buildings are being configured as “neighborhoods” rather than traditional nursing units. Orientation materials for newly admitted residents explain how the principles of resident-centered care are being implemented at all nursing facilities, which are now called “Living Centers.” And care plans are becoming more personalized.

For example, programs such as “Life’s Simple Pleasures” allow residents greater opportunities for daily enjoyment. A new scorecard (i.e., an information system to track facility-level performance, which is a criterion in setting bonuses) includes a metric to determine if every resident in every Living Center has recorded at least one daily pleasure in the care plan. Daily pleasures, determined by the resident, encompass things that bring him or her enjoyment on a regular basis. They may include getting a newspaper with a cup of coffee at 6:00 every morning, going to a baseball game, talking to a daughter every week, getting a cup of hot chocolate every night, getting one’s hair done monthly, or whatever the resident may desire routinely. A new meal program called “Dining Your Way” provides more meal options and greater flexibility, including between-meal snacks.

Thus although the RCC initiative per se is no longer supported at the corporate level, there is a renewed company-wide strategy to build a consistent resident-centered culture across all Living Centers.

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APPENDIX. TABLES

Table A-1. Culture Change Practices Associated with the Transformational Stage

Culture Change Practice	Definition	How Culture Change Practice Was Measured
Permanent Staff Assignment	Percentage of time nursing staff in the facility work at their permanently assigned location	<p>We asked administrators if there was permanent assignment of nursing staff within their facility. If nursing staff did not rotate on a regular basis (e.g., daily, weekly, or monthly), the facility was considered to have permanent staff assignments. If nursing staff were not permanently assigned, a score of 0% was recorded.</p> <p>Even with permanent staff assignments, nursing staff do not necessarily work at their assigned locations. It is common practice to pull nursing staff off their permanent assignments when other areas of the facility are short-staffed or “working short.” We asked about the percentage of time staff with permanent assignments actually worked where they were permanently assigned, and we recorded that percentage.</p>
Culture Change Awareness	Percentage of staff in the facility who are cognizant of the RCC initiative	We asked administrators this hypothetical question: “If you were to ask your staff to tell you something about the Resident-Centered Care program here, what proportion of them would know something about it?”
Informal Leadership Behavior	Percentage of staff in the facility who demonstrate informal leadership behavior	<p>Informal leaders are staff who are not in <i>formal</i> management or supervisory positions (e.g., administrator, director of nursing, department head, or charge nurse) but who routinely demonstrate leadership behavior by helping their coworkers “do the right thing” or “do things in the right way.” Informal leadership is evidenced in actual behavior, such as showing coworkers how to do their jobs better, mentoring them, helping them avoid problems, or listening to them in order to facilitate teamwork.</p> <p>We asked administrators this hypothetical question: “If you were to ask staff what they do to help coworkers make this a good place for residents to live, what proportion of them would demonstrate informal leadership behavior?”</p>
Resident-Directed Behavior	Percentage of staff in the facility who demonstrate resident-directed behavior	<p>Resident-directed behavior is evidenced by staff making good-faith efforts to fulfill special resident requests for things that are not typically offered by the facility. Such requests include foods, outings, activities, religious services, events, personal items, celebrations, daily choices, or anything else that is not offered routinely. Good-faith efforts are reflected in positive actions by staff to fulfill resident requests no matter what they might be. Good-faith efforts are evidenced in staff attitudes such as: “I try to give residents what they want by...,” or “I go to my supervisor to see if we can...,” or “I do what I can to see that...” Lack of good-faith efforts is seen in responses such as: “It can’t be done,” or “I politely tell the resident that that’s not possible,” or “I ignore the request because...,” or “I tell the resident to ‘get real’ by lowering expectations.”</p> <p>We asked administrators this hypothetical question: “If you were to ask staff what they do when a resident requests something that is not typically offered by this facility, what proportion of them would demonstrate resident-directed behavior?”</p>

Culture Change Practice	Definition	How Culture Change Practice Was Measured
Leadership-Team Behavior	The number of staff on the facility's leadership team who demonstrate "a great deal" of leadership-team behavior by doing tasks that go beyond their departmental roles	<p>We first asked administrators to provide names and positions of staff who make up the facility's leadership team. The leadership team was defined as "all staff who set the direction for the facility." The team typically includes the administrator and director of nursing but may also include department heads, supervisory staff, and other key staff.</p> <p>We then followed up with the question: "To what extent does each person demonstrate leadership-team behaviors that go beyond doing tasks within his or her primary function in a departmental role?"</p> <p>We noted that "departmental role" refers to tasks done wholly within departments such as nursing, activities, food service, social work, business office, housekeeping, or administration. For example, how often does a director of social services do things that are outside of typical social service tasks? How often does a director of nursing do things that are outside of typical nursing tasks?</p> <p>Respondents were specifically asked to indicate whether each member of the leadership team demonstrates "little or no," "some," or "a great deal of" leadership-team behavior. The number of staff on the leadership team who demonstrated "a great deal" of leadership-team behavior was recorded.</p>

Table A-2. Culture Change Scales (CCS)

Scale/ Subscale	Number of Items	Cronbach's Alpha*	Questions
System-Wide Culture Change	18	.97	<ol style="list-style-type: none"> 1) The environment of this facility encourages new ideas. 2) We are encouraged to develop new ways to deliver resident care and services. 3) There is a commitment to education and training in this facility. 4) This facility uses interdepartmental teams to solve problems. 5) Line staff actively participate in quality-improvement efforts in this facility. 6) Job expectations are understood by all facility teams. 7) We measure the effectiveness of our care and services. 8) A system to monitor quality is in place in this facility. 9) Our facility continuously evaluates our care and services to change future care and services. 10) We use data to identify what our facility is doing well. 11) The data we collect help identify problems with services. 12) We continually try to improve how we use data. 13) This facility supports the career development of staff. 14) This facility educates and trains people on how to identify and solve problems. 15) This facility is committed to supporting resident-directed care. 16) Our leadership staff encourages all employees to participate in resident-directed care. 17) How much this facility is committed to supporting staff training and development. 18) How much this facility uses interdepartmental teams to solve problems?
Resident Choice	7	.88	<ol style="list-style-type: none"> 1) How often can residents eat what they really want? 2) How often can residents eat when they really want? 3) How often can residents keep their own food in a refrigerator? 4) How often can residents go to bed when they really want? 5) How often can residents get up when they really want? 6) How often can residents spend time doing activities that they really choose whenever they want? 7) How often can residents make important decisions affecting their daily lives on the unit (neighborhood or household) that go beyond their care plan?
Organizational Design	11	.88	<ol style="list-style-type: none"> 1) How often are decisions made on your unit (neighborhood or household) based on input from you and your coworkers? 2) How often are decisions made using group processes (such as small group meetings) to reach agreement about important matters? 3) How often do you do things on your unit that are not part of your primary discipline or departmental role? 4) How often can you decide who will do what on your shift?

Scale/ Subscale	Number of Items	Cronbach's Alpha*	Questions
			5) How often can you give input that is used in a resident's care plan? 6) How often are you allowed to make decisions about how you do your work? 7) How much does the top leadership team at this facility include representatives from your unit? 8) How much influence does staff from your unit have in developing policies and procedures? 9) How much do department heads at your facility do things that are outside their own disciplines? 10) How much are staff on your unit encouraged to develop new ways to deliver resident care and services? 11) How much do staff on your unit actively participate to solve problems together?
Empowering Supervision	5	.90	1) My immediate supervisor responds to concerns in a timely manner. 2) My immediate supervisor treats me fairly. 3) I am encouraged to think of better ways of doing things. 4) I have the opportunity to participate in decision-making. 5) My job allows me to develop new knowledge and skills.
Job Design	3	.88	1) My job duties allow me enough time to do my job properly. 2) The work assignments are well planned in my facility team. 3) This facility works to find staffing practices to improve resident care and service.
Decision- Making	2	.80	1) How often does top management (e.g., administrator, director of nursing) make decisions about important matters without input from you and your coworkers? 2) How often does departmental leadership (e.g., nursing, housekeeping, activities, or food service) make decisions about important matters without input from you and your coworkers?
Overall CCS	48	.97	Two additional questions are included in the overall CCS: 1) How often are you assigned to your unit (neighborhood or household) for three months or longer? 2) How often are you assigned to other units in this facility?

* Cronbach's alpha is averaged across three measurement intervals: baseline (0 months), six-month follow-up, and 12-month follow-up.

Table A-3. Resident Quality-of-Life Measures

Scale	Number of Items	Cronbach's Alpha*	Questions
Resident Choice/ Autonomy	20	.80	<ol style="list-style-type: none"> 1) How often can you go to bed when you want? 2) How often can you get up when you want? 3) How often can you decide what clothes to wear? 4) How often can you decide what you want to eat for breakfast? 5) How often can you decide what you want to eat for lunch? 6) How often can you decide what you want to eat for dinner? 7) How often can you choose to eat breakfast when you want to? 8) How often can you choose to eat lunch when you want to? 9) How often can you choose to eat dinner when you want to? 10) How often can you keep your own food in a refrigerator? 11) How often can you decide when you take your showers or baths? 12) How often can you bring in personal belongings from home and keep them in your room? 13) How often can you decorate your room the way you like? 14) How often are you involved in decision making about important matters in your (unit/neighborhood/household/community)? 15) How often can you make a snack in the facility when you want to? 16) How often can you choose the time for your care routines? 17) How often can you have visitors in your room when you like? 18) How often can you decide who your roommate is? 19) How often can you decide who helps you with your daily care? 20) How often can you spend time pursuing activities that you choose to do when you want?
Dignity	10	.78	<ol style="list-style-type: none"> 1) How often do staff call you by the name you prefer? 2) How often do you feel you are treated with respect? 3) How often do staff treat you politely? 4) How often do staff handle you gently while giving you care? 5) How often do staff respect your modesty? 6) How often do staff talk to residents as if they were children? 7) How often do staff remember to do the things you ask them to do? 8) How often do staff take time to listen to you when you have something you want to say? 9) How often do staff spend enough time with you during the day? 10) How often do staff respect you as a person?

* Cronbach's alpha is averaged across three measurement intervals: baseline (0 months), six-month follow-up, and 12-month follow-up.

Table A-4. Staff-Satisfaction Measures

Scale/ Subscale	Number of Items	Cronbach's Alpha*	Questions
Satisfaction with Training	4	.89	<ol style="list-style-type: none"> 1) Does the facility give new staff orientation to do their job? 2) Does the facility give you in-service training? 3) Does the facility give you training to deal with difficult residents? 4) Does the facility give you training to deal with difficult family members?
Satisfaction with Supervision	3	.89	<ol style="list-style-type: none"> 1) Does your supervisor care about you as a person? 2) How regularly does your supervisor show you appreciation for a job well done? 3) How regularly does your supervisor give you important work-related information?
Satisfaction with Management	2	.93	<ol style="list-style-type: none"> 1) Does management listen to its employees? 2) Does management care about its employees?
Satisfaction with Work Environment	9	.88	<ol style="list-style-type: none"> 1) How much does the facility pay you compared to other nursing homes? 2) How safe a workplace does the facility provide? 3) How adequately does the facility provide equipment and supplies to do your job well? 4) Does your work allow you to make a difference in people's lives? 5) Do your coworkers work together? 6) Are your performance evaluations done with fairness? 7) How respectful are staff to the residents? 8) Does the facility help you deal with job stress or burnout? 9) How well does staff communicate between shifts?
Overall Staff Satisfaction	21	.96	<p>Three questions are included in the Overall Staff Satisfaction measure:</p> <ol style="list-style-type: none"> 1) Do you have overall satisfaction with this facility? 2) Would you recommend this facility as a place to work? 3) Would you recommend this facility as a place to receive care?

* Cronbach's alpha is averaged across three measurement intervals: baseline (0 months), six-month follow-up, and 12-month follow-up.

Table A-5. Implementation Costs for RCC Initiative* (2002–2005)

Budget Item	2002–2003 Pilot Phase	2004 Expansion Phase	2005 Expansion Phase
Consulting fees paid to Action Pact, Inc.	\$500,000 (estimated)	\$160,531	\$115,172
Other direct costs during pilot phase (e.g., staff salaries and travel expenses).	\$100,000 (estimated)		
Salaries paid to facility staff to attend two-day training sessions (5 attendees per facility x 18 facilities). There were 21 sessions during 2004 and 19 sessions during 2005.		\$190,896	\$131,681
Salaries paid to corporate and RCC staff (i.e., senior VP of operations and four culture change agents) who also attended the two-day training sessions for facility staff.		\$21,842	\$18,684
Travel costs, for airfare, hotel, and meals, for facility and RCC staff to attend the two-day training sessions.		\$381,150	\$311,850
Salaries paid to corporate, regional, and district staff to attend three regional retreats during 2004.		\$40,363	
Travel costs, for airfare, hotel, and meals, for staff to attend the three regional retreats.		\$39,270	
Total	\$600,000	\$834,052	\$577,387

* Excludes capital expenditures for physical renovations. Capital costs are estimated at approximately \$750,000 per facility, depending on the existing building footprint, floor plan, and scope of renovations required. In 2005, Beverly Healthcare thus budgeted \$7.5 million for physical renovations in 10 RCC facilities. The actual dollar amounts spent to complete physical renovations could not be ascertained. Physical renovations were not yet completed at the close of this study.

