Nursing Assistants' Job Commitment: Effect of Nursing Home Organizational Factors and Impact on Resident Well-Being

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Purpose: The purpose of this study was to investigate (a) whether certified nursing assistants (CNAs) are more committed to nursing home jobs when they perceive their jobs as enhanced (greater autonomy, use of knowledge, teamwork), and (b) whether CNA job commitment affects resident satisfaction. **Design and Methods:** A qualitative exploration of management philosophy and practice and of CNAs' views of their jobs in 18 Massachusetts nursing homes formed the basis for a survey administered to 255 CNAs in 15 homes. A quality-of-life questionnaire was administered to 105 residents. Logistic regression accounting for clustering estimated the effect of personal characteristics, satisfaction with tangible job rewards, and aspects of job design on CNAs' intent to stay in current jobs. A general linear model estimated the effect of job commitment on residents' satisfaction with their relationship to nursing staff. **Results:** After we accounted for satisfaction with wages, benefits, and advancement opportunities, good basic supervision was most important in affecting CNAs' intent to stay in their jobs. Job enhancements were not significantly related to intent to stay. Residents were more satisfied with their relationships to nursing staff and their quality of life on units where a higher proportion of CNAs were committed to their jobs. **Implications:** The finding that greater job commitment of CNAs is associated with better quality of relationships and life for residents implies that better jobs lead to better care. Culture change transformation that increases CNA autonomy, knowledge input, and teamwork may not increase workers' commitment to jobs without improvements in basic supervision.

Key Words: Workforce, Turnover, Frontline caregivers, High-performance management, Culture change

High turnover for direct care staff, recently measured at 71% for the nation's nursing homes (American Health Care Association, 2003; Castle, 2006), is a costly problem. The cost to employers of recruitment, screening, and training to replace a worker who leaves has been estimated to exceed $2,500 (Seavey, 2004). However, this direct cost to the nursing home represents only part of the value that nursing assistants take with them when they leave. Nursing assistants carry with them knowledge of the needs and preferences of the individuals they care for and of the care processes at their own nursing homes. Although it has been difficult to

demonstrate, the discontinuity of care and the understaffing that often occur with turnover suggest that high turnover compromises quality of care (Castle & Engberg, 2005; Kash, Castle, Naufal, & Hawes, 2006).

In addition to averting direct and indirect costs of turnover, an increase in commitment of frontline nursing home workers to their jobs is a necessary condition for engaging workers in the growing movement to transform the nursing home through what is known as *culture change* (Baker, 2007; R. A. Kane, Lum, Cutler, Degenholtz, & Yu, 2007; Robinson & Rosher, 2006; Weiner & Ronch, 2003). Ideally, a culture change process engages frontline caregivers to work with their nursing supervisors to think through and implement more customized, person-centered approaches to care. Care communities are working to integrate the preferences and wishes of residents, as well as their care needs, in order to provide privacy, dignity, comfort, and choice in such basic human activities as bathing, dining, and sleep–wake cycles. The empowerment of workers is a salient feature of a number of culture change initiatives (Kehoe & Van Heesch, 2003; Reinhard & Stone, 2001), because it is frontline workers who make the minute-to-minute care decisions that can customize care to meet resident preferences and needs. Practitioners hope that job enhancement and enlargement (including increased job autonomy, exercise of workers' job knowledge, and teamwork) will engage workers and decrease the turnover that has plagued the nursing home industry and that increased engagement and decreased turnover will improve resident care.

Because of the increasing value of a stable workforce in nursing homes, it is important to understand the factors affecting nursing assistants' commitment to their jobs, that is, their intent to stay on the job. Studies of turnover and job commitment in general labor markets model a complex process driven by the rewards of a job in comparison to the worker's alternative opportunities. Workers with greater pay, benefits, and possibilities for advancement and workers who are satisfied with both tangible and intangible job rewards in comparison to their alternatives are more likely to be committed to and to stay in their jobs. The intent to leave a job (or its converse, the intent to stay) is a reliable predictor of actual future turnover (Steel, 2002), and it is this measure of job commitment that is the focus here.

This article reports the results of the quantitative portion of a study titled "Improving Institutional Long-Term Care for Residents and Workers: The Effect of Leadership, Relationships, and Work Design," which was part of the Better Jobs Better Care research initiative. Our investigation, based on the seminal work of Susan Eaton (2000, 2001), used a mixed methods approach to examine (a) the impact of frontline caregivers' perceptions of their jobs, including job design and supervision, on their commitment to staying in their jobs and (b) the impact of the level of commitment of nursing assistants on residents' satisfaction with their relationship to staff. The heart of the study was the qualitative investigation of these issues through interviews and focus groups held with nursing home staff. We then returned to the nursing homes with questions based on our qualitative findings to gain a broader view of the same topics and assess their relationship to resident quality of life. We designed and carried out the study just as culture change efforts were becoming better known, so it cannot be considered an examination of culture change practices; but the findings shed light on the value to workers of good supervision and enhanced, expanded jobs. When the voices of frontline workers are more fully heard in research and policy analysis, nursing home leaders will be better able to design jobs and work communities to support nursing assistants' commitment to their jobs. In the following sections, we present our research questions, describe the surveys of nursing assistants and residents and the variables we developed from them, present results, and consider implications.

The analysis presented here addressed two research questions: (a) What are the roles of good basic supervision, job enhancements (autonomy, teamwork, use of worker knowledge), and tangible job rewards in fostering nursing assistants' commitment to their jobs? (b) Does the job commitment of nursing assistants on a nursing unit affect the experience of that unit's residents?

Methods

Nursing Home Study Group

We designed the data plan for this study to develop information about the variation in management philosophy and practices in a purposive sample of good-quality nursing homes, including some that were beginning culture change efforts and others that had little awareness of the nascent culture change movement. The intent was to learn from both supervisors and nursing assistants about how work is managed in better facilities and what this means for nursing assistant job satisfaction and for resident care.

Eighteen nursing homes, nominated as good places to live and work by informants familiar with the Massachusetts nursing home industry, agreed to participate in the site visit phase of the research. We selected the study homes from a group nominated as good places to live and work because the contrasts across a representative sample would have revealed stark differences between good and poor homes, and the problems of poor management have been well documented (see especially Eaton, 2001). Instead, inspired by Eaton's distinction between medical-rehabilitative versus generative

communities, we wanted to understand differences in frontline work among reasonably good nursing homes. Although more nuanced contrasts among good homes are more challenging to study, we believed that we would learn more valuable lessons from variation among well-managed facilities. Selection of this purposive sample of 18 began with 17 organizations, both single nursing homes and multiple-facility groups, who were nominated by an advisory group as providing good care and who provided letters of support for the project proposal. Several of these organizations dropped out before our initial meeting with prospective sites, two organizations supplied two nursing homes for the study group, and another nursing home was recruited to fill a desired condition (for-profit multifacility organization, union). This resulted in 18 homes for the site visit phase of the project.

We selected eight nursing homes because they had identified themselves as pursuing transformation to person-centered care (culture change) in 2003 by participation in a culture change support group sponsored by the Massachusetts affiliate of a national nonprofit provider organization. We chose for contrast six nursing homes in similar areas of the state with good reputations for care and work that had not self-identified as culture change homes, and we selected four additional homes to add underrepresented types, including for-profit regional corporate facilities. (Site visit interviews at one of these comparison nursing homes revealed that it was pursuing culture change through external affiliations unknown to the local group, bringing the total of culture change homes in the site visit phase to nine.) Because we were interested in exploring variation across units within nursing homes and differences between units caring for residents with physical and cognitive disabilities, we asked the nursing home management of each home to allow us to study two nursing units, including a dementia unit if there was one.

A two-person team spent several days in each nursing home interviewing administrators and frontline supervisors using a semistructured interview guide concerning human resources management, philosophy of nursing home care, and work practices. The three interviewing teams consisted of a senior investigator and a doctoral student, all experienced qualitative researchers. The teams conducted focus groups with nursing assistants from the two units on both morning and evening shifts. For this exploratory study on supervision and resident relationships, the study team decided to invest its limited resources in surveying the day and evening shifts, given the typically more intensive interaction with residents during the day and evening, compared to nighttime when most residents are asleep. We therefore excluded the night shift. We coded the interview and focus group responses using Atlas-ti to identify management philosophy of leadership and care, management practices, and the work concerns of nursing assistants.

Some supervisors felt that nursing assistants could be trusted to do their jobs without close supervision, whereas others believed that nursing assistants needed strong supervisory controls. Some supervisors clearly valued the knowledge of residents that nursing assistants brought to their jobs, whereas others saw nursing assistants as task performers. Several supervisors described practices that fostered teamwork among nursing assistants, and the job design literature has shown teamwork to be important to job satisfaction for workers throughout the economy (e.g., see Batt, 2004; Kirkman & Rosen, 1999; Sikorska-Simmons, 2006) and for nursing assistants in particular (Tyler, 2007; Yeatts & Cready, 2007). Finally, the interviews and focus groups revealed what appeared to be substantial variation in the quality of the basic supervision across nursing units, regardless of the degree of knowledge input, autonomy, and teamwork supported for the frontline nursing staff. The interview and focus group data revealed that good basic supervision—defined here as positive feedback, support for problem solving, and respect from charge nurses for the nursing assistants they supervise—cannot be taken for granted on nursing home units. Weinberg, Zincavage, Pfefferle, Dossa, and Bishop (2007) discuss more fully the patterns of supervisors' management philosophy and practice drawn from our interview and focus group data.

Nursing Assistant Data

We designed a nursing assistant survey concerning workplace relationships, job satisfaction, and resident care (82 items) based on information from our interviews, with question phrasing adapted from previous surveys when appropriate (Gittell, 2002; Kiefer et al., 2005). The survey was translated into Spanish and Haitian Creole and recorded on audiotape so that it could be administered orally simultaneously with the written form. We offered the survey to all 267 full-time employed nursing assistants on the morning and evening shifts in the two designated units in 15 nursing homes during release time at their workplace; those who completed the survey were given a $10 bill as a thank-you gift. We excluded 3 of the 18 nursing homes from the survey phase because 2 could not provide standard administrative data and the language of both staff and residents at the third, based in an ethnic community, proved prohibitive for administration of the staff and resident surveys. A total of 255 nursing assistants filled out the survey, for a response rate of 96%. We were acutely aware of the possibility that these low-wage workers, many of them immigrants and almost all female, might be reluctant to share their candid views of their jobs and

Table 1. Characteristics of Nursing Homes

Characteristic	M	SD	Min	Max
Size (beds)	139.9	38.7	92	224
Residents	131.4	37.4	85	211
Nursing staff hours per resident day	3.80	0.33	2.95	4.14
Nonprofit ownership	0.667	0.488	0	1
Self-identified culture change	0.467	0.516	0	1

Note: N = 15.

supervisors. We made every effort within the constraints of the study design to build their trust in the confidentiality of the research process and their understanding of research goals (Dodson & Schmalzbauer, 2005). Table 1 presents characteristics of the nursing homes where the survey was administered.

Table 2 presents descriptive statistics for the survey responses from the nursing assistants. With respect to personal characteristics, there was little variation in gender, and both race and language were strongly related to specific nursing home, meaning that we could not separate effects of race and language from nursing home effects. Thus, we could not include these personal characteristics as independent variables in the analysis of this limited data set, but the nursing home level effects account for them in the random effects model. Nursing assistants' satisfaction with tangible job rewards was indicated by their responses to three survey questions on pay, benefits, and opportunities for advancement. These and other indicator variables were set to 1 for nursing assistants who made an affirmative choice for true or very true, but to 0 for nursing assistants who did not answer in this affirmative manner. This allowed the model to include this lack of affirmation for nursing assistants who rejected the true/very true response by refusing the question. Questions about use of nursing assistant knowledge, autonomy, and teamwork in the nursing assistant questionnaire were designed to identify from the nursing assistants' perspective contrasting approaches to supervision that we had found in interviews with supervisors. Two questions in the nursing assistant survey captured nursing assistants' perceptions about whether their supervisors respected nursing assistants'

Table 2. Nursing Assistant Survey Questionnaire Data

Domain and Question	Response	Proportion
Dependent variable: Intent to stay		
Do you plan to leave your current job?	No	.545
Personal characteristics		
Gender	Female	.870
Age: Younger	Younger than 35	.392
Age: Older	45 or older	.306
Race	White	.250
First language	Other than English	.490
Employed in this nursing home	Less than 1 year	.241
Satisfaction with tangible job rewards		
The pay is good.	Very or somewhat true	.376
The benefits (e.g., vacation, health insurance) are good.	Very or somewhat true	.635
The chances for promotion are good.	Very or somewhat true	.439
Supervisor respects and uses nursing assistant knowledge		
My supervisor respects my ability to observe and report clinical symptoms.	Always	.466
My supervisor asks for my ideas when developing resident care plans.	Always or occasionally	.475
Job autonomy		
I can decide on my own how to go about doing my work.	Very or somewhat true	.635
Teamwork		
How often do you have co-workers you can count on to help with your assignments?	Often or always	.373
Basic supervision		
My supervisor tells me I do well.	Always or occasionally	.490
My supervisor helps me with my job tasks when help is needed.	Always or occasionally	.478
My supervisor talks disrespectfully to me.	Never	.553
When there are problems, do nurses try to solve the problem?	Often or all the time	.494
Do nurses know very much about the work you do?	A lot or everything	.494
Do nurses respect the work you do?	A lot or completely	.412
Basic supervision index.	Mean responses for six basic supervision questions	.484

knowledge and were using nursing assistant observations of residents. The model used a single-item response of very true or somewhat true to the prompt "I can decide on my own how to go about doing my work" to indicate the nursing assistant's experience of job autonomy. Nursing assistants' response to the question "How often do you have co-workers you can count on to help with your assignments?" (set equal to 1 if always or often, otherwise 0) represented the presence of teamwork on the unit. We constructed an index for basic supervision (Cronbach's $\alpha = .73$) from the questions related to respect from supervisors and basic aspects of supervision that indicated that supervisors provided feedback, helped nursing assistants with their work as needed, knew and respected their work, and did not speak disrespectfully to them.

Modeling Intent to Stay

We modeled the probability that a nursing assistant would respond that she intended to stay on her job as a function of personal characteristics and perceived job rewards; then we tested variables reflecting basic supervision, autonomy, nursing assistant knowledge input, and teamwork for whether they significantly increased explanatory power. Logistic regression with random effects (xtlogit in STATA 9) allowed us to account for the binary nature of the dependent variable (intent to stay) and the clustering of nursing assistants in 15 nursing homes (Neuhaus, 1992; Neuhaus, Kalbfleisch, & Hauck, 1991).

Resident Data

We adapted a resident survey of 38 questions selected for their relevance to resident quality of life and relationships with staff from an instrument developed at the University of Minnesota (R. A. Kane et al., 2003). The survey included all 14 of the items used for the Short Quality of Life instrument (see Degenholtz, Kane, Kane, Bershadsky, & Kling, 2006; R. A. Kane et al., 2003). We reduced the number of response categories to two (mostly yes, mostly no) because of concern about residents' willingness to make fine distinctions in response to a Likert scale. This followed R. A. Kane et al., 2003, who used a Likert scale but "reverted to dichotomous responses when necessary." (p. 240)

We selected five residents from each of the two target nursing units in the 15 participating homes from residents able to give informed consent as identified by the unit nurses. Prior to the interview, the interviewer screened these residents using questions from the Mini-Mental State Examination (Folstein, Folstein, & McHugh, 1975). We were conservative in our assessment of mental status. If the resident did not know the year or the name of the nursing home or room number, we did not continue with the interview. Residents were thus included in the study if they were cognitively capable of participation and were willing to participate. We included in the sampling frame only residents who were in long-term care, thus excluding those admitted for rehabilitation. The resident survey sample therefore was representative of unit long-term care residents with the cognitive ability to complete the survey.

Where there were fewer than five residents on any unit willing and able to complete the questionnaire, we interviewed family members as proxies. Nurses identified proxies from family contacts (guardians and persons with power of attorney) from residents' charts; nursing home staff obtained family assent prior to providing study staff with family contact information. In the analyses presented here we did not include proxy data because of recent assessments that such data are not comparable to responses from residents due to inherent differences in survey administration methods (R. L. Kane et al., 2005).

An advanced graduate student experienced in communicating with persons with dementia and cognitive impairment administered resident surveys orally. The interviewer conducted surveys in this way to allow residents with poor eyesight, severe arthritis, and other physical limitations to participate. Residents received a large-print copy of the questionnaire so they could read along with the questionnaire if they so wished. Resident interviews took place in a space of the resident's choice to allow for maximum privacy and comfort. Residents received a small gift at the completion of the survey. We received resident responses from 105 out of the 123 cognitively appropriate residents that we sought to survey, for a response rate of 85%; residents on 23 nursing units in 15 nursing homes were able to participate in the survey directly (see Table 3). Because we had asked the nursing homes to designate a dementia unit as one of their two study units if they had one, seven study units had no eligible participants and provided only proxy surveys to the study.

Modeling Resident Satisfaction With Staff Relationships and Quality of Life

Because our focus was how better jobs for nursing assistants might be associated with better care, we sought to investigate the hypothesis that residents would have a more positive relationship to nursing staff on units where more nursing assistants were committed to their jobs. We developed and computed an index incorporating responses to questions that focused directly on residents' satisfaction with their relationships with staff (Cronbach's $\alpha = .728$). In addition, we computed an index representing more general quality of life using the questions included in

Table 3. Resident Satisfaction Questions: Staff Relationships and Short Quality of Life Questionnaire

Index	Question	Proportion Mostly Yes
Staff relationships	Do staff here treat you politely?	0.962
Staff relationships	Do you feel that you are treated with respect here?	0.924
Staff relationships	Do staff handle you gently while giving you care?	0.829
Staff relationships	Do staff here respect your modesty?	0.829
Staff relationships	Do staff take time to listen when you have something to say?	0.790
Staff relationships	Despite your health conditions, do you give help to others, such as other residents or your family?	0.571
Staff relationships	Do you feel you can get help when you need it?	0.829
Both	In the last month, have people who worked here stopped just to have a friendly conversation with you?	0.648
Both	Do you consider any staff members to be your friend?	0.733
Both	Taking all staff together, nurses, aides and others, does the staff know about your interests and what you like?	0.571
Both	Are the people here interested in your experiences and the things you have done in your life?	0.457
	Index of resident satisfaction with relationships to staff: Proportion "mostly yes" answers	0.749
SQOL-14	Can you make a private phone call?	0.705
SQOL-14	When you have a visitor, can you find a place to visit in private?	0.848
SQOL-14	Do you participate in religious activities here?	0.695
SQOL-14	Do the religious activities here have a personal meaning for you?	0.571
SQOL-14	Do you enjoy the organized activities here?	0.686
SQOL-14	Do you like the food at (name of nursing home)?	0.648
SQOL-14	Do you enjoy mealtimes at (name of nursing home)?	0.819
SQOL-14	Do you feel that your possessions are safe at this nursing home?	0.714
	Short Quality of Life Index: Proportion "mostly yes" answers[a]	0.678

Notes: $N = 105$. Staff relationships index described in text. Questions for the Short Quality of Life Questionnaire drawn from (R. A. Kane et al., 2003). SQOL-14 = 14-question Short Quality of Life index.

[a]14-question Short Quality of Life index (Degenholtz et al., 2006).

R. A. Kane and colleagues' (2003) Short Quality of Life-14 with our truncated response choices (Cronbach's $\alpha = .647$). We measured the independent variable of interest, job commitment for the nursing assistants on each unit, by computing the proportion of nursing assistants on each unit who answered our survey that they intended to stay in their jobs. We used a general linear model with clustering by nursing home for the analysis because it accounted for unobserved nursing-home-specific factors (glm in STATA 9).

Results

Intent to Stay

The random effects logistic regression analysis showed that tangible rewards (satisfaction with wages, benefits, and advancement possibilities) were significantly related to a nursing assistant's intent to stay once personal characteristics (age, whether English was the nursing assistant's first language, and education beyond high school) were accounted for. We present here a parsimonious model using only older age and job rewards (see Table 4, Panel 1) because it was superior to the model including younger age, education, and language, based on Akaike's information criterion. (Full results are available on request.)

The parsimonious model significantly improved with inclusion of the index for basic supervision (see Table 4, Panel 2). A nurse supervisor perceived as showing respect to nursing assistants, helping out when help was needed, and working to solve problems had a significant impact on intent to stay. The index for nursing assistants' perception of basic supervision ranged from .42 to .81 in the 15 nursing homes. At the mean for the nursing assistant sample, a shift from low to high on the supervision index increased predicted intent to stay by 12.8 percentage points, from 50.9% to 63.6%.

We then tested the hypothesis that job design enhancements (use of nursing assistant knowledge, autonomy, teamwork) affect nursing assistant job commitment by adding these variables to the parsimonious model (see Table 4, Panels 3–5). None of them added significantly to explanatory power. To assess whether respect for nursing assistant ability to work independently and respect and use of nursing assistant knowledge were aspects of supervisor proficiency rather than separate dimensions of supervision, we considered the variables reflecting autonomy and use of knowledge for inclusion in the supervisory index. The variables showing nursing assistant job control were not correlated with the overall index. In contrast, the variables indicating that supervisors had respect for nursing assistant knowledge and made use of it in

Table 4. Intent to Stay: Effects of Personal and Job Characteristics, Basic Supervision, Respect for Knowledge, Job Autonomy, and Teamwork

Variable	(1) Personal, Job Characteristics	(2) Basic Supervision	(3) Knowledge	(4) Autonomy	(5) Teamwork
Constant	−1.096***	−1.594***	−1.574***	−1.619***	−1.675***
Age >45	0.836***	0.868***	0.847***	0.869***	0.895***
Wages	0.521*	0.496[a]	0.508[a]	0.493[a]	0.474[a]
Benefits	0.698**	0.580*	0.563*	0.577*	0.553
Advancement	0.937***	0.793***	0.790***	0.787***	0.814***
Basic supervision		1.337***	1.288**	1.334***	1.210***
Supervisor always respects knowledge			0.201		
Supervisor asks input			−0.152		
Autonomy				0.051	
Teamwork					0.408
Log likelihood	−157.97	−153.59	−153.35	−153.58	−152.64
Akaike's information criterion	325.93	319.19	320.69	321.156	319.28
Wald chi-square	30.39***	36.11***	36.46***	36.15***	37.29***
McFadden's ρ^2	.101	.126	.127	.126	.131

Notes: Random effects logistic regression for nursing assistant intent to stay in this job. $N = 255$.
*$p < .1$; **$p < .05$; ***$p < .01$.
[a]Coefficient greater than robust cluster standard error.

resident care were significantly correlated with the general supervisory variables, and we constructed a new index (Cronbach's $\alpha = .76$) that included them. This expanded index did not provide more explanatory power for modeling intent to stay, however.

Resident Relationships With Staff and Quality of Life

The general linear model revealed a significant effect on residents' satisfaction with their relationships to nursing staff for the proportion of the unit's nursing assistants who said they intended to stay in their jobs (see Table 5). The preferred model had no constant term. The limited personal information available for residents (gender, age, time in the nursing home) did not add to explanatory power. The proportion of nursing assistants who intended to stay ranged from .33 to .90 over the 23 units. Predictions from the model revealed that moving from the lowest value in this range for job commitment on a unit to the high end of this range

would increase resident satisfaction with staff relationships (proportion of staff relationship questions answered "mostly yes") from .65 to .85, about 30%; and would increase the predicted rating on the adapted Short Quality of Life index from .61 to .77, about 26%.

Discussion

Studies specifically focusing on the nursing assistant job, with its low pay and benefits, few barriers to occupational entry, and few opportunities for advancement, have identified a variety of personal and organizational factors associated with turnover. Karsh, Booske, and Sainfort (2005) found that younger age, greater education, and non-White race were associated with higher turnover. Organizational attributes of nursing homes predict turnover (Brannon, Zinn, Mor, & Davis, 2002; Castle, 2006). Findings of this study, designed to delve more deeply into a handful of nursing homes in one state, cannot be generalized to reach conclusions about the effect of these organizational factors on intent to stay or

Table 5. Effect of Unit Nursing Assistants' Intent to Stay on Resident Satisfaction With Relationships to Nursing Staff

Variable	Resident Satisfaction With Staff Relationships		Resident Quality of Life (QOL-14)	
	Coefficient	Robust *SE*	Coefficient	Robust *SE*
Proportion unit nursing assistants who intend to stay	1.964	0.297***	1.353	0.136***
Pseudo log likelihood	−44.375		−46.753	
Akaike's information criterion	.864		.910	
Proportion of variation explained	.059		.083	

Notes: General linear model fitted with Stata 8 glm, link (logit); cluster standard errors for nursing home. $N = 105$.
***$p < .001$.

resident care. Yet interviews with workers and managers at the study nursing homes allowed us to identify management philosophies and styles of supervision that shape experience for frontline workers and residents. The survey data revealed substantial variation in the commitment of nursing assistants to stay in their current jobs and supported estimation of relationships between intent to stay and nursing assistants' perceptions of dimensions of their jobs, including satisfaction with tangible job rewards and relationship with their own supervisors. There was also variation in residents' satisfaction with their relationships to caregiving staff and quality of life, and the data supported estimation of a simple model relating nursing assistant job commitment to resident satisfaction.

Tangible Job Rewards

Research and policy analysis concerning the nursing home workforce has tended to steer around the adequacy of pay and benefits, suggesting that these are not very important to frontline nursing home workers. This matches what nursing assistants say is important to them about their jobs: As found in the interviews conducted for this project and in other research (Dodson & Zincavage, 2007; Pfefferle & Weinberg, 2008, in press), frontline workers almost always identify the most important thing about their jobs as their ability to care for residents and state that this keeps them coming back day after day. However, this by no means implies that tangible job rewards are not important. Frontline nursing home workers are almost always paid low wages for difficult work; low-skill direct care work does not command high wages in any sector, and constrained demand for nursing home care restricts what nursing homes are willing to pay their workers. This has become part of the background, so that nursing assistants and researchers tend to see improvement in wages and benefits as an impractical desideratum and may even fail to mention these issues. In our sample, we also did not find a strong impact for satisfaction with wages on intent to stay, but the coefficient for wage satisfaction was significant or greater than its standard error in all of the models, suggesting that a larger, more varied sample would have validated a positive relationship. We did find that satisfaction with benefits and satisfaction with advancement opportunities were consistently important to nursing assistants' commitment to their jobs.

Basic Supervision and Enhanced Job Design

Previous research has found that the quality of a nursing assistant's relationship to his or her supervisor affects commitment to staying on the job (Jernigan & Beggs, 2005; Parsons, Simmons, Penn, & Furlough, 2003). Investigators with access to information on nursing home job characteristics have found effects on job commitment for two aspects of work design of primary interest here: the opportunity to use one's knowledge on the job (Banaszak-Holl & Hines, 1996; Barry, Brannon, & Mor, 2005) and control over one's work (Tyler et al., 2006).

Consistent with the literature on supervision, we found that when nursing assistants perceived their supervisors to be respectful, helpful, and providing good feedback, they were more likely to be committed to their jobs. This is good basic supervision, rather than job enhancement through high-involvement management. In contrast to previous literature, once we accounted for both tangible job rewards and this basic supervisory relationship, variation in job design enhancements did not make much difference. In fact, in this low-wage setting with so many job demands, workers may experience requests for more self-direction and knowledge input as further demands rather than job enhancements (Gruss, McCann, Edelman, & Farran, 2004; Lopez, 2006a, 2006b; Stack, 2003). Researchers should further explore this with larger samples.

More Committed Workers Provide Better Relational Care

The results of this analysis, although exploratory, are consistent with the handful of studies that have examined the relationship between worker commitment and better resident care. Committed workers are more likely to interact positively with residents—after all, like the residents, they also expect to find themselves within the community of the unit and the nursing home tomorrow and next week. With the idea of community in mind, we should also note that support may run in both directions: Staff are more likely to be satisfied with their jobs when residents express positive attitudes toward staff. Researchers should investigate hypotheses from the management literature on the relationship between service workers' satisfaction and customer satisfaction outcomes in a nursing home context (Hallowell, Schlesinger, & Zornitsky, 1996; Rust, Stewart, Miller, & Pielack, 1996; Wilson & Frimpong, 2004). But it makes sense that greater workforce stability and worker satisfaction would result in a better relational environment for the residents in their care.

Implications for Culture Change

The implementation in nursing homes of person-centered care practices through culture change committees of frontline workers and supervisors (see for example League of Voluntary Hospitals and Homes of New York, 2004) is parallel to the quality circles used in high-performance human resources management initiatives in other industries. Experience in

other industries should be transferable to nursing home industry transformation efforts. Job redesign to enhance frontline jobs is a critical ingredient of high-performance human resources management (also called *lean management*, *high-involvement management*, and *high-commitment management*), which relies on workers to bring their knowledge of the production process and their full effort to their work. Ideally, jobs are redesigned so that workers are empowered to use their job knowledge to make choices about how their work is best done. This approach recognizes that workers are experts on the work they do and can use their knowledge to improve quality and productivity. In industries where quality and customization are highly valued, work has been transformed through involvement of frontline workers (Appelbaum, Bailey, Berg, & Kalleberg, 2000; Bartel, 2004; Doeringer, Evans-Klock, & Terkla, 2002).

High-performance management, and its embodiment as culture change, requires that workers be willing to do enhanced, expanded jobs and to become more committed to management goals. In exchange, there must also be greater commitment from the employer to workers. Typically in industry this is expressed through human resource practices meant to attract, develop, and retain qualified workers, including good pay, benefits, and advancement opportunities (Baron & Kreps, 1999). In contrast, in its quest for culture change the nursing home industry has not picked up these aspects of high-performance management. Pay remains low, benefits are often poor, and opportunities for advancement are few (Smith & Baughman, 2007; U.S. Bureau of Health Professions, 2004). Nursing homes face severe resource constraints, with low government-regulated rates of payment and weak private-pay demand, making it difficult for them to provide better wages and benefits, more selective recruitment, wage increases for longevity, and job ladders. The job redesign that is part of culture change holds potential to make jobs more attractive to the extent that workers value self-direction, problem solving, and teamwork on the job. This should allow workers to fully engage their substantial expertise about their residents and their work on the job. But in the absence of good wages, benefits, and promotion possibilities, will these attributes increase workers' commitment to their jobs?

Implications for Intent to Stay

The statistical analysis presented here tells a cautionary tale. Yes, observed variation in nursing home personnel management practices, even within a group of nursing homes known for their good care, appears to range from enlightened and empowering to task oriented and hierarchical. But the critical aspects of human resources management that affect nursing assistant job commitment remain at the basic level: satisfaction with benefits and advancement opportunities, and to some extent wages; and humane, fair, attentive supervision. To increase nursing assistants' commitment to their jobs, it will not be enough to introduce person-centered care with all its attendant focus on worker involvement and participation. Nursing supervisors may need more training, staff time, and management support to improve their performance as supervisors of nursing assistants, a job most were not explicitly trained to carry out. In addition, our analysis underlines an association between satisfaction with benefits and advancement opportunities (and to a lesser extent wages), and a nursing assistant's commitment to her job. Consistent with the insights of Folbre (2006), consumers and policy makers seeking long-term-care workforce stability should support increases in wages, benefits, and advancement opportunities for frontline workers commensurate with the hard work expected of them and the care responsibility entrusted to them.

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