

## Job Retention among Home Healthcare Nurses

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## Abstract

**Purpose:** to examine the relationship of job satisfaction and individual nurse characteristics to intent to stay and job retention in home healthcare nurses.

**Scope:** Certified Home Healthcare Agencies (CHHAs) are challenged to meet the increasing demand for services while at the same time facing a severe nursing shortage.

**Methods:** This was a correlation study designed to test a theoretical model of variables affecting job retention in home healthcare nurses. Data were collected from home healthcare agencies and nurses in two phases with self-report surveys questionnaires and researcher-administered interviews.

**Results:** 1) A negative effect of job stress and work demands on job satisfaction, 2) a significant positive relationship between job satisfaction and nurses' intention to stay at the job, 3) a significant positive relationship between job satisfaction and nurse retention, 4) evidence of nursing shortages, and 5) a positive relationship between shared decision-making and job satisfaction were noted.

**Key Words:** Job Satisfaction, Nurse Retention, Home Healthcare

## **Purpose**

The purpose of this study was to examine the relationship of job satisfaction and individual nurse characteristics to intent to stay and job retention in home healthcare nurses. The specific aims of the study were to:

1. examine the relationship of job satisfaction to intent to stay and job retention
2. examine the relationship of individual nurse characteristics to intent to stay and job retention
3. test a theoretical model of the indirect and direct effects of job satisfaction, individual nurse characteristics, and intent to stay on job retention for home healthcare nurses.

## **Scope**

Home healthcare is a labor-intensive industry that depends on nursing personnel as a major resource in the production of services. Ensuring access to quality home healthcare services in the future will depend on an organization's ability to retain qualified nursing staff. Predicted severe nursing shortages and an increasing demand for home healthcare services have made the retention of experienced, qualified nursing staff a priority for healthcare organizations. Staff turnover is costly; it reduces the effectiveness and productivity of an organization and decreases the quality of patient care (HayGroup, 2001; Kepner & Trogoe, 1999). Although many investigators have examined the nursing shortage, job satisfaction, and retention among nurses in hospital settings, little is known about these phenomena in home healthcare. Knowledge of variables that contribute to job retention in home healthcare will provide the information necessary to maintain nursing staff and ensure access to quality home healthcare services.

Certified Home Healthcare Agencies (CHHAs) are challenged to meet the increasing demand for services while at the same time facing a severe nursing shortage. Despite the dramatic 3-year decline in home healthcare nursing visits during the Medicare interim payment system from 1997 to 2000, the growth in demand for home healthcare services has been dramatic and continuous since the inception of the Medicare home healthcare program in 1965 (McCall, Komisar, Peterson & Moore, 2001). Between 1990 and 1997, Medicare expenditures for home healthcare services grew at a rate of more than three times that of the spending growth for the entire Medicare program (GAO, 2000). Based on the continuing changes in acute care practice, advances in technology, and an aging population (McCall et al., 2001), the demand for home health services is expected to increase in the future.

The increased demand for home healthcare services is occurring in the midst of a worldwide shortage of registered nurses (RNs) (Buerhaus, Staiger & Auerbach, 2000; Gunn, 2000; Grayson, 2000, Congressional Research Service Report, 2001). By the year 2020, the RN workforce is expected to decrease by 20% (Health Care Financial Management Association, 1999). Nursing shortages have already been reported in the home healthcare industry — in all types of home healthcare agencies and in all areas of the United States (Ellenbecker & Cushman, 2001). According to a recent report issued by the Congressional Research Service (2001), jobs for nurses in home healthcare will increase by 82.2% over the next 6 years, which is a much greater increase than in other sectors of healthcare. The increased demand is due to the preference of people to be cared for in their homes, new technologies that permit treatments to be performed at home, and the growing number of older persons. The current and projected shortage is a result of a reduction in the number of nurses who are working as nurses due at least in part to dissatisfaction with working conditions; a decrease in the number of people entering nursing; and aging of the current workforce. There is a growing concern that the

nursing shortages and job dissatisfaction will have a negative impact on access to services and the quality of patient care (Aiken, Smith & Lake, 1994; Aiken, Sochalski & Lake, 1997; Benefield, 1996; Ellenbecker & Cushman, 2001; Goodell & Coeling 1994; Hallberg, Hansson & Axelsson, 1994; Leveck & Jones, 1996).

Although the nursing profession has experienced other shortages in its history, the current shortage is different from those of the past (Bradley, 2000). Conditions that contributed to past nursing shortages still exist, including the multiple points of entry into the profession, the predominance of women in the profession, the decentralization of healthcare, and dissatisfaction with working conditions. Recently, however, other factors that are exacerbating the shortage have emerged. Managed care has changed the way nurses are utilized and further decreased nurses' job satisfaction, and the booming economy of the 1990s lured nurses and potential nurses away to other professions (Gunn, 2000).

### Theoretical Model

The theoretical model tested (Figure 1) was an integration of the findings of empirical research related to job satisfaction and retention, models of nurse retention proposed by Alexander et al. (1998) and Tauton et al. (1997), and components of Neal's theory of home healthcare nursing practice. The theoretical model proposes that the intrinsic and extrinsic characteristics of job satisfaction, and the individual nurse characteristics are directly related to intent to stay. The individual nurse characteristic of tenure is also indirectly related to intent to stay through its relationship to the intrinsic job characteristic of autonomy. Intent to stay is directly related to retention.

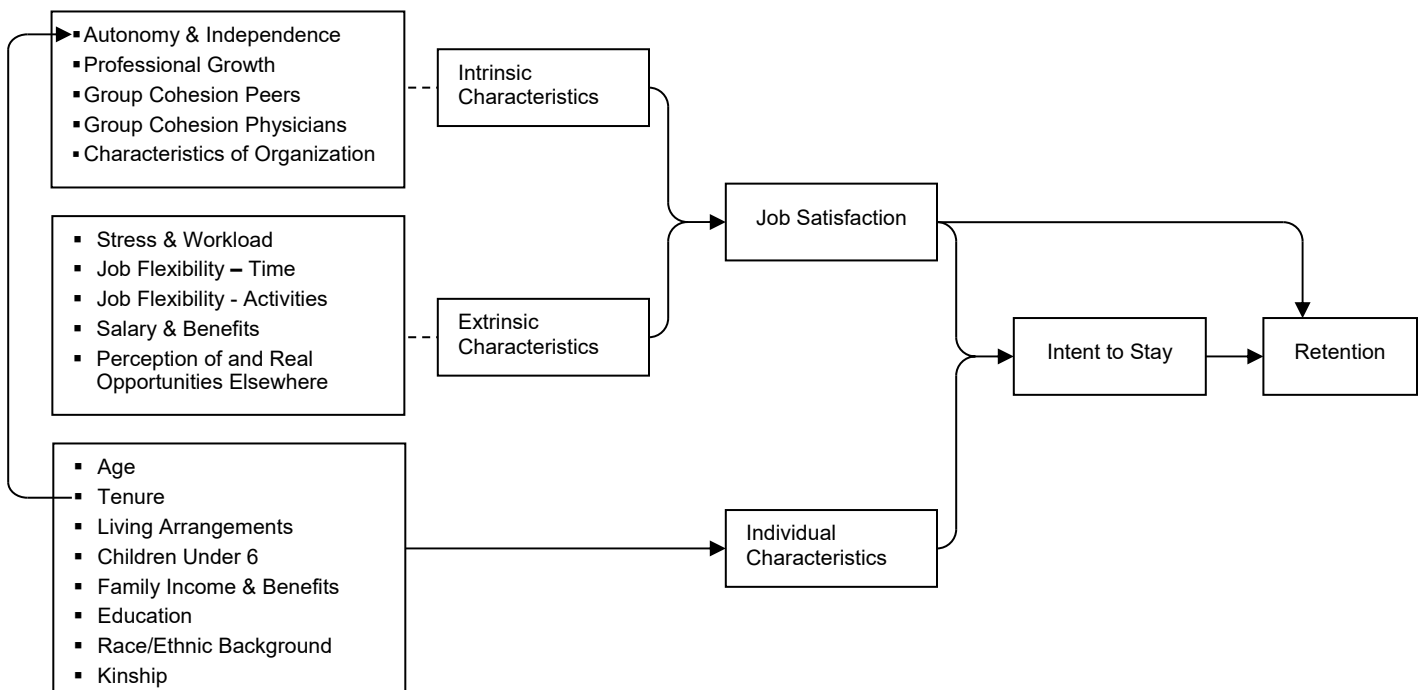


Figure 1. Theoretical model of job retention for home healthcare nurses.

Extensive knowledge of job satisfaction and retention comes primarily from studies of nurses working in hospital settings. Just four studies have focused on job satisfaction among home healthcare nurses but none have examined job satisfaction's relationship to retention (Boswell, 1992; Ellenbecker, 2001; Lynch, 1994; Moore & Katz, 1996). The results of these studies suggest that, although some of the predictors of job satisfaction for home healthcare nurses are similar to those identified for nurses in hospital settings, there are differences (Boswell, 1992; Ellenbecker, 2001; Lynch, 1994; Moore & Katz, 1996). Given these results, it is expected that the nature of job retention among home healthcare nurses also may be different than for nurses in hospital settings. Additional results suggest that the nature of nurses' job satisfaction in general is changing. How recent changes in the home healthcare environment have affected nurses' job satisfaction has only minimally been explored.

Similarly, the relationship of job satisfaction's intrinsic characteristics and individual characteristics to intent to stay and retention have been well established in studies conducted with nurses working in hospital settings. To date, no studies have focused on intent to stay or retention among home healthcare nurses utilizing data collected directly from nurses. Less is known about the effects of extrinsic job characteristics or the effect of the changing nature of job satisfaction on intent to stay or retention with nurses from both settings.

Models of variables affecting intent to stay and retention have been developed based on data collected primarily from nurses in hospital settings; no models of variables affecting retention have been developed in home healthcare nurses. The proposed study addresses gaps in knowledge of intent to stay and retention by adding information about job satisfaction and individual nurse characteristics that affect intent to stay and retention among home healthcare nurses. This knowledge is especially necessary and important to home healthcare agencies as they attempt to retain nursing staff during an era of nursing shortages. Changes in the home healthcare environment and the changing nature of job satisfaction warrant a closer look at the variables that contribute to a nurse's decision to stay or leave a job.

## **Methods**

This correlation study was designed to test a theoretical model of variables affecting job retention in home healthcare nurses (Figure 1). The study was conducted in two phases. In Phase I, participants were recruited from randomly selected home healthcare agencies. Data were collected from agencies and from nurses on job satisfaction and individual characteristics and their relationship to intent to stay. In Phase II, study participants were contacted and asked to provide information on their present job status, further testing the model and the relationship between intent to stay and retention.

Data were collected from a regional sample of home healthcare nurses by self-report on a mailed survey questionnaire. The Phase I survey questionnaire contained two scales, a demographic data sheet, and two open-ended questions. The investigator-developed modified Home Healthcare Nurse Job Satisfaction Scale (HHNJS) was used to measure intrinsic and extrinsic characteristics of job satisfaction. The HHNJS, is a 30-item Likert scale designed to measure nurse job satisfaction. Cronbach's alpha internal consistency reliability of the HHNJS was established at .89 in a sample of 306 home healthcare nurses. The ITS Scale was used to measure home healthcare nurses' intent to stay in their present job. The ITS, which was developed by the Principal Investigator, contains three Likert-type items. Cronbach's alpha internal consistency reliability of the ITS was established at .87 in a sample of 81 home healthcare nurses. A 12-item demographic

data sheet developed by the investigators was used to measure individual characteristics that affect retention and intent to stay. Participants were asked to respond to two open-ended questions: 1) The two or three things I like most about my job at this agency are..., and 2) I would leave my present job if....

Home healthcare nurse respondents were recruited from a randomly selected sample of certified home healthcare agencies in the six New England states. The study sample size was determined by a power analysis based on a pilot study indicating that 2,925 nurses were needed. Because there was no known listing of home healthcare nurses, access was obtained through the agencies that employed them. The Medicare provider file was obtained from the Center for Medicare and Medicaid Services (CMS). The file contains the names, addresses of agencies, and number of FTE staff nurses in all the CHHAs in the six New England states. Approximately 6,600 FTE nurses work in New England at 315 agencies.

A probability proportional to size sample of agencies was generated to ensure that the largest agencies would be included in the sample, along with a representative selection of smaller agencies. Of the 149 randomly selected agencies, 123 (83%) agreed to participate. The 26 declining agencies were not significantly different in size, ownership model, and geographic location compared with those that agreed to participate. Agencies that declined did so primarily due to time constraints, staff shortages, and general issues of organizational stress.

Directors of the selected home healthcare agencies were contacted and asked to allow the researchers to attend an agency staff meeting to recruit staff nurses for the study. A member of the research team who was a home healthcare nurse visited participating agencies and conducted an interview with an agency representative to collect information about agency characteristics and practices. Nurse study participants were recruited, and the survey questionnaire was distributed. The survey packet included a cover letter, consent form, survey questionnaire, Dunkin' Donut coffee coupon, blank index card, and return self-addressed stamped envelope. Each nurse who agreed to participate signed a consent form; completed the survey questionnaire; provided his/her names, addresses, and telephone numbers on an index card; and mailed the packet to the researchers. Corresponding codes on index cards and survey questionnaires allowed the researchers to track participants for the follow-up survey in Phase II.

Two hundred fifty-three visits were made to agencies and their satellite offices. Of the 3,960 surveys packets distributed to nurses, 2,459 were completed and returned, yielding a response rate of 62%. Ninety-six percent (n=2,357) of the first surveyed nurse sample agreed to future contact.

As survey packets returned, they were opened; the consent forms and index cards were separated from the survey questionnaires. The coded index cards served as the master list for following up nurses in Phase II. Scan sheets were scanned into SAS. Data were cleaned by running frequencies on all variables, checking for inaccurate data.

In the second phase of the study, data were collected by mailed survey questionnaire to nurses who participated in the first survey to determine the actual retention of nurse participants 1 year after the job satisfaction and intent to stay measurement. The Phase II survey packet included a cover letter, survey questionnaire, Dunkin' Donut coffee coupon, and self-addressed stamped return envelope.

Efforts were made to ensure an adequate response rate by tracking and contacting nonresponders. A second survey packet was mailed to nonrespondents 3 weeks after the Phase II questionnaire was mailed. Participants who did not respond 6 weeks after the initial Phase II mailing were contacted by phone, prompting participants to send in their questionnaire and also collecting critical information regarding whether they have left or stayed in their job. Of the 2,357 nurses from Phase I who agreed to future contact, 2,081 responded with information on retention.

## **Results**

### *Nurse Level Analysis*

Study activities resulted in two sources of data: agency-level data and individual nurse-level data. Nurse-level data were collected in two phases. Analysis of individual nurse data began with an examination of the psychometric properties of the revised HHNJS.

The analysis of HHNJS data resulted in the 30-item job satisfaction scale, composed of eight independent factors. The eight factors composing job satisfaction are Relationship with Peers, Relationship with Organization, Relationship with Physician, Relationship with Patients, Independence and Work Autonomy, Salary and Benefits, Professional Pride, and Stress and Workload (Ellenbecker, Byleckie & Samia, 2005). No intrinsic and extrinsic characteristics of job satisfaction emerged.

The next step in the analysis was to examine the level of job satisfaction for home healthcare nurses in New England. Results indicated that nurses are somewhat satisfied with their jobs (mean job satisfaction = 3.7 on the 1 to 5 scale, with 1 being the least satisfied and 5 being the most satisfied). Further examination of the subscales contributing to job satisfaction revealed that nurses are more satisfied with some aspects of their jobs than with other aspects. On average, nurses are most satisfied with their relationships with patients and peers and with the professional pride, autonomy, and independence in their job. They are somewhat satisfied with their relationships with physicians and with the organization, although there is greater degree of variability among nurses on this item. The data also suggest that, on average, nurses are least satisfied with their job stress and workload and with the salary and benefits they receive. An analysis on the Phase I data examined the effect of multiple individual agency and nurse characteristics; results indicated that nurse job satisfaction was related to some extent to individual nurse characteristics of job position, education, income, job tenure, and employment status, in that order as well as the agency characteristics of size and location. A nurses' job position as a direct patient care provider, as opposed to a job position of supervisor or administration, had a strong negative effect on nurse's job satisfaction ( $p < .001$ ). Nurse job satisfaction was strongly predictive of intent to stay. *Evidence that nurses in direct patient care were the most dissatisfied group of nurses was a troubling finding and warrants additional investigation.*

A qualitative analysis of nurses' narrative responses to two open-ended questions provided more evidence of contributors to job satisfaction and intent to stay. A content analysis of nurses' responses to what they liked most about their job resulted in the following themes: job flexibility (n=927), control in decision making and autonomy and independence (n=673); and patient (n=671) and peer (n=337) relationships, in that order of frequency. Themes representing nurses' responses to why they would consider leaving their job included too much paperwork and excessive workload (n=715), poor

benefits and salary (n=358), and poor relationships with administration (n=191), in that order of frequency (Ellenbecker, Boylan and Samia, 2006). Based on these results, we hypothesized that the most important factors in nurses' intent to stay is shared decision making and the amount of stress in the work environment due to the demands of the work. Some of these demands may be amenable to interventions implemented by agency management and administration.

The second phase of data collection, using the follow-up Retention Survey Questionnaire, allowed us to examine why nurses left or stayed in their jobs, the effects of job satisfaction, intent to stay, and individual nurse and agency characteristics on nurse retention. Nurses reported in forced-choice selection and open-ended responses that they left their jobs primarily because of the "overwhelming and stressful demands," and (second) because of relationships with administration. These findings suggest the need for more research to investigate agencies' interventions to reduce nurses' stress from work demands.

In Phase II analysis, a structural equation model (SEM) was estimated to analyze direct and indirect effects of nurse and job characteristics, job satisfaction, and intent to stay on nurse retention. For the estimation sample of 1,912 nurses with complete data on relevant variables from both phases of data collection, the retention rate was 86%. The measurement model component of the SEM was specified with the eight subscales of the HHNJS (described above) as observed indicators of a latent job satisfaction variable. Job satisfaction and intent to stay reported in Phase I were specified as intervening variables between nurse/job characteristics and retention a year later (Figure 1). Job satisfaction was specified as a function of individual nurse and job characteristics and contextual agency-level and market-level environmental characteristics. Intent to stay at Phase I was specified to be a function of these same variables and job satisfaction. Retention at Phase II was specified to be a function of intent to stay; job satisfaction; and exogenous nurse, job, and environmental variables. The empiric results are shown in Table 1. Although loadings for a few subscales were relatively weak, a parsimonious measurement model composed of a single latent job satisfaction variable produced a very good model fit (CFI=0.915; RMSEA=.035).

The SEM empirical results support expectations about the importance of job satisfaction in agency retention of home healthcare nurses. Not only does job satisfaction directly affect retention ( $\beta=.13$ ;  $p<.001$ ), but it also has notable indirect effects on retention because it is the most dominant factor associated with nurses' intent to stay ( $\beta=.69$ ;  $p<.001$ ), and intent to stay has a strong positive effect on retention ( $\beta=.12$ ;  $p<.001$ ). The results show that several factors affect retention in complex ways. Among the strongest (negative) factors influencing job satisfaction was a nurses' job position as a direct patient care provider as opposed to a supervisor or administrator ( $\beta=-.21$ ;  $p<.001$ ). However, direct care job position has a direct positive effect on retention ( $\beta=.05$ ;  $p<.02$ ) and a positive indirect effect on retention through its positive effect on intent to stay ( $\beta=.07$ ;  $p<.01$ ) that largely negates its negative effect on job satisfaction. Although greater job satisfaction was associated with the work benefits of paid off-time ( $\beta=0.12$ ;  $p<.01$ ) and retirement benefits ( $\beta=.08$ ;  $p<.02$ ), there was a larger negative direct effect of retirement benefits on retention ( $\beta=-.13$ ;  $p<.01$ ). Though job satisfaction was lower among nurses working in larger agencies ( $\beta=-.08$ ;  $p<.001$ ), the suggested negative indirect contextual effect of agency size on retention through job satisfaction was partially negated by greater intent to stay in their current job among nurses in larger agencies ( $\beta=.04$ ;  $p<.01$ ). However, retention was more likely among nurses employed in voluntary nonproprietary agencies ( $\beta=.07$ ;  $p<.05$ ).



Nurses who perceived jobs were readily available elsewhere were less satisfied with their jobs ( $\beta=-.10$ ;  $p<.01$ ) but were more likely to remain in their job ( $\beta=-.05$ ;  $p<.07$ ). The results also suggest that retention was more likely among nurses living in counties with higher prevailing wages ( $\beta=.05$ ;  $p<.05$ ) and also more likely in counties with higher unemployment rates ( $\beta=.04$ ;  $p<.09$ ). Last, the positive effects of greater job tenure in an agency on both intent to stay ( $\beta=.03$ ;  $p<.06$ ) and retention ( $\beta=.17$ ;  $p<.001$ ) suggest the importance of increasing retention rates among recent hires to affect retention rates over the longer run.

Evidence that some nurses may be highly dissatisfied with their job but remain in their jobs was a puzzling phenomenon. A return to the literature provided a possible explanation in the theory of organizational commitment, which will be tested in future research.

Table 1: SEM Empirical Results (n=1,912)

Variable	Job Satisfaction		Job Satisfaction		Intent to Stay		Retention	
	Loading	t	Beta	t	Beta	t	Beta	t
Professional Pride	0.79	13.60						
Relationship with Organization	0.75	16.17						
Salary & Benefits	0.52	0.00						
Autonomy & Independence	0.51	15.00						
Relationship with Peers	0.51	12.67						
Stress & Workload	0.44	11.33						
Relationship with Physicians	0.31	7.14						
Relationship with Patients	0.25	5.33						
<b>Intervening variables</b>								
Intent to Stay	...	...	...	...	...	...	<b>0.12</b>	<b>3.19 *</b>
Job Satisfaction (latent)	...	...	...	...	<b>0.69</b>	<b>16.58</b>	<b>0.13</b>	<b>3.44</b>
<b>Nurse characteristics</b>								
White race	...	...	...	...	...	...	0.02	1.07
Education level	...	...	-0.05	-1.88	<b>-0.06</b>	<b>-3.31</b>	...	...
Lives alone	...	...	...	...	...	...	<b>-0.06</b>	<b>-2.69</b>
<b>Job characteristics</b>								
Job tenure at agency	...	...	-0.03	-1.05	0.03	1.93	<b>0.17</b>	<b>6.77</b>
Direct patient care position	...	...	<b>-0.21</b>	<b>-7.74</b>	<b>0.07</b>	<b>3.78</b>	<b>0.05</b>	<b>2.59</b>
Full-time position	...	...	-0.03	-1.15	0.03	1.68	...	...
Salaried position	...	...	-0.05	-1.91	...	...	0.04	1.57
Retirement plan benefit	...	...	<b>0.08</b>	<b>2.51</b>	...	...	<b>-0.06</b>	<b>-2.64</b>
Paid time off benefit	...	...	<b>0.12</b>	<b>4.02</b>	...	...	...	...
<b>Agency characteristics</b>								
Voluntary nonprofit	...	...	0.04	1.00	...	...	<b>0.07</b>	<b>2.23</b>
Agency size	...	...	<b>-0.08</b>	<b>-2.75</b>	<b>0.04</b>	<b>2.68</b>	...	...
Average area wage rate	...	...	-0.06	-1.55	...	...	<b>0.05</b>	<b>2.12</b>
Other jobs available	...	...	<b>-0.10</b>	<b>-2.98</b>	...	...	0.05	1.85
Unemployment rate	...	...	0.03	0.97	...	...	0.04	1.72

Urban area	...	...	...	...	-0.03	-1.42	-0.04	-1.41
<b>Model Fit</b>								
CFI					0.915			
RMSEA					0.035			

\* Path coefficients with p-values <.05 are shown in bold

### *Agency-Level Data Analysis*

Data obtained from interviews with agency representatives during the first round of data collection provided evidence that agencies were experiencing nurse shortages, with vacancy rates of about 61%, and that the majority of home care agencies were implementing multiple recruitment and retention interventions. Interview data were collected by a structured 12-item questionnaire developed for the purposes of the study. The first four items addressed the competitiveness of the agency environment for recruiting and maintaining nursing staff. The remaining items were a list of retention interventions most frequently reported in the literature as interventions to recruit and retain nurses (Table 2). As shown in Table 2, most agencies were implementing recruitment and retention interventions: from 90% of agencies offering flexible work schedules to 50% of agencies attempting to reduce job demands.

Table 2: Number and Percent of Agencies Implementing Retention Interventions (N=123)

<b>Have you implemented any of the following interventions to recruit or maintain RN Staff?</b>	<b>Number of Agencies Reporting “yes”</b>	<b>Percent (%) of Agencies Reporting “yes”</b>
Offer competitive benefits	97	78
Enhanced workplace safety	83	67
Shared decision-making	101	82
Employee recognition interventions	102	82
Flexible work schedules	116	94
Opportunity for control over work	112	90
Opportunity for professional growth	98	79
Agency reduced job demands	62	50

A regression analysis determined that nurses' job satisfaction was significantly lower among agencies experiencing job vacancies and difficulties in recruiting ( $p=.016$ ). Regression results also demonstrated that nurses reported significantly higher levels of job satisfaction ( $p=.018$ ) at agencies that reported implementing shared decision making (Ellenbecker et al., in press). An additional regression analysis of nurses' intent to stay demonstrated that no intervention affected nurses' intent to stay. The strongest explanation of intent to stay was job satisfaction ( $p=.000$ ). The finding that shared decision making is the only agency retention intervention to have a positive significant effect on nurse job satisfaction and an indirect effect on intent to stay suggests that continued research is needed to examine the intervention of shared decision making and how it is being implemented.

This study has several limitations; results of the study can be generalized only to nurses in home care in New England. More research will be needed to apply the model to more diverse and representative samples. Other limitations in the study are those

inherent in data collected by survey, including the validity of self-report data and the degree to which the instruments accurately measure the constructs of job satisfaction and retention. A survey for which the response is mailed may result in a limited response rate, which could adversely affect the internal validity of the model.

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Ellenbecker CH, Porell F, Samia L, et al. Predictors of Home Healthcare Nurse Retention submitted to Journal of Nursing Scholarship. August 2007, second revisions submitted Oct 2007.

Ellenbecker CH, Byleckie J, Samia L. Further Psychometric Testing of the Home Healthcare Nurse Job Satisfaction Scale, Research in Nursing & Health. 2008 March/April issue

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