Keeping Frontline Workers in Long-Term Care:

Research Results of an Intervention

December 2003

A Collaborative Report

IFAS
Institute for the
Future of Aging Services

50th Anniversary
KAHSA
Kansas Association of
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Kansas Association of Homes and Services for the Aging (KAHSA)

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INTRODUCTION

In 2002, the Kansas Association of Homes and Services for the Aging (KAHSA), the professional association representing the not-for-profit nursing homes in Kansas, tested a set of interventions directed toward reducing the high staff turnover rate in nursing homes.

The evaluation of these interventions (The Long-Term Care Workforce Project) is one of a new breed of investigations directed toward improving the long-term care workforce crisis. The focus was evaluating a workplace intervention in the real world nursing home environment. As such, the project provides lessons beyond the data assessing the success of the intervention.

The project was funded with a grant from the Sunflower Foundation: Health Care for Kansans. The Sunflower Foundation was created in August 2000 as part of a settlement between the Kansas Attorney General, the Insurance Commissioner and Blue Cross Blue Shield of Kansas. The foundation is charged with serving the health needs of Kansans.

The Aging Research Institute, KAHSA's training and research branch, served as the primary coordinating and oversight organization for the project and set up a partners group to implement and evaluate the project. The unique partnership was made up of researchers from Wichita State University and representatives from the Institute for the Future of Aging Services (IFAS), Prairie View Mental Health Center and Schmucker Training and Consulting.

This professional-academic consortium of players contributed to the successful implementation and evaluation of this project and could serve as a model for further research in this important area. The partnership was an extremely successful component of the undertaking.

BACKGROUND

Problem

High turnover rates for paraprofessional and professional frontline caregivers in nursing homes have been a longstanding problem for more than two decades. This phenomenon has consistently created an undue burden for dedicated practitioners, administrators, nursing home residents and their family members.

Since the late 1970s, individual nursing facility turnover rates from 50 to more than 100 percent have been reported. During the tight labor markets of the 1980s and the sustained economic upswing of the 1990s, nursing homes reported high turnover and vacancy rates for nursing assistants and other aides nationwide. As reported by Stone and Weiner in their 2001 overview of the long-term care workforce crisis, national turnover rates from that time period were estimated to be as high as 105 percent (Wilner and Wyatt, 1998). Individual state estimates approached 150 percent (North Carolina Division of Facility Services, 1999).

Such pervasive turnover rates did finally thrust this serious issue onto the national policy agenda. Many casual observers attributed the high turnover rate to a strong economy. They postulated that in a weaker economy, workers would seek out and remain in these essential, but stressful, strenuous and low paying jobs. Now, almost two years into a marked economic recession, those predictions have proven to be unjustified. The historically high turnover and vacancy rates for nursing home nurses are increasing and may soon reach unprecedented levels.

The ongoing turnover crisis is being exacerbated by a general health care labor shortage that extends to both paraprofessional and professional personnel. With the paraprofessional workforce, nursing homes are facing increased competition from home health care agencies, rehabilitative care centers and the other community and hospital-based sub-acute units and facilities. With respect to the professional health care labor shortage, nurses are currently in exceedingly short supply relative to demand. Nursing homes face increasing competition from hospitals that can afford to offer better wages, benefits and other incentives.

The state of Kansas is facing a nursing home staffing crisis of epidemic proportions. For nearly a decade, KAHSA has been actively studying the dynamics of turnover among its members and seeking solutions to the workforce crisis. KAHSA members have repeatedly cited nurse aide turnover as the most significant threat they face in providing high quality care for their residents.

Since the mid-1990s, the yearly turnover rates for nursing assistants and aides have paralleled the national average. Individual homes have reported rates ranging from 40 to over 100 percent. The average aide turnover rate for the state in the year 2000 was over 99 percent (KAHSA 2002). Currently, Kansas has over 350 nursing facilities serving more than 20,000 residents statewide. Nurse aides provide over 80 percent of the hands on care in these settings, while nurses provide the essential medical care and professional oversight.

Kansas faces another concern that may also affect other states with large rural areas. Many Kansas nursing homes are located in small, closely knit and somewhat secluded rural communities. Turnover is a particular problem for these rural facilities. Attracting people to rural communities is problematic in all health care occupations and professions. No program or incentive system currently exists that can successfully encourage those who live outside the community to work in an unfamiliar rural area.

In the coming years, a large percentage of the population of the United States will be getting older. Aging baby boomers will be the most visible factor in the projected increase in the elderly population. Boomers will have fewer informal family caregivers than preceding generations did. This situation is expected to significantly increase demand for formal long-term care and nursing home services.

Causes

Excessive nursing home staff turnover is not just the result of a straightforward economic dynamic of supply, demand and price. It is the result of the interplay of many factors, including the social, fiscal, regulatory and political environments. Turnover is also driven by the administrative and organizational culture and the interpersonal practices and interactions in the nursing home workplace.

The High Cost of Turnover

Research has clearly demonstrated that understaffing and inconsistent staffing are associated with poor quality nursing home care (Kayser-Jones and Schell 1997 and Kramer, et al. 2000).

In addition to the quality issues associated with understaffing, the financial cost of nursing home turnover has been high for both the nursing facilities and state government. Turnover costs include funds spent on the recruitment and the training of new personnel. Costs also take into account the loss of productivity during the transition and training phase of initial employment. Conservative estimates place the cost of one aide turnover at $2,000. With so much money going into the turnover costs, nursing homes have limited funds for essential or innovative services.

High turnover costs also financially affect state government. Nursing homes rely heavily on both Medicare and Medicaid to finance their operations. Through Medicaid, the state acts as the major third party payer for nursing home care and consequently bears the cost of much of nursing home turnover. Turnover, therefore, represents a budgetary concern at the state level even during the best of times. Given the enormity of the current and projected fiscal crisis in many states, the turnover cost greatly impedes a state's ability to adequately fund long-term care and other badly needed services for its citizens.

WORKPLACE INTERVENTION

The Long Term Care Workforce Project was specifically developed to evaluate the impact of a workplace intervention on rampant staff turnover in nursing homes. The idea for this type of intervention came from previous research examining the relationship between intrinsic job satisfaction and turnover among nursing home personnel. Intrinsic job satisfaction refers to the elements in a job that provide internal rewards to a worker. These can include positive social interactions, personal achievement, recognition and work expectations that are challenging but reasonable. High intrinsic levels of satisfaction build commitment toward one's employer and can offset low levels of extrinsic satisfaction, such as salary and benefits.

The research found that:

- Intrinsic job satisfaction among nurse aides was heightened when their nurse supervisors possessed good interpersonal skills and promoted aide autonomy in the daily process of care (Waxman et al. 1984).
- Turnover rates among nurse aides were significantly lower in homes where nurse supervisors listened and responded to aides' recommendations and involved aides in resident care plans (Banaszak and Hines 1996).
- Poor interpersonal skills and a lack of mutual empathy among nurse aides and their nurse supervisors affected communication, interfered with informal teamwork and were a root cause of turnover for both aides and nurses. Training in interpersonal skills was recommended for both nurses and aides (Lescoe-Long and Long 1998).

STUDY OBJECTIVES

The Long-Term Care Workforce Project specifically aimed to develop superior interpersonal interactions among nurses and aides and encourage a sense of teamwork in Kansas nursing homes. The objectives of this project, as formulated by the project development team, were:

1. To improve frontline nursing home employee retention through:
   - Training to enhance interpersonal skills and empathy among frontline workers and their supervisors
   - Training to enhance the supervisory skills of team supervisors
   - Increased job satisfaction and commitment through facilitated support groups
2. To measure the impact of these interventions on interpersonal relationships and supervisory capabilities.

METHODOLOGY

Intervention

The intervention consisted of three parts. Training in interpersonal skills and empathy was the primary intervention. Weekly support groups and online supervisory training were booster interventions to enhance the training.

Interpersonal Skills and Empathy Training

The first and primary intervention consisted of training in interpersonal skills and empathy. The training was directed toward naturally occurring work groups of 5 to 12 aides and their nurse supervisors. Naturally occurring work groups were defined as a set of same-shift aides who routinely worked together to provide resident care, plus their immediate nurse supervisor. They were not formally sanctioned work teams.

One of the goals of the interpersonal skills and empathy training was to create and instill camaraderie and cooperative spirit within these naturally occurring work groups, so that the work group would become a team. It was hoped that the successful development of teams would increase the intrinsic job satisfaction of perceptual team members, increase job commitment and reduce turnover.

A professional trainer provided consistent training in interpersonal skills and empathy for all participants in the study. The trainer employed two highly validated, reliable and proven approaches in the training protocol.

First, the trainer used the DiSC Dimensions of Behavior, Personal Profile System to develop empathy among work group members and lay the foundation for high quality interpersonal interactions. The DiSC Personal Profile System uses personality assessment, similar to the Myers-Briggs Type Indicator (Kragness and Rening 1996), as a training tool for employee development and team building. Potential team members take a self-assessment test that measures four personality characteristics. The characteristics influence the circumstances under which people excel or become demotivated in the workplace. The trainer shares these patterns with all the group members to help them understand themselves and each other, as well as better interact with each other based on personality differences. This training included both aides and supervisors.

The second training protocol consisted of skills training for the nurse supervisors only. This skills training is designed as an extension and enhancement of the interpersonal skills training provided to the full work group. The training is based on strengthening the 12 major drivers of intrinsic job satisfaction derived by the Gallup Organization and detailed by Buckingham and Coffman in *First Break All the Rules: What the World's Greatest Managers Do Differently* (1999).

These 12 drivers are:

1. Making sure that employees know what is expected of them at work
2. Making sure that employees have the materials and equipment they need to do their job right
3. Providing employees with the opportunity to do what they do best every day
4. Providing recognition or praise to employees on a regular basis
5. Sincerely caring about employees as individuals
6. Encouraging employee personal development
7. Giving credence to employee opinions
8. Making sure the organization's mission operates in a manner that makes the employees feel their job is important
9. Making sure the employee work group is committed to high quality work
10. Encouraging social relationships among employee team members
11. Providing feedback on employee performance
12. Providing employees with opportunities to learn and grow

The training sessions were designed to:

- Further improve nurse empathy for their aides
- Teach nurse supervisors the skills to develop a team mentality among their work group members
- Improve nurse supervisors' sense of competence in their managerial role

Biweekly Support Groups

The biweekly support groups were designed to bolster the interpersonal skill and empathy training. The groups were facilitated by a licensed social worker specializing in care and counseling related to mental and emotional health. These support groups provided work group members with a place where they could engage in mutual problem solving and apply the information they learned in the interpersonal and empathy training sessions.

Online Supervisory Training

The third intervention was the addition of interactive, online supervisory training through the Learning Network for Senior Services (TLN). TLN was developed through the American Association of Homes and Services for the Aging, KAHSA's parent organization. Participating nurse supervisors completed online management and supervisory modules to reinforce the skills and concepts being taught in the supervisor training on the intrinsic job satisfiers. This intervention was designed primarily to ensure that nurse supervisors felt competent and comfortable in their team-building skills.

Measurement

Several measurement instruments were designed by the evaluation team and were used to measure changes in the attitudes, beliefs and behaviors of aides and supervisors. These multiple measures, which include surveys and log sheets, were used to provide as much insight as possible into the dynamics of the interventions' effects.

The first of these content valid measures, the Employee/Supervisor Attitude Survey or ESAT, was developed to measure changes in the attitudes and beliefs of aides and nurse supervisors toward their co-workers.

The second measure, the Employee Organization Rating Survey or EOR, was developed to capture changes in the attitudes of aides relative to their nurse supervisors and to themselves. This survey was divided into three parts. The first part consisted of questions designed to determine if aides' attitudes toward their supervisors became more favorable after supervisory skills training. The second part of the survey was a supervisor behavior rating scale. Aides rated their supervisors on the extent to which they displayed high quality interpersonal skills and achievement in the workplace. The third section of the survey was a self-rating scale in which the aides ranked themselves on the same interpersonal and achievement characteristics. This section of the survey was designed to measure whether aides rated themselves more highly on any of the behaviors after the interpersonal and empathy skills training and after their nurse supervisor had been instructed on how to motivate them to achieve more in the workplace.

The third measure, the Supervisor Rating Survey (SR), was designed to measure supervisors' ratings of their interpersonal skill behaviors and their suitability for their current position. The questions were designed to capture any increase in supervisors' interpersonal competence after the training and any changes in supervisors' attitudes about their competence and suitability as supervisors.

The fourth measure, the Supervisor Belief Survey, or SB, was designed to measure supervisors' beliefs about how one should attempt to motivate others in the workplace. In addition, this survey asked supervisors to what extent they believed that the interpersonal and achievement characteristics used in the EOR were important to performing their jobs well.

The fifth measure, the daily log sheet, was developed to capture specific instances when the participants made behavior changes during the course of the intervention training. Intervention participants filled out a daily log sheet each day they worked during the intervention period. Each participant was to fill out his or her thoughts, feelings and personal responses to the interactions they had that day with their supervisor, their work group co-workers, members of other shifts or departments and the residents.

The professional trainer had designed the Intrinsic Drive Survey. It was an attitude survey used to help supervisors track how successful they were in strengthening the workplace through the 12 Gallup-developed intrinsic drivers. This survey specifically addressed changes in work group attitudes and beliefs regarding the level of the 12 drivers present in the workplace. The trainer used before and after percentage change to help motivate and inform the work group participants.

Four additional questions were added that dealt with the perceived level of satisfaction and commitment participants felt toward their employer.

Finally, two measures screened for other influences that might have affected the implementation of the behavior changes. The first measure, the LTC survey, was adopted from the Vital Research Survey and captured variables that may have been acting as barriers to implementing the desired behavior changes. For example, high levels of short staffing, a highly stressful environment or a lack of support from the administration can all frustrate efforts to initiate new behaviors in the workplace. The second measure was the Environmental Scan Interview, used to find out if any other programs, interventions or circumstances were inflating the evaluation results.

Design

KAHSA issued an invitation to participate to all its member homes within a 60-mile radius of Wichita. Eleven homes volunteered to participate. Out of the, six were selected that were comparable in size and quality of care. They were all mid-sized facilities of around 100 beds and were among the best nursing homes in the state, relative to quality of care records and reputation.

The homes also had, at the time of selection, a stable administration with either an administrator or a director of nursing who had been in that position for over two years. Three urban (two in Wichita and one in Newton) and three rural facilities (Behuler, Arkansas City and Winfield) were selected.

Two homes were randomly chosen, one urban and one rural, as facility controls. This left four intervention homes, two urban and two rural, and two facility control homes. A seventh home was selected from the initial 11 participants to serve as a testing control.

Data Collection

Intervention training sessions and booster interventions were conducted from November 2002 through February 2003. The evaluation team fielded two data collections, a pre-intervention baseline data collection in October 2002, and post-intervention data collection in March 2003. Baseline data were collected at the four designated intervention homes and the two designated control homes. Post-intervention data were collected from these same homes and from the test control home.

The evaluation team conducted an initial meeting for the participants in each home. During the first hour, the evaluators explained the consent forms and how the data would be collected. After the forms were signed, the evaluation team went over each of the survey instruments with the subjects to make certain they knew how to fill them out.

Subjects were then given one week to complete the surveys at their leisure. This delayed collection was necessary because none of the homes could spare such a large complement of employees for the length of time it would take them to complete the surveys at the point of distribution. In addition, completing such a large number of surveys at one sitting could lead to fatigue or boredom and result in rushed or superficial responses. Log sheets were mailed to the evaluation team at Wichita State University each week.

Subject Participation

The four intervention homes and the test home identified two naturally occurring groups and selected one to be the test group and one to be the control group. At the outset, each of the intervention homes had intervention subject and control subject work groups consisting of between four and five aides and one nurse supervisor. There were a total of 18 intervention subject aides, 17 control aides, and eight intervention and control supervisors. The test control homes had five intervention subject aides, five control subject aides, one intervention and one control supervisor. At the two control homes, there were 22 control home control aides and two control home control supervisors.

The total number of project subjects was 85. Although these numbers are small, they are in keeping with a pilot investigation.

By the time the post-intervention data were collected, there were 54 project subjects participating. This represents about 63 percent of the original number. The charts below give more details on how the numbers broke down.

Four Intervention Homes				
	Aides		Supervisors	
	Pre	Post	Pre	Post
Test Group	18	14	8	4
Control Group	17	6	8	2
Total	35	20	16	6

Two Control Homes				
	Aides		Supervisors	
	Pre	Post	Pre	Post
Control Group	22	14	2	2

One Test Control Home				
	Aides		Supervisors	
	Pre	Post	Pre	Post
Test Group	5	5	1	1
Control Group	5	5	1	1
Total	10	10	2	2

FINDINGS

The evaluation of the intervention yielded five major findings.

Major Finding 1: Professional trainer intervention had a measurable impact on participating nurse supervisors. As a result of the nurse supervisor training and training in interpersonal skills development, nurse supervisors felt more confident about their ability to communicate with, encourage and effectively mentor members of their work team. This signifies that the supervisors found the training compelling and valuable, and attempted to implement what they had learned with their work group members.

Specifically, nurse supervisors viewed themselves as substantively improved in these areas:

- Improved ability to interact well with others
- Greater recognition of the importance of good interpersonal relationships at work
- Improved ability to communicate effectively
- Improved ability to evaluate the potential of any given employee
- Improved ability to motivate work group
- Improved quality of work group performance
- Improved ability to encourage work group members to use their natural strengths
- Improved ability to mentor work group
- Improved ability to give constructive feedback
- Better at resolving conflict
- Have clearer vision of group's success
- Better at helping work group correct bad habits
- Better acting on input from group
- Better at listening to group members
- Grown as a person in the past three months
- Happier in job today than three months ago
- More confident that they can improve morale of their work group
- More confident they can improve the performance of their work group
- More confident they can sustain improved morale and performance

The intervention resulted in happier, more confident nurse supervisors.

The supervisors also provided their team members with more feedback on their progress at work after the intervention than before the intervention.

Major Finding 2: Although the intervention had a cognitive and behavioral impact on the supervisors, its impact was less noticeable for the aides. Overall, the aides failed to detect any change in their own behavior as a result of the intervention. The aides also failed to note any detectable change in their supervisor's behavior, beyond providing more feedback on their progress at work.

One possible reason for this discrepancy may be that supervisors held fast to a belief that all work group members should be treated exactly the same, even after intervention training advocated taking into account each individual's uniqueness. This type of differential fairness is at the heart of good mentoring, motivation and dealing with unacceptable problem behaviors, behaviors for which the aides had given the supervisors low marks. The fact that the supervisors did not convert to this belief may be implicated in their continued poor performance in these areas in the eyes of the aides.

Major Finding 3: The interpersonal training and the indirect effect of better nurse supervision did have some positive impact on the aides. Aides reported several positive impacts during the evaluation. They felt that their supervisors were more willing to update them on their progress at work (see Major Finding 1) and that they had been given an opportunity to learn and grow on the job.

Aides also seemed to benefit from the online training their supervisors took. The supervisory training appeared to increase the sense of team unity among the participant work group members. This suggested that reinforcement of the trainer's teachings improves the ability of the nurse supervisor to nurture team bonds.

Work group members also reported better interpersonal relationships with their residents, making the environment feel more like a home rather than an institution. In the wake of the intervention, aides also perceived that their work group functioned more like a team than a set of individuals.

This suggests that this particular intervention has the potential to improve teamwork and may be an important part of developing self-directed work teams. It appears to improve supervisors' ability to facilitate teamwork and improve group dynamics to make teams stronger. Residents are indirect beneficiaries as improved interpersonal skills translate into improved social interactions with the residents.

Major Finding 4: The survey data revealed a sense of cynicism with one's fellow human beings among study participants. These feelings are characteristic of people who have experienced a great many hard times and disappointments. The cynicism suggests a lack of trust of the motives of others and may well have affected participants' willingness to fully embrace the intervention's teachings. This lack of trust was reflected in the participants' high ranking of these statements:

- If you start doing favors for people, they will walk all over you.

- People pretend to care more about one another than they really do.
- At this organization, what people say and do are usually two different things.
- The morale in this organization has gone down from what it was just a year ago.

A possible area where cynicism may have played a role in study results was in the aides' failure to recognize a substantive change in their supervisors' behavior. The aides may have been waiting to see much more dramatic and sincere displays of changed behavior than supervisors were able to mount. Cynicism also may have affected the evaluation findings in the failure of the support group intervention to yield any significant results.

Major Finding 5: Stress ranked constantly high by aides and supervisors both before and after the intervention. The evidence for this was the high ranking on these statements:

- I work under a great deal of stress.
- I have too much work to do to do a good job.
- I always feel I am racing from one thing to the next.
- The people in my department are expected to do far too much work.
- The people in my department have more work than do people in other departments.

The stress associated with chronic short staffing played a major role in the inability of the participants to apply and internalize the lessons learned from the professional trainer. The intervention did energize the participants in the short term. Good teamwork was evident for a brief period of time after each training session, regardless of staffing patterns. When teams were at full staff, which may have included agency help, the work groups tried to implement the teachings from the intervention training and observed that they worked well as a team. Even in the face of short-term short staffing, the work groups reported they were functioning better—with less conflict—and got more accomplished.

The log sheets revealed that intervention group members worked short staffed—primarily due to absenteeism—more than 70 percent of the time. When short staffing continued beyond two days (which happened frequently), work groups reported increased tension, poor teamwork and poor interpersonal interactions, especially with their supervisors. During these stressful times, nurses and aides routinely clashed, aides clashed with other aides, aides felt ignored and badly treated and nurses felt overwhelmed. Stress of this magnitude makes it exceedingly difficult to implement new behaviors.

When the stress of short staffing became overwhelming, which was the majority of the time, the intervention behaviors were abandoned and old attitudes and resentments emerged. There were emotional outbursts; increased complaining; threats to quit; a sense of burnout and hopelessness; feelings of being used by each other, their supervisors and the organization; and demands for more compensation in light of "all they suffer."

These latter findings relate to two additional sets of constants evidenced by the LTC survey. The first set of findings relate to a sense of the aides' lack of trust (see Major Finding 4). Short

staffing exacerbated the aides' feelings that they were ignored and badly treated by the nursing staff and the administration. Short staffing reinforced existing cynicism.

The second set of constants from the LTC survey reflects evidence of a sense of inadequate compensation for work provided. This evidence came from low rankings of these statements:

- When it comes to benefits, I think this organization is one of the best.
- When it comes to salaries and wages, this organization is very competitive.

Although it can be argued that aides are not compensated well for their work, the log sheets did indicate that the stress of short staffing refocused the aides' attention on the perceived inadequacy of their compensation. This can only magnify its importance relative to job dissatisfaction.

Summary: These findings suggest that overall, the intervention caused changes in attitudes and behavior consistent with its teachings. The intervention also demonstrated an ongoing willingness to try to continue to implement behavior change, even in a difficult work environment. In the final analysis, the lack of a stronger response to the intervention is primarily attributable to the stress and tension associated with under-staffing.

In short: The caliber of your work force interactions can't be improved if you do not build a supportive environment.

SUGGESTED MODIFICATIONS

These findings suggest that several modifications could be made to strengthen the intervention and the environment in which it is fielded.

First, chronic staffing shortages need to be addressed to reduce the stress on frontline personnel so they can better learn and adopt the intervention teachings. Once the staffing is stabilized, the potential for adoption, diffusion and sustainability of the intervention should increase.

Second, the intervention needs to be administered to a larger audience in each intervention home. The more work groups there are practicing the same behavior patterns, the more support there will be for them and the sooner the behavior will become the new social norm.

Third, the intervention needs to be reinforced on as many levels as possible. According to the data, the most promising intervention combination was the professional trainer coupled with the complementary computer training modules. This implies that multiple reinforcements of the lessons strengthens their effect and makes it easier for supervisors to apply the lessons in the workplace. In addition, both supervisors and aides need to be kept informed of the progress they are making in applying the lessons learned.

Fourth, the intervention needs to either be longer or be reintroduced to its target audience in booster sessions. This will reinforce the intervention's most important lessons.

Fifth, work teams should be given a stronger sense of purpose than mere camaraderie. The intervention has clear implications for developing high performing self-directed teams. Frontline workers work best when they can make decisions and problem solve as mature self-managing teams.

Sixth, the prevailing sense of pessimism among frontline workers needs to be addressed before the intervention is fielded. Learned helplessness derails behavior change. Participants need to hear more about what they stand to gain, not what benefits will accrue to the organization. Facility administrators need to gain skills in persuasive communication to better overcome the barriers experienced by their frontline workers due to overwhelming tension and stress.

LESSONS FOR FUTURE RESEARCH

This evaluation is one of a new breed of investigations directed toward improving the long-term care workforce crisis. It focused on evaluating a workplace intervention in the real world nursing home environment. As such it provides lessons beyond the data assessing the success of the intervention per se.

First Lesson: Establish a professional-academic partnership, such as the one among KAHSA, Wichita State University and the Institute for the Future of Aging Services (IFAS) for this project. Such a partnership can help overcome the difficulties associated with gathering good data in nursing homes.

The professional oversight and coordinating role of KAHSA was crucial to obtaining data of sufficient quality to conduct this evaluation. Academics planning such investigations should involve long-term care professionals in the planning phase of all such investigations. KAHSA's expertise in the industry overcame the stumbling blocks to both intervention delivery and data collection. Such expertise may spell the difference between a high quality investigation and a marginal one.

The effective administration of this evaluation was due to the fact that KAHSA was a trusted and respected representative of its members. Communicating with participants, serving as a troubleshooter and coordinating all the intervention sessions were just a few of the actions KAHSA took to ensure a smooth operation. These actions contributed to a high degree of cooperation from the participants.

The expertise of seasoned researchers, the contribution of Wichita State University, was essential to ensuring a high quality study design, with sufficient control and rigor, to illuminate both bold and subtle outcomes. Long-term care professionals should involve experienced researchers as early as possible in the intervention and study design to eliminate the need for costly post hoc controls.

The IFAS team provided important feedback to the project concerning measurement data collection and barriers to implementation. IFAS also provides the mechanism for dissemination of study results to providers across the country.

Second Lesson: The best-case nursing homes are frequently the most accessible homes for investigation. In addition, best-case employees are frequently the most willing employees to participate in interventions. While it is possible to statistically account for this best-case bias, the accounting can't entirely erase the problems inherent in generalizing the results to a wider audience. This is a major issue in nursing home investigations and clever incentive packages or workable randomized designs need to be part of future investigations.

Third Lesson: Participant turnover and disinterest may well occur and threaten the internal validity of controlled designs. Data should be collected in as friendly a way as possible to get the best return rates. The effects of the stressful nursing home work environment can't be overestimated in how they change participants' willingness to engage in data collections that consume precious time and energy.

Fourth Lesson: There is value in using multiple and intervention-specific measures to investigate intervention effects. Some of the most interesting interpretations in this study came from cross-referencing findings from two or more measures. In addition, intervention-specific measures yielded the best assessment of the interventions' effects. Time and resources did not permit a pilot test of these measures. Allowing time and resources for developing and piloting such measures should be integral to future investigations.

Fifth Lesson: Temper optimism with realism. This project was initiated with the hope that a sustainable facility-wide decrease in turnover would result from this advocated intervention. Persuading individuals that behavior change is both valuable and doable is always a difficult undertaking. The professional trainer made a substantial impact in persuading study subjects that behavior change was beneficial and effective. This is a major finding in and of itself.

Changed attitudes did lead the participants to attempt to change behavior in the workplace. There was also a hint of a turnover effect, but inconsistencies in control home turnover data make it impossible to claim reductions as intervention-specific. A measurable change in facility-wide turnover is an outcome for the future. It will result from the accumulation of information provided by studies such as this one.

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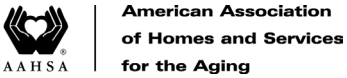
Institute for the Future of Aging Services

The Institute for the Future of Aging Services, a policy research center within the American Associaiton of Homes and Services for the Aging, was created in July 1999 to create a bridge among the policy, practice and research communities to advance the development of high-quality aging services. IFAS provides a forum for the health, supportive services and housing communities to explore and develop policies and programs to meet the needs of an aging society.

American Association of Homes and Services for the Aging



The American Association of Homes and Services for the Aging represents more than 5,600 mission-driven, not-for-profit nursing homes, continuing care retirement communities, assisted living and senior housing facilities, and community services organizations. AAHSA is committed to advancing the vision of healthy, affordable, ethical aging services for America. The association's mission is to create the future of aging services.

Kansas Association of Homes and Services for the Aging

The Kansas Association of Homes & Services for the Aging (KAHSA) is a not-for-profit association representing nearly 160 not-for-profit community, church and government sponsored adult care homes, retirement communities and social service programs for the elderly. The mission of KAHSA is to provide services to not-for-profit long-term care organizations who enhance the quality of life of Kansas seniors. KAHSA does this by influencing public policy; providing leadership on social, economic and political issues; sharing information; and promoting collective networking opportunities.