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Implementation and Evaluation of LVN LEAD: A Leadership and Supervisory Training Program for Nursing Home Charge Nurses

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Abstract

Licensed practical/vocational nurses (LVNs) play an important role in U.S. nursing homes with primary responsibility for supervising unlicensed nursing home staff. Research has shown that the relationship between supervisors and nurse aides has a significant impact on nurse aide job satisfaction and turnover as well as quality of care, yet nurses rarely receive supervisory training. The purpose of this project was to develop, pilot, and evaluate a leadership/supervisory training program for LVNs. Upon completion of the training program, many LVNs expressed and demonstrated a new understanding of their supervisory leadership and supervisory responsibilities. Directors of staff development are a potential vehicle for supporting LVNs in developing as supervisors.

INTRODUCTION

While evidence suggests that the primary supervisors of direct care providers in nursing homes are often licensed practical nurses—called licensed vocational nurses (LVNs) in California and Texas—little research has focused on the LVN supervisors or their supervisory skills. Researchers have found that supervisory and leadership training are rarely included as part of LVN educational programs or continuing education (Noelker & Ejaz, 2001; Reinhard & Reinhard, 2006; Riggs & Rantz, 2001; Seago 2004) and that LVNs in particular lack self awareness regarding their limited supervisory and leadership skills (Siegel, Young, Mitchell, & Shannon, 2008).

The purpose of this article is to describe the development, implementation and evaluation of a supervisory skill education program for LVNs. Project LVN LEAD, (Leadership Enrichment and Development) is a curriculum designed to increase leadership and supervisory capacities of LVNs. This project was developed collaboratively by the Institute for the Future of Aging Services (IFAS), the University of Wisconsin School of Nursing and Aging Services of California (ASC). The project had four objectives: (a) develop and pretest a leadership and supervisory training program for LVNs in four California nursing homes;

(b) assess the feasibility of implementing and evaluating it on a broader scale; (c) identify barriers to wide-scale implementation and how they might be resolved; and (d) evaluate its impact on participants. The development of the curriculum and its implementation and evaluation were funded by the California HealthCare Foundation.

BACKGROUND

Although registered nurses (RNs) are ultimately responsible for supervising and delegating in long term care settings, this work often falls to the LVNs, who are often the nurses in charge of units. According to 2008 data collected by the National Council of State Boards of Nursing, 62% of LPNs/LVNs working in long-term care facilities report they are charge nurses, directing and supervising the work of certified nurse aides (Wendt, 2009). Another 7% report they are team leaders. Anecdotal evidence suggests that there are times when LVNs/LPNs are the only nurses in the nursing home, other than the director of nursing (DON). In California, the overwhelming majority of nurses in nursing homes are LVNs (Harrington & O'Meara, 2004). During the course of this project, it was clear there were few RNs employed in the four participant homes and that the LPNs/LVNs had primary responsibility for supervising front line workers.

Numerous studies have found that the nursing home work environment—particularly the relationship between supervisors and CNAs—is an important factor in CNA job satisfaction, turnover, and quality of care (Bowers, Esmond, & Jacobson, 2003; Dellefeld, 2008; Eaton, 2000; Kemper et al., 2008; McGilton, Hall, Wodchis, & Petroz, 2005; Tellis-Nayak, 2007). Prior research (Bishop, Squillace, Meagher, Anderson & Wiener, 2009; Bowers et al., 2003; Harahan et al., 2003; Kemper et al., 2008; McGilton et al., 2005) documents the pervasive experience of CNAs as feeling disrespected, underappreciated, and generally excluded from resident care decisions, particularly by LVN supervisors. Lack of respect by their supervising nurse has also been repeatedly identified by CNAs as an important factor in their organizational commitment (Bishop, Weinberg, et al., 2008) and their desire to leave their job (Brannon, Barry, Kemper, Schreiner, & Vasey, 2007; Parsons, Simmons, Penn & Furlough, 2003).

A prior study conducted by the current research team (Harahan et al., 2003) suggests that licensed nursing staff routinely dismissed the importance of supervisory skills and seemed largely unaware of the CNAs generally negative perception of nurses' supervisory ability. Despite the well documented importance of supervisory and leadership skills and the pervasive lack of such skills, few studies have investigated the supervisory roles performed by LVNs in nursing homes, or the impact of supervisory training on themselves or the people they supervise.

A review of nurse management training and leadership development programs found few targeted at nurses in long-term care settings (Reinhard & Reinhard, 2006). An extensive review of the research on nurse leadership training in nursing homes concluded that effective programs must include four elements: interpersonal skills, clinical skills, organizational skills, and management skills (Harvath et al., 2008). The authors were not able to identify any programs for LVNs that met all of these criteria.

PRE TRAINING ACTIVITIES

Six key activities were undertaken during the period prior to delivering the LVN LEAD training program (see Table 1). These activities were designed to inform development of the LEAD curriculum and training implementation. The institutional review board determined this project was for curriculum development and evaluation, thus exempting it from federal human subject research regulations, however the highest ethical standards to protect those involved with the project were followed.

Stakeholder views of LVNs

Nine stakeholders were interviewed by telephone and through in-person interviews (see Table 1). There was agreement that LVN education programs did not include preparation in leadership and supervision of CNAs. When asked to describe LVN work, stakeholders mentioned; medication pass, clinical treatments, and monitoring patient conditions. Only one included supervising CNAs. One suggested that, often coming from the ranks of CNAs themselves, LVNs found it difficult to act in a position of authority over individuals who had previously been their peers. One administrator described LVNs as lacking a professional identity and was consequently unclear about their role in motivating, teaching, and coaching CNAs.

CNA Focus Groups

Two focus groups were convened with CNAs who were not employed in the pilot sites. CNAs identified the following "ideal charge nurse" characteristics/activities:

- sharing information about residents, particularly at admission and between shifts;
- performing direct care tasks appropriately and on time (not making residents wait);
- listening to residents and responding to their needs;
- helping with call lights and vital signs and working as part of a team;
- treating aides fairly;
- speaking in a language other staff and residents can easily understand;
- coaching CNAs;
- acknowledging CNAs and their work;

LVN Focus Groups

Two focus groups were held with LVNs. Initially, several LVNs said they were too busy to handle supervisory tasks in addition to their patient care and regulatory responsibilities and suggested it might be the Director of Staff Development's responsibility to educate CNAs about proper patient care techniques. Later in the focus group, several LVNs began to express a lack of confidence about engaging in supervisory and leadership activities, saying it was hard to teach CNAs the proper way to do things because CNAs became defensive. LVNs also expressed discomfort with trying to resolve conflicts among staff and believed this was the role of the DON or other supervisor.

Pilot Sites

Four northern California nursing homes perceived as high-performing, based on annual survey results and active participation in state quality improvement initiatives, were selected to pilot the leadership curriculum. These included two for-profit and two not-for-profit facilities, ranging in size from 59 to 174 beds. One of the sites was dropped from the study after the first round of training when administrator turnover became a barrier to participation.

Pilot Site Management Interviews—As part of the planning process, the project team asked managers (Administrators, Directors of Nursing and Staff Development) at pilot sites to identify topics they believed should be addressed in the leadership program. Several managers mentioned coaching and mentoring skills as well as the importance of identifying “teachable moments” that provide an opportunity for them to mentor CNAs. Improving communication skills was identified as a high priority along with problem solving and critical thinking skills. Managers also wanted more LVNs to come up with their own solutions to problems rather than referring them on to managers.

Pilot Site Surveys—Prior to training implementation, pilot site CNAs and nurses were surveyed about aspects of their jobs regarding satisfaction and supervision. Details on the survey and sample can be found in the “results” section below.

TRAINING IMPLEMENTATION

LVN LEAD was designed to provide charge nurses with skills, knowledge, and competencies that enable them to (a) understand the importance of their role as leaders and role models (b) better communicate with all levels of personnel within a facility, but particularly with the staff they directly supervise (c) develop skills in coaching and mentoring CNAs (d) enhance critical thinking skills (e) develop strategies for resolving conflict in the workplace (f) understand how culture can impact their own leadership style and skills and how others' culture impact work styles and (g) work more effectively with management.

LVN LEAD was developed as a series of seven one-hour modules on the above topics that could be taught in one day or over several time periods, along with companion “booster” materials to be given as a follow-up post module. Thirty-seven nurses, predominantly LVNs, from four homes participated in the program.

The curriculum was grounded in adult learning theory, guided by previous research (Harahan, et al., 2003; Harvath et al., 2008; Scott-Cawiezell, et al., 2004), and feedback from interviews and focus groups with administrators, CNAs, LVNs, and pilot site managers. The learning exercises were carefully tailored to be consistent with daily practice of the participating nurses and participants were provided opportunities to discuss the exercises and how they might apply the knowledge to their daily work.

Based on the project team’s past research and published literature on the importance of administrative involvement in practice change, the project team included administrative staff

in the planning and implementation. Project staff met first with administrators to discuss the project and to decide how administrators would support the staff in their implementation efforts.

METHODS

Evaluation of the project focused on the following questions: (a) How did CNAs in the pilot sites view the skills of their supervisors? (b) Did CNAs believe that charge nurses were supportive and helpful to them? (c) Did the CNAs believe that charge nurses promoted their learning? (d) How did charge nurses view their own leadership capabilities? (e) Did charge nurses believe it was their role to coach and mentor CNAs? (f) Did charge nurses change their behavior following the program? (g) What implementation obstacles were encountered? As previously stated, one of the four participating facilities could not sustain participation beyond session one of training and did not complete post training surveys or interviews.

Data collection procedures and instruments

Quantitative data were collected through baseline and follow-up surveys with the CNAs and nurses in the four pilot sites and a satisfaction survey with the nurses who attended the LVN LEAD training sessions. Qualitative data were collected through baseline and post training interviews with management in the pilot facilities and post training interviews with LVN participants in the training program.

CNAs and LVNs were surveyed at baseline and post training to evaluate impact. CNAs were asked about job satisfaction, satisfaction with charge nurse supervision and support, communication patterns within the facility, and issues raised by the cultural diversity of staff. Charge nurses were surveyed about their supervisory roles, supervisory skills, communication, cultural competency and workplace support. Survey items were taken from the 2004 National Nursing Assistant Survey/Nursing Assistant Questionnaire (Centers for Disease Control, 2004), the General Job Satisfaction Scale derived from the Job Diagnostic Scale (Hackman & Oldham, 1980), the Better Jobs Better Care Survey of Direct Care Workers (Kemper et al., 2008) and the Organizational Readiness Assessment Tool for Nursing Homes developed by IFAS (2007). One hundred CNAs in three pilot sites (as previously mentioned, one pilot site discontinued participation) and 18 nurses completed the survey approximately six months post training.

In addition to the survey data, in-person and telephone interviews were conducted with 10 LEAD participant LVNs at one month post-program and 20 participants six months post-program to assess perceived changes their working relationships with CNAs, what they had learned in LVN LEAD and their ability to apply what they learned. Thirteen CNAs were also interviewed approximately eight weeks after LVNs completed the program to gain their perceptions of any changes in charge nurse behavior. Finally, the leadership teams were interviewed via telephone multiple times post training to identify any changes in work environment that could be associated with the training program.

Analysis

The survey results were analyzed using descriptive statistics. Due to the small sample sizes and exploratory nature of this analysis, facilities were aggregated for the analysis. The means and medians for specific items were calculated. Cross tabulations and chi-square tests were used to determine whether there were any statistically significant differences between baseline and follow-up. The interview and focus group transcripts were analyzed using qualitative thematics by senior members of the project team. Results from statistical analysis were compared with the qualitative themes.

RESULTS

Comparisons on perceptions of working relationships between LVNs and CNAs before and after the leadership program revealed some consistent differences between LVN and CNA perceptions of LVN leadership ability. The pre/post comparison also suggested some project impact on coaching and mentoring skills of LVN charge nurses, although few comparisons were significant at $\alpha=0.05$.

Survey Sample

Pre training survey sample—The pre training survey sample included 130 CNAs and 57 LVNs. Of the CNAs surveyed, 80% were female with a median age of 44 and a median length of employment at their current facility of three years. The majority of CNAs identified themselves as Asian (61.6%) or black (24%). Of the nurses surveyed, 89.5% were female with a median age of 43.5 years and the median length of employment in their current facility was 4 years and 8.5 months. The majority of nurses identified themselves as Asian (77.2%) or Black (12.3%). Pilot site management acknowledged that staff who identified themselves as Asian were primarily Filipino.

Post training survey sample—The post training survey was administered to a total of 100 CNAs and 26 LVNs. Of the CNAs surveyed, 83% were female with a median age of 44 years and a median length of employment at their current facility of 3.5 years. The majority of CNAs identified themselves as Asian (74.5%) or Black (13.3%). Of the nurses surveyed, 92% were female with a median age of 49.5 years and a median length of employment at their current facility of four years. The majority of nurses identified themselves as Asian (76.9%).

Survey Results

LVN Survey—Charge nurse descriptions of their supervisory skills were consistently high both before and after the leadership program. Before and after the program, charge nurse respondents agreed with statements: “I provide clear instructions when assigning work,” (100% pre, 100% post) “I treat all nursing assistants equally,” (100% pre, 100% post) “I help CNAs with their job when they need it,” (100% pre, 100% post) “I listen to CNAs when they are concerned about a residents care,” (100% pre, 100% post) “I discipline or remove CNAs who do not do their job well” (83% pre, 80% post) and “I tell CNAs when they are doing a good job.” (100% pre, 100% post).

CNA Survey—In contrast to the LVNs perception of their supervisory skills, CNAs rated LVN supervisory skills consistently lower both before and after the leadership program. However, most CNA ratings of LVN supervisory skills improved following the training program. Both before and after the program, most CNA respondents agreed with the statements: “My supervisor provides clear instructions when assigning work” (83.3% pre, 93.9% post), “My supervisor treats all nursing assistants equally,” (71.4% pre, 74.7% post) “My supervisor helps CNAs with their job when they need it,” (83.7% pre, 80.7% post) “My supervisor listens to CNAs when they are concerned about a resident care,” (86.7% pre, 87.2% post) “My supervisor disciplines or removes CNAs who do not do their job well” (63.7% pre, 57.7% post) and “My supervisor tells CNAs when they are doing a good job.” (82.8% pre, 83.3% post). Two items from baseline survey data, “provides clear instructions when assigning work,” and “is supportive of progress in my career, such as further training,” showed statistically significant differences after the training program (see Table 2).

Prior to the implementation of the training program, 51% of nurses and 45.6% of CNAs agreed with the statement that “sometimes there are problems between staff of different races and cultures.” Post training, more nurses (68%) and CNAs (46.3%) agreed that “sometimes there are problems between staff of different races and cultures.” This could indicate nurse participants were more aware of cultural differences. Prior to the program, over 44% of CNA respondents reported that some staff members had a hard time doing their jobs because of language and/or reading difficulties. After the program, 47.9% of CNA respondents reported that some staff had a hard time doing their jobs because of language and/or reading difficulties.

The research team was unable to make a more meaningful comparison of self-reported changes in nurse behavior between the baseline and follow-up surveys because of ceiling effects. Charge nurses rated themselves so highly at the baseline on the items designed to measure their relationship to CNAs that it was not possible to detect changes after program was completed. CNAs also rated their charge nurses very highly at baseline, making it impossible to discern a measureable change.

Post Program Interviews with LVNs

Subjective experiences shared by LVNs have provided some sense that the program had a positive impact. Twenty of the 32 nurse participants were interviewed six months after the end of the training program to find out if they were able to apply what they learned, and if so, how. Almost all nurses said they had never before received any training in leadership and supervision. The majority said the training program helped them become better at listening to and soliciting CNAs’ input regarding patient care needs, consistently communicating patient status and care planning with CNAs and providing feedback to CNAs. One LVN stated, “I listen to their ideas now and I didn’t before. Before, I said ‘*you need to do it this way.*’ I didn’t realize that they could have good ideas, because they deliver so much of the care.” Another LVN observed, “I try to be more assertive than before; I try to talk to CNAs. I asked them ‘*what are your suggestions?*’ These LVNs transitioned from viewing their role solely as a nurse in charge of patient care to viewing themselves as leaders who have the capacity to teach and mentor.

The module on mentoring and coaching seemed to make a significant impression. One nurse expressed a new understanding of her teaching and coaching roles, capturing its essence when she told us “you are teaching them all the time, especially the new ones. It opened my eyes. I now tell them *‘I’ll show you and you watch, and then you try it and I’ll watch.’* Several other nurses also pointed out they were now more conscious of the importance of explaining to CNAs why particular clinical tasks were important and sharing outcomes with them.

Managers’ Perceptions of Training Impact

Managers at the three pilot sites that remained in the project were interviewed after each training session. They described many concrete examples of behavior changes they attributed to the training program. For example, a DON in one site required all nurses to select a goal they want to work on as part of their annual performance review. She said for the first time many of her nurses picked coaching, telling her they had learned they needed to be more respectful of the CNAs. An administrator at another site stated the project helped him to understand that supervising staff was more of a coaching process than a punitive one.

A Director of Staff Development observed, “I see a couple people out on the floor who would never go out on the floor before and are now working with CNAs and answering lights.” Another Director of Staff Development mentioned she had seen a particularly quiet charge nurse coaching a CNA for the first time.

Implementation Barriers

Upper management instability posed a particular challenge to successful implementation of strategies learned during the program. The loss of an administrator in one facility, led to the withdrawal of the entire facility from the training program. The DONs at two of the remaining sites also vacated their positions during the course of the study. This was a consequential loss for the training program, as the research team expected them to play a major role in motivating and reinforcing staff participation in the training program and implementing skills on the job.

DISCUSSION

In the judgment of the project team, evaluation findings supported program goals. The data affirmed the need for a training program to help build the leadership and management capacity of the LVNs in California nursing homes. One of the major successes of the pilot was the recognition by many LVNs that they were leaders and had a responsibility to manage their units, to communicate with and mentor the CNAs and to develop a team approach to service delivery.

While leadership instability did not interfere with gaining the requisite participation of LVNs among the three organizations that remained in the study, it may have contributed to less ownership of project goals and less probability of lasting effects from the intervention. At the beginning of the program, each leadership team was asked to develop a plan to sustain the program in the future. Many discussions were held with upper management to identify strategies for institutionalizing project goals. However, little guidance was provided

by the project team, as the scope of the project and timeline did not permit this activity. In addition, none of the managers set any real expectations for LVNs prior to their attending the training program and few prompted concrete follow up. A cognitive dissonance seemed to exist between what upper management thought they were doing and what they actually did to support the program. As a result of this project, researchers have concluded that any replication of the training program must include more specific guidance to and involvement from the facility's upper-level management group.

During the training sessions, a number of "natural mentors" were observed helping other participants. Efforts to expand and replicate the training program should carefully consider how to formally utilize these natural mentors in an effective and encouraging manner. The Directors of Staff Development in the project sites maintained important relationships with both CNAs and LVNs, and, in most cases, seemed respected by both groups of staff. Therefore, it may be advantageous to utilize Directors of Staff Development as supports for the LVN training program to create a pivotal link between the LVNs and upper management.

The project team also learned from many individuals involved that cultural orientations are believed to create conflict and misunderstanding among staff. The research team observed how the cultural orientation of these nurses influenced their behavior and found that some tensions at pilot facilities appeared to be a product of differences in cultural orientation. Because of this, researchers' believe this project underscored the importance of including cultural competence in leadership training and the application of this knowledge in daily practice.

Implications for Nursing Practice, Education and Research

The responsibilities of the nursing home LVNs in the supervision and management of CNAs have been largely understudied. While there is a need to recruit and retain more RNs as part of the effort to improve nursing home quality, the reality of the role of LVNs as charge nurses and team leaders should also be acknowledged, strengthened, and supported. The following recommendations for next steps in research and continuing education for LVNs have emerged from this pilot study:

- Create a broader awareness of the role the LVNs play in quality long-term care delivery;
- Modify education and competency requirements to assure that new LVNs are prepared to assume leadership and supervisory responsibilities;
- Integrate supervisory and leadership training and support into continuing education requirements for LVNs;
- Revise the scope of responsibilities of the Director of Staff Development to support LVNs in their leadership and supervisory roles; and
- Evaluate the impact of leadership and supervisory training on job satisfaction, turnover and quality of care.

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TABLE 1**Data Collection Methods and Purpose Pre LEAD training**

Method	Purpose
During Project Planning Phase	
Review of the literature	Review evidence base on nurse leadership and supervision in long-term care and adult learning techniques.
CNA and LVN focus groups (CNA n= 23; LVN n=16)	Obtain feedback on what a good charge nurse looks like and the areas in which charge nurses need training.
Stakeholder interviews (N=9)	Obtain input on the role of charge nurses and what is needed to strengthen their leadership and supervisory capacities. Stakeholders included nursing home administrators, California Board of Vocational Nursing representatives and, nurse educators from California LVN training programs.
Telephone and in-person interviews with pilot site management team members—administrator, director of nursing, director of staff development	Solicit perspectives on their concerns about the performance of charge nurses in the facility and the areas in which they need to strengthen leadership/supervisory abilities. Identify the organizational structures necessary to help implement/sustain the knowledge and skills acquired by participants in the training program.
Baseline survey of CNAs in four pilot facilities (N=130 [*])	Gather CNA perspectives on their job satisfaction, support received from charge nurse, communication across staff, and issues with cultural diversity within their facility.
Baseline survey of charge nurses in four pilot facilities (N=57) ^{**}	Obtain nurse perspectives on their supervisory responsibilities and skills, support received from facility leadership, communication across staff, and issues with cultural diversity within their facility.

* Includes the fourth pilot site (N=31), which discontinued participation during the study.

** Includes the fourth pilot site (N=19), which discontinued participation during the study.

TABLE 2

CNA Responses to Selected Measures of Charge Nurse Support

Survey Question	Strongly Agree/Somewhat Agree		p
	Baseline Survey (n=99)	Follow-up Survey (n=100)	
My charge nurse provides clear instructions when assigning work.	85.3%	93.9%	.047
My charge nurse is supportive of progress in my career, such as further training.	77.1	89.0	.041
My charge nurse is open to new and different ideas, such as new or better ways of dealing with resident care.	77.9	88.3	.062
I have a good understanding of the goals for each resident.	77.1	85.6	.105