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**Building the Foundation for Quality Improvement:  
LEAP for a Quality Long-Term Care Workforce**

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## **Building the Foundation for Quality Improvement: LEAP for a Quality Long-Term Care Workforce**

### **ABSTRACT**

The demand for a qualified long term care (LTC) nursing workforce and the focus on federally mandated quality indicators and staffing ratios, creates an imperative for the LTC industry to invest in developing and retaining quality nursing managers and staff. The purpose of this paper is to evaluate the impact of LEAP (“Learn”, “Empower”, “Achieve”, “Produce”), a comprehensive LTC workforce development initiative, that aims to educate, empower, and retain LTC nurses and certified nurse assistants (CNAs). LEAP consists of two modules: Module 1, *The Essential Roles of Nurses in LTC*, is a 6-week (18 hours total) workshop targeting nurse managers and charge nurses to develop essential roles of leader, care role model, clinical expert, and care team builder, and Module 2, *Growing the Heart of Care: Career Development for CNAs*, is a 7-week (14 hours total) workshop focused on career development for CNAs. When implemented across four care centers representing an array of payer-mixes and reaching 560 nursing staff, increases in leadership effectiveness, work empowerment, job satisfaction, and perceptions of the organizational climate were realized six-months post-LEAP implementation. Improvements in LEAP measures were associated with improvements in quality indicators, reduced number of health deficiencies, and decreased nurse and CNA turnover. Although these findings are drawn from a small sample of care centers, results of the LEAP program are promising and are likely attributable to its multidimensional approach to a complex issue: addressing nurse leaders as well as front line nursing providers, providing communication skills as well as clinical skills, and coupling mentoring and clinical ladders, with training. Continued expansion of LEAP to other LTC settings across multiple states will be evaluated longitudinally

## INTRODUCTION

Adults age 65 years and older are the most rapidly growing portion of the U.S. population. The peak of this demographic shift is anticipated in 2050 when one in five persons will be age 65 years and older, and those age 85 years and older will comprise 24% of the elderly population (Federal Interagency Forum on Aging-Related Statistics, 2001). An emerging “care gap” is anticipated with a smaller proportion of younger adults available to function as formal and informal care providers (Paraprofessional Institute, 2002). With an aging population, a greater number of older adults will require some form of long-term care (LTC) services. The Agency for Healthcare Research and Quality (AHRQ) noted that 40% of older adults will need to utilize a LTC facility particularly during the final two years of life (Spector, et.al., 2000).

The demand for a qualified LTC nursing workforce will far outnumber the future supply of both professional and paraprofessional staff. The U.S. Bureau of Labor Statistics (2001) supports this contention in their Monthly Labor Review, noting that approximately 400,000 women will enter the U.S. workforce during this decade. Typically, more women take positions as LTC direct care workers. Even if all of these women entered LTC direct care worker positions by 2010, an additional 600,000 workers would be needed to fill and replace all openings in this decade alone (Paraprofessional Healthcare Institute, 2002).

Recruitment efforts alone will not address the looming LTC workforce crisis. Provision of LTC services is physically, mentally, and emotionally challenging work that requires specialized caring knowledge, skills, and commitment by LTC administrators, managers, and clinical staff. With the focus on federally mandated quality indicators and staffing ratios, it is imperative that the LTC industry invests in developing and retaining quality nursing managers and staff.

The purpose of this paper is to evaluate the sustained impact of LEAP (“Learn”, “Empower”, “Achieve”, “Produce”), a comprehensive LTC workforce development initiative, that

aims to educate, empower, and retain LTC nurses and certified nurse assistants (CNAs).

Specifically, the following questions are addressed:

- 1) Does nursing staff perceives improvements in their leaders' effectiveness, own work empowerment, job satisfaction, and feelings about the organizational climate 6-months post-implementation of LEAP workshops?
- 2) What specific aspects of leadership behaviors, work empowerment, job satisfaction, and feelings about the organizational climate are impacted by LEAP?
- 3) Are there associations between LEAP evaluation measures and other indicators including resident characteristics, number of health deficiencies, and staff retention?

The paper begins with a discussion of the current and future issues influencing LTC nursing staff recruitment, retention, and development. The lack of research focused on relationships between LTC nurse staffing issues and quality of resident care is addressed. Components of the LEAP workforce initiative and program evaluation methods are described. Results of the LEAP evaluation are discussed in terms of the potential impact on staff, managers, and residents. Finally, implications for quality of LTC, nursing staff retention, best-practice models, and culture change are described.

## **BACKGROUND**

### **Overview of LTC Workforce Issues**

The U.S. House of Representatives Select Committee on Aging estimates that 1.1 million additional registered nurses (RNs) will be needed by 2020 to fill positions across the LTC continuum. Similar estimates are projected for licensed practical nurses (LPNs) (Feldman, 1999). The need for certified nurse assistants (CNAs) is more immediate and is even greater with an additional one million needed by 2010 (Paraprofessional Healthcare Institute, 2000). This need for LTC nursing staff will be magnified several fold when the aged population reaches its peak in 2050.

## **Trends Affecting the LTC Workforce**

Several trends, external and internal to LTC, are also impacting the extent of the workforce crisis. External factors include: (1) an aging nursing workforce; (2) more opportunity for other career choices; and (3) lack of gerontology and geriatric education programs. According to Health Resources and Services Administration's (2000) most recent sampling of RNs, the average age of nurses in 2000 was 45.2 years. Nurses in LTC settings tend to be older with a current average age of nearly 50 years of age. In the past, women have typically selected nursing as a career choice, but now have more choices in other industries. Education of health care professionals in the area of aging is sorely lacking. Surveys of both U.S. medical and nursing schools reported that less than 25% of 724 programs offered courses in aging (Rosenfeld et. al, 1999). Similarly, education for CNAs varies considerably among states and few programs include content on caring for the elderly (Paraprofessional Healthcare Institute, 2002).

Internal factors adding to the LTC workforce crisis include: (1) low salaries and inadequate benefits; (2) lack of investment by administrators in their LTC workers, and (3) overall negative perceptions of nursing homes and careers in LTC. Higher salaries and easier working conditions in many other service industries make LTC careers unappealing for those entering the workforce. Also, while many companies in other industries see the importance of "investing" in employees by providing more prospects for development and promotion, the LTC industry is far behind other industries in this area in spite of nursing home reform that begun one decade ago. Perceptions of LTC residents as "difficult" and work settings as "unattractive" or "less challenging" makes careers in this specialty less desirable than other service-related fields or even other health care areas.

## **Impact of Staff Development on Quality of Care**

The report to Centers for Medicare and Medicaid Services (CMS), "Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes" (CMS, 2001) concluded that staffing numbers

significantly impact quality of care in LTC facilities. The report further noted that, by itself, increasing the numbers of nursing home staff has a limited effect on quality of care. The report identified other factors that are vital to quality of care including staff education, career development, support, and supervision.

Unfortunately, the report also referred to many aspects of staff development and education as “soft skills”, including “communication, problem solving, and cultural sensitivity” (p. 7-92). As many studies have demonstrated significant links between nursing staff turnover and key factors such as lack of respect and recognition by management, poor communication, and lack of participation in decision making (CMS, 2001), it becomes apparent that these aspects of staff education should be considered “essential skills”.

### **LTC Staff Development Programs**

Formal education for CNAs typically focuses on one aspect, skills training. What is required of CNAs in LTC settings is much more complex in nature than can be covered in a 75-hour minimum program of preparation. Areas lacking in current curricula include problem solving, communicating with residents, families, and supervisors, mentoring skills, and cultural sensitivity. On the other hand, nurses are expected to enter LTC careers with these skills, but few nursing programs require clinical experiences in LTC that expose students to challenges they may face related to managing large numbers of nurse assistants and meeting the needs of frail elderly residents and concerned family members, while complying with a host of regulations.

Continuing education programs for frontline staff vary widely in content, program length, teaching methods, and qualifications of educators. According to OBRA mandates, continuing education must target areas of deficiency (Federal Regulations, 1987) with states varying widely as to required topics. Typically, educational sessions are taught didactically, with little time for discussion, and without the input from LTC nursing staff as to what they need to know to provide

quality care. Evaluation of the continuing education is seldom done unless the nursing home is cited on a health deficiency related to that topic, and thus must take action to correct the problem.

### **Getting Back to the “Essential Skills”**

Over the past 25 years, the Gallup Organization conducted extensive studies of more than one million employees and their managers across a wide gamut of industries to identify what successful employees needed to be the most productive (Buckingham and Coffman, 1999). Consistently, across all types of businesses and levels of employees, the reason why the most effective employees stayed at their organization and gave their best effort was determined by their relationships with their direct manager or supervisor. These successful employees reported that their immediate manager: (1) was highly effective as a leader; (2) cared about them as individuals; (3) provided consistent recognition and feedback on work performance; (4) encouraged them to give their best effort each day; and (5) included them in problem solving activities.

In one of the few studies that prospectively examined retention of nurses in LTC, Robertson and colleagues (1994) identified factors that were imperative to nurse retention, including: (1) support from administration; (2) authority in decision-making; (3) positive relationships with co-workers; (4) availability of resources to provide quality care; (5) assistive staff with appropriate skill sets; and (6) adequate staffing ratios. The Paraprofessional Healthcare Institute conducted similar studies focused on CNA retention in LTC settings (2000). CNAs who stayed in their positions cited the following factors as most important: (1) having fair-minded, informed, and concerned supervisors; (2) availability of educational opportunities; (3) working with nurses who pay attention and are considerate of their opinions; (4) feeling a part of the health care team; and (5) availability of resources to provide quality care. Interestingly, while clearly an important issue to all employees, CNAs in both studies did not identify salary as a top factor in retention.

## LEAP for a Quality LTC Workforce

LEAP is a comprehensive LTC workforce initiative that aims to educate, empower, and retain RNs, LPNs, and CNAs through unique components including:

- 1) A resident-centered approach to developing qualified, effective nursing leaders and staff
- 2) Interactive teaching methods based on adult learning concepts
- 3) Assessment of the LTC organization's learning capacity including management style, readiness for learning, and capacity to implement and sustain LEAP
- 4) Research-based evaluation mechanisms targeting key staff and resident outcomes
- 5) A "Train-the-Trainer" course preparing staff to effect and sustain change in their own settings.

LEAP is an acronym corresponding to the following overall goals: (1) *Learn* to use tools and resources for quality LTC; (2) *Empower* caring and competence in self and others; (3) *Achieve* commitment to work teams and the organization; and (4) *Produce* opportunities for growth and development.

The LEAP program consists of two modules. Based on the program's overall goals, each module engages participants in a variety of interactive experiences based on concepts from adult learning theory, including experiential learning opportunities, use of audio-visual materials, "hands on" demonstrations, and role playing. Module lesson plans begin by introducing new knowledge ("Learn") that participants apply to their own work settings ("Empower"). Lesson plans continue with individual and group activities in which participants develop action plans ("Achieve") that they are expected to put into action ("Produce") prior to the next session.

Content, teaching methods, and length of the workshops were based on multiple interviews and focus groups of LTC nursing staff in a variety of settings. Nursing staff was asked what they needed to better deliver quality of care to LTC residents. The key content areas they identified for

their own learning needs (Figure 1) complement the proposed national nursing home quality initiative indicators particularly in the physical and mental health-related categories.

**Figure 1. Comparing Education Content Areas Identified by Focus Groups and Nursing Home Quality Initiative Areas**

| <b>Key Education Content Areas Identified by Nursing Staff</b>  | <b>Nursing Home Quality Initiative Examining the Percent of Residents with:</b>  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ Person-centered care</li> <li>▪ Assessment and inspection</li> <li>▪ Skin, nutrition, and incontinence care</li> <li>▪ Mental status assessment</li> <li>▪ Communication</li> <li>▪ Team building</li> <li>▪ Family relations</li> </ul> | <ul style="list-style-type: none"> <li>▪ ADL assistance needs</li> <li>▪ Pain</li> <li>▪ Infection</li> <li>▪ Pressure sores</li> <li>▪ Weight loss</li> <li>▪ Physical restraints</li> <li>▪ Delirium (short stay)</li> </ul> |

Module 1, *The Essential Roles of Nurses in LTC*, is a 6-week (18 hours total) workshop targeting nurse managers, supervisors and charge nurses to develop essential roles of leader, care role model, clinical expert, and care team builder. Unique to LTC, all nurses function in leadership roles, and therefore all nurses participate in the LEAP workshops. As a leader in LTC, nurses learn ten key roles of effective leaders including communication skills, giving feedback, and mentoring staff. As a care role model, nurses learn the importance of “person-centered care” and its influence on empowering residents and frontline staff. Gerontological nursing as its own specialty is emphasized, and nurses are encouraged to develop their knowledge base and assessment skills within their specialization. As care team builder, nurses learn the importance of developing relationships with residents, families and staff as an empowering means of delivering quality care.

The second module, *Growing the Heart of Care: Career Development for CNAs*, is a 7-week (14 hours total) workshop focused on career development for CNAs. A clinical ladder program is first established as the framework to implement this module. CNAs who meet the recognized criteria set forth by the LTC organization complete interviews and are promoted to Level II CNAs and are enrolled into the Module 2 workshop. Topics include: person-centered care, communication skills, head-to-toe inspection, clinical updates (nutrition, skin care,

incontinence), building care teams, cultural sensitivity, and working with families. The final two weeks of the seven week workshops focus on developing skills as a mentor to new CNAs.

## **METHODOLOGY**

Over the past 18 months, LEAP was implemented and evaluated across four LTC care centers (nursing homes) in Cook County, Illinois representing a full array of payer-mixes from private-pay to public aid. These four settings were randomly selected from the 238 care centers in Cook County with Medicare beds stratified by payer-mix. Administrators agreed to participate and committed to the following: (1) facilitating a schedule to allow all nurses (including managers and supervisors) to participate in Module 1; (2) implementing the career ladder program in Module 2 (i.e., interviewing and promoting 10 to 12 CNAs per site for Level 2 status with salary increases; and (3) facilitating longitudinal evaluation of the program by all nursing staff. To provide consistency in teaching methods, an experienced nurse educator who participated in the development of LEAP and had expertise in LTC workforce issues at managerial and clinical levels, delivered all course content across the four settings. Trained research assistants administered surveys in the four care centers at private locations. No personal identifiers were used to maintain anonymity of nursing staff.

### **Description of LEAP Evaluation Measures**

A survey instrument was developed and refined through psychometric testing of its reliability and validity across multiple settings. The main evaluation measures included: (1) leadership effectiveness; (2) work empowerment; (3) job satisfaction; and (4) organizational climate. Correlations among these measures, resident characteristics, and number of health deficiencies over time were also examined.

The leadership effectiveness measure consisted of ten 4-point Likert scales derived from the Survey of Organizations II (Taylor, 1972). Leadership behaviors included mentoring, consulting,

rewarding, and resolving conflict situations. The overall reliability of the revised instrument was 0.95 with high internal consistency among individual items (range of 0.85 to 0.96).

The work empowerment measure was derived from the Conditions of Work Effectiveness Questionnaire (Laschinger, 1996), focusing on access to opportunities for development, information, support, resources, and the degree of formal/informal power perceived. Twelve 5-point Likert scales were derived from the original tool with an overall reliability of 0.88 with high internal consistency among individual items (range of 0.81 to 0.90).

The job satisfaction measure was developed from items on the Job Satisfaction Survey (Spector, 1985) and consisted of nine 4-point Likert scales. Job satisfaction items included external satisfiers (i.e., pay, benefits, promotion opportunities, etc.) and internal satisfiers (i.e., relations with supervisors, contingent rewards, communication, relations with co-workers, etc.). Internal consistency for individual items was moderate to high (range of 0.62 to 0.90).

Perception of organizational climate consisted of eight 4-point Likert scales derived from the Survey of Organizations II (Taylor, 1972). Four dimensions of organizational climate were studied including communication, operations, motivation, and decision-making. Overall reliability was 0.87 with moderate internal consistency among individual items (range of 0.76 to 0.88).

Through the Nursing Home Quality Initiative, CMS plans to evaluate all Medicare supported care centers on ten quality measures with results made publicly available on their website, [Nursing Home Compare](#) (2002) beginning in October, 2002. Some of these quality measures are represented by aggregate data of resident characteristics that are currently available on the website. The percentages of residents experiencing dependency in eating, abnormal weight loss or gain, pressure ulcers, or being bedfast were collected for each of the four care centers. The number of health deficiencies for each care center (pre- and post-LEAP workshops) was also obtained from the [Nursing Home Compare](#) website. Staff retention data were collected as available.

## Description of Sample

Table 1 provides a description of the four care centers that participated in the replication study. The care centers ranged from 143 to 259 beds with occupancy ranging from 78 to 100%. Staffing ratios ranged from 2.30 to 4.34 hours of total nursing care (RNs, LPNs, and CNAs) per resident per day. A total of 560 nursing staff (RNs, LPNs, and CNAs) completed the baseline (pre-workshop) survey (93.5% overall response rate). Table 2 compares characteristics of the nursing staff across the four care centers. Approximately one-third of the staff was nurses and two-thirds were CNAs.

**Table 1. Characteristics of the Care Centers**

| Care Center | Number of Beds | Number of Residents | Percent Occupancy | Medicare Beds | Medicaid Beds | Staffing Ratios |
|-------------|----------------|---------------------|-------------------|---------------|---------------|-----------------|
| A           | 190            | 168                 | 88%               | YES (20%)     | NO            | 3.25            |
| B           | 210            | 210                 | 100%              | YES (60%)     | YES (20%)     | 4.34            |
| C           | 259            | 201                 | 78%               | YES (50%)     | YES (50%)     | 4.12            |
| D           | 143            | 118                 | 83%               | YES (20%)     | YES (80%)     | 2.30            |

**Table 2. Characteristics of Nursing Staff Across the Care Centers**

| Care Center | Number of Respondents | Percent Female | Mean Age in Years | Mean Years at Care Center | Mean Years in Nursing | Percent Full-time |
|-------------|-----------------------|----------------|-------------------|---------------------------|-----------------------|-------------------|
| A           | 190                   | 93.2           | 37.3              | 2.4                       | 10.1                  | 84.7              |
| B           | 160                   | 70.0           | 37.9              | 4.4                       | 9.2                   | 70.6              |
| C           | 111                   | 84.7           | 41.8              | 4.0                       | 12.1                  | 64.0              |
| D           | 101                   | 84.2           | 40.7              | 8.5                       | 13.4                  | 60.4              |

## Data Collection

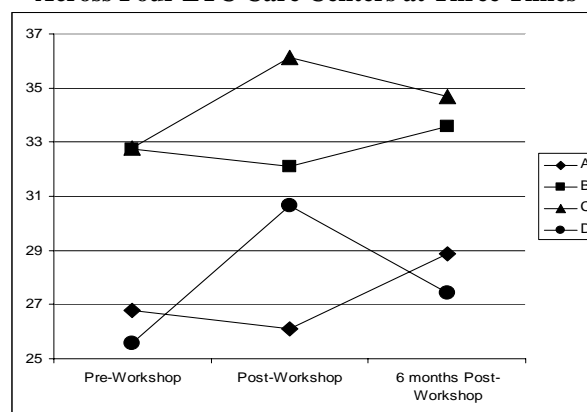
Nursing staff completed the surveys at three points in time: pre-workshops (baseline or Time 1), 2-weeks post-workshops (Time 2), and 6-months post-workshops (Time 3). As the LEAP program is designed for implementation throughout an entire care center, separate control groups within each care center could not be established. Data collection began in November, 2000, and was completed in April, 2002. Eighty-eight percent of all nursing staff completed both baseline and 6-month post-workshop surveys.

## RESULTS

### Leadership Effectiveness

Nursing staff was asked to rate effectiveness of their direct leader (i.e., charge nurse, manager, or supervisor) according to 10 leadership behaviors. Perceptions of nurses' leadership effectiveness by staff significantly increased from Time 1 to Time 3 ( $t=2.001$ ,  $p=0.046$ ,  $df=378$ ). Figure 2 shows some different patterns in leadership effectiveness across the care centers, although staff across all settings reported improvements from baseline. Two care centers with greater proportion of Medicaid beds (Sites C and D) reported greater improvements in leadership effectiveness at Time 2 with a decline by Time 3. In contrast, Sites A and B (greater proportions of private-pay and Medicare beds) showed a decline in leadership effectiveness at Time 2, but then an increase over baseline by Time 3. In follow-up interviews with some of the Site A and B staff, LEAP heightened their awareness of what nurses "should be doing" as effective leaders, and thus scored the nurses lower on this measure at Time 2.

**Figure 2. Mean Leadership Effectiveness Scores Across Four LTC Care Centers at Three Times**

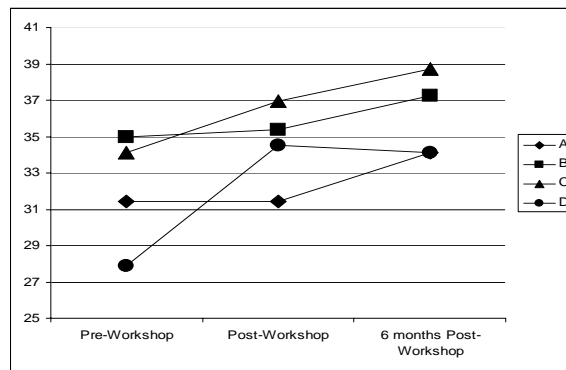


Individual leadership behaviors that significantly improved in all four care centers from Time 1 to Time 3 included: (1) involving staff in problem-solving ( $t=2.154$ ,  $p=0.032$ ,  $df=376$ ); (2) rewarding or recognizing staff for good work ( $t=2.954$ ,  $p=0.003$ ,  $df=371$ ); and (3) mentoring or role modeling ( $t=2.312$ ,  $p=0.021$ ,  $df=389$ ).

### Work Empowerment

Nurses' and CNAs' perceptions of their own work empowerment significantly increased from baseline to Time 3 ( $t=4.134, p=0.000, df=389$ ) (Figure 3). Nursing staff perceived greater access to opportunities for development, information and resources to better do their work, support from their direct supervisor, and clearer understanding of their formal roles and responsibilities. Perceptions of greater staff empowerment were associated with higher staffing ratios ( $p<0.05$ ).

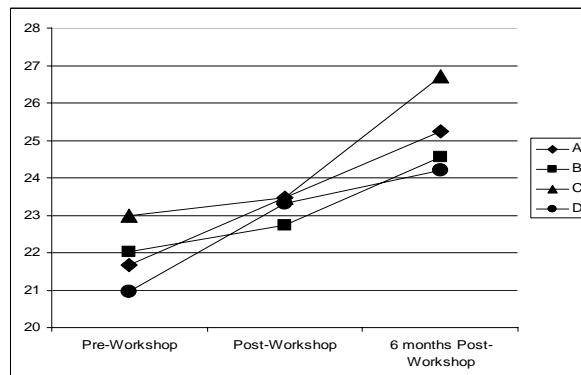
**Figure 3. Mean Work Empowerment Scores Across Four LTC Care Centers at Three Times**



### Job Satisfaction

Nursing staff's job satisfaction significantly increased from baseline to Time 3 ( $t=8.153, p=0.000, df=389$ ) (Figure 4). Job satisfiers that significantly improved included: relations with supervisors, contingent rewards; communication among staff; feelings about working with residents satisfaction with pay; operating policies and procedures; benefits; and opportunities for promotion.

**Figure 4. Mean Job Satisfaction Scores Across Four LTC Care Centers at Three Times**



### **Perceptions of the Organizational Climate**

Only the dimension of organizational communication increased significantly from baseline to Time 3 ( $t=2.280$ ,  $p=0.023$ ,  $df=389$ ). Nursing staff perceived that the other three dimensions of organizational climate (operations, motivation, and decision-making) improved post-workshops, but the increases did not achieve statistical significance. Positive perceptions of the organizational climate was also associated with increased staffing ratios ( $p<0.05$ ).

### **Comparing LEAP Evaluation Measures to Resident Characteristics and Health Deficiencies**

Associations between resident characteristics, the number of nursing home health deficiencies, and LEAP measures were examined. Having greater numbers of highly effective nurse leaders in a care center was significantly associated with fewer residents with the following characteristics: completely bedridden; abnormal weight changes; and pressure ulcers ( $p<0.005$ ). For care centers in which staff reported greater job satisfaction, significantly fewer residents were dependent in eating ( $p<0.05$ ). For care centers in which staff reported greater work empowerment, significantly fewer residents experienced pressure ulcers or were completely bedridden ( $p<0.05$ ).

Associations between the number of health deficiencies (baseline and Time 3) and LEAP measures were examined. The total number of reported health deficiencies across the four care centers at baseline was 26 (mean of 6.5 per care center). At Time 3, the total number of health deficiencies was 16 (mean of 4 per care center). Table 3 shows significant correlations of health deficiencies to aggregate scores of leadership effectiveness, staff empowerment, and organizational climate. At baseline, lower scores on leadership effectiveness, empowerment, and perceptions of the organizational climate were significantly associated with greater numbers of health deficiencies across the four care centers. At Time 3, improved scores on these three measures were significantly associated with lesser number of health deficiencies across the settings. Decreased number of health deficiencies was not associated with improvements in overall job satisfaction.

**Table 3. Correlations Between Numbers of Health Deficiencies  
And LEAP Evaluation Measures**

|  | <b>Pre-workshop Inspection</b> | <b>Post-workshop Inspection</b> |
|--|--------------------------------|---------------------------------|
| <i>Total Number of Health Deficiencies in 4 Care Centers</i> | 26                             | 16                              |
| Leadership Effectiveness                                     | r=-0.961<br>p=0.039            | r=-0.962<br>p=0.038             |
| Staff Empowerment  | r=-0.973<br>p=0.027            | r=-0.989<br>p=0.011             |
| Organizational Climate                                       | r=-0.998<br>p=0.002            | r=-0.966<br>p=0.034             |

An artificial control group was created by utilizing reported health deficiencies collected at the same time periods from 20 randomly selected care centers in Cook County, Illinois. The total number of reported health deficiencies across the 20 randomly selected care centers was 56 (mean of 2.8 per care center) at baseline, and the total of deficiencies was 96 (mean of 3.8 per care center) at Time 3. Two of the 20 care centers showed a reduction in the number of health deficiencies, whereas all four of the study care centers experienced declines.

### **Improvements in Staff Retention**

Nursing staff turnover data were available from two of the LTC care centers. Because each setting utilized different formula to calculate turnover rates, results are presented separately in Table 4. Nursing staff turnover rates for Site A (LEAP implemented in December, 2000) and Site B (LEAP implemented in February, 2001) are shown below. For Site A, total turnover rates through the first 6 months of 2002 are presented.

**Table 4. Nursing Staff Annual Turnover Rates**

| Turnover Rates   | 1999 | 2000 | 2001 | 2002 |
|--|------|------|------|------|
| Care Center A - 120 Nursing Staff (LEAP implemented December 2000)     |      |      |      |      |
| Nurses   | 44%  | 36%  | 19%  | 16%  |
| CNAs   | 76%  | 43%  | 34%  | 4%   |
| Care Center B - 135 Nursing Staff (LEAP implemented in February 2001 ) |      |      |      |      |
| Nurses   | 72%  | 75%  | 50%  | N/A  |
| CNAs   | 93%  | 113% | 79%  | N/A  |

## DISCUSSION

Although findings from this study are preliminary, they suggest a positive impact of LEAP, a comprehensive LTC workforce initiative, on factors including nurse leadership effectiveness, nursing staff empowerment, job satisfaction, organizational climate, and nursing staff retention all of which are associated with resident characteristics and health deficiencies. These results must be viewed cautiously in that the findings are drawn from a small sample of care centers and that while very promising, have not yet demonstrated stability over time. Longitudinal study of LEAP's impact particularly in the areas of staff empowerment, job satisfaction, and nursing staff retention will continue in order to evaluate sustainability of effects.

Baseline staff empowerment and job satisfaction scores are consistent with published results of nursing staff samples by the tools' developers (Laschinger, 1996; Spector et al., 2000). For the most recent annualized nursing staff turnover data, Care Centers A and B had lower turnover rates in 2001 compared to national (nurse turnover rate of 60%; CNA turnover rate of 80.7%) and state (nurse turnover rate of 60.5%; CNA turnover rate of 87.4%) (American Health Care Association, 2001; Illinois Hospital Association, 2001).

For nursing staff, LEAP centers on development of essential skills to provide quality care. Core competencies for nurses focus on leadership abilities, role modeling, gerontological nurse clinical expert, and care team builder. The importance of developing effective nurse leaders influences several areas of the LTC work environment. LTC staff working with highly effective nurse leaders: (1) hold more positive perceptions of the organization; (2) perceive they are highly effective in their own work; and (3) experience greater job satisfaction.

As part of the 6-month follow up, a randomly selected group of approximately 30 nurses and Level II CNAs were invited to participate in focus groups and were asked what aspects of LEAP have been integrated into their daily work skills. Nurses stated that they are "using positive

communication techniques with co-workers and listening skills". Additionally, they have "learned to be receptive to staff's needs and problems." In other situations, they are "more comfortable dealing firmly with problems with chronic absenteeism". For CNAs promoted to Level II, their career development program gave them more confidence in "giving praise and feedback to co-workers; building feelings of teamwork; sharing information with team members; addressing own accomplishments; and, identifying own learning needs". Additionally, Level II CNAs grew their mentoring skills in areas such as "making new CNAs feel part of the team; discussing expectations with new CNAs; and, taking time to demonstrate procedures".

For administration, recruiting nurses who have the potential to be effective leaders is imperative. Identifying factors that differentiate effective from ineffective nurse leaders would be valuable in screening potential nurse candidates. According to the present study, the following four behaviors differentiate effective nurse leaders: (1) pays attention to what staff says; (2) encourages idea exchanges; (3) encourages staff to give their best effort; and (4) sets an example. Effective nurse leaders also promoted a positive organizational climate, and thus have a central role communicating goals, values, and expectations of upper management to frontline workers.

For residents and families, effecting LTC workforce improvement through a culture change model such as LEAP forms the basis for enhanced quality of care and quality of life. CNAs provide up to 90% of all direct care. What they say they do best in their jobs includes: (1) providing support and affection to residents; (2) taking good care of residents; (3) listening to residents; and (4) being available to co-workers. Augmenting these key behaviors with career development opportunities promotes retention, resident/family relationships, and quality care.

### **Considering Study Limitations and Future Directions**

There are some study limitations to be addressed. The primary limitation is the lack of a control group at the onset of the study. As LEAP is based on a culture change model targeting the

entire organization, it was not possible to randomly assign units in each care center to control and treatment groups. Potential threats to internal validity in this study include history (other intervening factors that may affect results), maturation (changes occurring systematically over time), and testing (effects impacted by presence of a pretest).

Furthermore, the findings may not be generalizable across regional and geographic areas (urban vs. suburban vs. rural) due to variation in organizational culture, regulatory issues and economic environments. As the evaluation component of the study continues, several measures are being taken to reduce these threats. Longitudinal data from the four care centers will be collected 12-months post-workshops to evaluate if results are sustained over time.

In the second phase of the LEAP program evaluation, additional care centers across multiple states will also be analyzed longitudinally and compared by region to increase external validity of future findings. A standard method to measure staff turnover will be implemented in Phase 2, so that turnover rates may be compared across settings. Additionally, evaluation of the program's impact will include measures of resident and family satisfaction with care and quality of life.

## **IMPLICATIONS FOR LTC QUALITY IMPROVEMENT**

Implications for LEAP's potential impact on LTC quality improvement is addressed from three perspectives focusing on quality of LTC, best practice models, and culture change.

### **Quality of Care and Staff Retention in LTC**

LTC organizations that fail to place top priority on quality of care may not survive in the future market for a number of reasons. Consumers are becoming more educated about LTC choices and have higher expectations of care providers. The perception of consumers, particularly about nursing homes, is consistently negative. Often, interactions between family members and frontline workers are filled with tension, based on some crisis or problem that has occurred. LEAP teaches nursing staff about developing family/resident relationships, considering them key members of the

health care team. Staff learns to take proactive and preventive actions to meet needs of both residents and family members.

The report “Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes” (CMS, 2001) concluded that greater staffing numbers are associated with improved quality of care. At some point, however, increasing staffing no longer has an impact on quality of care. In addition to staffing levels, quality of care is related to the adequate education and appropriate specialized development of staff through a focus on obtaining enhanced skill sets and reinforcement of person-centered outcomes. Furthermore, staff views continuing education as a “value-added” benefit provided by the LTC organization.

The costs of LTC continue to rise concomitant with greater numbers of frail, cognitively impaired residents and decreased reimbursements. LTC organizations cannot afford to support staff development programs that fail to demonstrate any impact on care quality or retention. Quality of care has become a definitive goal for the LTC industry at the national level, being driven by consumer, industry and government alike (AHQA, 2002). Quality of care is strongly determined by having consistent, highly qualified and motivated staff. Quality staff education is associated with staff retention; and retention in turn is fundamental to the long-term viability of care centers. LTC care centers can no longer afford high rates of staff turnover, as the cost of replacing just one CNA can be three to four times the monthly salary of that one staff member.

### **Impact of LEAP for Best-Practice Models**

Results from the LEAP evaluation suggest positive benefits to LTC organizations by improving nursing staff retention, increasing staff satisfaction, improving clinical outcomes, and ultimately, improving the quality of care and quality of life of residents. These preliminary results are promising and speak to the need for further study, particularly in the area of costs and cost savings (i.e., recruitment costs, costs of training, costs of temporary staff, etc.)

From a management perspective, education and training programs must provide reliable and timely data to improve clinical outcomes and improve administrative decisions. Nursing staff as well as administrators must be able to apply information to decision-making quickly to best meet the needs of their care centers in a constantly changing LTC environment. LEAP incorporates user-friendly evaluation methods that provide feedback to multiple audiences including administrators, staff, residents, and their family members.

Yet the greatest impact of LEAP may be the fact that it has not focused on a single strategy for improving clinical outcomes and improving retention. Best practices in improving the LTC work force are frequently unidimensional in nature, for example focusing only on CNAs or didactic educational strategies. The success of the LEAP program is likely attributable to its multidimensional approach to a complex issue: addressing nurse leaders as well as front line nursing providers, providing communication skills as well as clinical skills, and coupling mentoring and clinical ladders with training. In the future, best practices for improving the LTC work force will have to increasingly address multiple dimensions of an intervention and an array of internal and external organizational influences.

### **Impact on Culture Change**

LEAP is part of a much larger initiative occurring within the field of LTC – that is the changing of the very culture of LTC. It is very clear that consumers want something very different than what currently exists in LTC services. Task-oriented, depersonalized care represents the old culture of care focusing on routines framed by the medical model of cure. Within this old culture is a hierarchical, punitive approach to the workforce. Although the vast majority of care is provided by CNAs, they are distant from organizational decision-making, have little input into formal care planning, and are not part of designing key processes for care delivery.

Many LTC organizations are committing to the process of culture change, a movement towards person-centered, resident-directed, individualized care. Several key elements within the organization need to be considered, including leadership's vision, wishes of consumers, and understanding the role of the LTC workforce in all culture change transformations. Some organizations have underestimated the importance of considering the LTC workforce as an essential component of any culture change process.

LEAP challenges LTC settings to rethink their vision and structure of their workforce when undertaking culture change. For example, LEAP promotes a radical, yet essential, shift of the nurse's role in LTC. As the role currently exists, the nurse spends the majority of the day passing medications, obtaining orders, making appointments, and documenting. As a result, the nurse grows distant from the direct care workers and residents. LEAP asks nurses to expand their roles professionally and creatively with the goal of creating care settings that practice person-centered care. LEAP also creates structures for growth and promotion of CNAs. Person-centered care asks CNAs to enter into respectful, caring, and adult relationships with residents. This only happens if CNAs feel respected and valued by the organization.

In the end, culture change is about developing and maintaining relationships. LEAP strives to support growth and development of nursing staff, while nurturing their relationships with residents, families, and each other. And while staffing ratios and other technical measures will continue to be a benchmark for quality in some quarters, it is far more likely that it is these underlying relationships that will have the greatest impact on improving the quality of LTC.

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