



**RESEARCH INSTITUTE FOR QUANTITATIVE  
STUDIES IN ECONOMICS AND POPULATION**

**Where Have All the Home Care Workers  
Gone?**

**Margaret Denton, Isik Urla Zeytinoglu,  
Sharon Davies, Danielle Hunter**

**QSEP Research Report No. 393**

## **Where Have All the Home Care Workers Gone?**

**Margaret Denton, Isik Urla Zeytinoglu,  
Sharon Davies, Danielle Hunter**

**QSEP Research Report No. 393**

**September 2005**

**M. Denton is a QSEP Research Associate, director of the McMaster Centre for Gerontological Studies and faculty member in the McMaster Department of Sociology. I.S. Zeytinoglu is a faculty member in the McMaster School of Business. Sharon Davies is a research associate in the McMaster Centre for Gerontological Studies. Danielle Hunter is research assistant in the McMaster Centre for Health Economics and Policy Analysis.**

**This report is cross-classified as No. 128 in the McMaster University SEDAP Research Paper Series.**

**The Research Institute for Quantitative Studies in Economics and Population (QSEP) is an interdisciplinary institute established at McMaster University to encourage and facilitate theoretical and empirical studies in economics, population, and related fields. For further information about QSEP visit our web site <http://socserv2.mcmaster.ca/qsep> or contact Secretary, QSEP Research Institute, Kenneth Taylor Hall, Room 426, McMaster University, Hamilton, Ontario, Canada, L8S 4M4, FAX: 905 521 8232, Email: [qsep@mcmaster.ca](mailto:qsep@mcmaster.ca). The Research Report series provides a vehicle for distributing the results of studies undertaken by QSEP associates. The authors take full responsibility for all expressions of opinion.**

## **Where Have All The Home Care Workers Gone?**

**Margaret Denton<sup>1,3</sup>, Isik Urla Zeytinoglu<sup>2</sup>, Sharon Davies<sup>1</sup>, Danielle Hunter**

**<sup>1</sup>Gerontological Studies  
McMaster University**

**<sup>2</sup>Human Resources & Management  
DeGroote School of Business  
McMaster University**

**<sup>3</sup>Department of Sociology  
McMaster University**

**Please direct all correspondence to:**

**Dr Margaret Denton  
Director, Gerontological Studies  
McMaster University. KTH 226  
1280 Main Street West  
Hamilton Ontario  
L8S 4M4  
email: [mdenton@mcmaster.ca](mailto:mdenton@mcmaster.ca)  
Tel: (905) 525-9140  
Fax: (905) 525-4198**

**This research was made possible through the generous research support from the Workplace Safety and Insurance Board and the Canadian Health Services Research Foundation.**

## **Abstract**

Because of the on-going need to co-ordinate care and ensure its continuity, issues of retention and recruitment are of major concern to home care agencies. The purpose of this study was to examine the factors affecting turnover decisions among visiting home care workers. In 1996, 620 visiting nurses and personal support workers from three non-profit agencies in a mid-sized Ontario city participated in a survey on their work and health. By the fall of 2001, 320 of these respondents had left the agencies. Analysis of the turnover data showed a temporal association between the implementation of managed competition and turnover. We mailed a self-completion questionnaire asking about their reasons for leaving the agency and about their subsequent work experience. One hundred and sixty nine (53%) responded to this survey. Respondents indicated dissatisfaction with the implementation of managed competition, with pay, hours of work, lack of organizational support and work load as well as health reasons, including work-related stress, as reasons for leaving. Less than one-third remained employed in the home care field, one-third worked in other health care workplaces and one-third were no longer working in health care. Their responses to our 1996 survey were used to predict turnover. Results show that nurses were more likely to leave if they had unpredictable hours of work, if they worked shifts or weekends and had higher levels of education. They were more likely to stay with the agency if they reported working with difficult clients, had predictable hours, good benefits, had children under 12 years of age in the home, and were younger. Personal support workers were more likely to leave if they reported higher symptoms of stress, and had difficult clients. They were more likely to stay if they worked weekends and perceived their benefits to be good.

**Keywords:** turnover, home care workers, nurses, personal support workers, managed competition, home care sector, policy, for-profit agency, non-profit agency

**JEL Classification:** I11; I18

## **Where Have All The Home Care Workers Gone?**

Turnover of home care workers is a major challenge to home care provider agencies (Stone, 2001; Cushman, Barnette and Williams, 2001; Cushman, Ellenbecker and Wilson, 2001). The Ontario Community Support Association (2000) estimates that the average turnover rate for home care workers is double to triple the rate of other health care workers across Canada. The impression is that home care workers are taking better paying jobs in the institutional and acute care sector, which limits their availability in the home care setting (Canadian Home Care Human Resources Study, 2002a). Additionally, many trained personal support workers (PSWs) may be leaving the home care sector. Yet there is little knowledge as to why workers leave and where they go. The recent Canadian Home Care Resources Study (Human Resources Development Canada, Appendix B, HRDC, 2002) identified that “collecting data on these issues is a fundamental starting point for developing retention strategies” (Appendix B, p. 112).

The high turnover rate among home care workers is a major human resource concern for home care provider agencies that must devote resources to the recruitment and retention of home care workers. Further, turnover is an important area of research because it greatly affects how home health care is delivered. When home care workers switch agencies or leave the field altogether, clients and families are primarily affected because of the break in continuity of care. Clients must get acquainted with new workers which is often a difficult process because it involves gaining a new trust and comfort level with the new worker. This in turn affects the quality of care that a client receives.

When care is not provided on a regular basis by the same individual or team of individuals, important medical information about the client may not be passed along which could lead to an adverse outcome as well as a decline in client satisfaction. Turnover also affects the way care is co-ordinated. Scheduling is an issue as co-ordinators are left scrambling to find replacements for clients who depend on care (Denton, Zeytinoglu and Davies, 2003). When workers quit, co-workers are left to split their client load which leads to increased stress and decreased job satisfaction (Kiyak, Namazi and Kahana, 1997).

There is speculation that the restructuring of the health care sector, and the increasing acuity/complexity of client caseloads and corresponding increasing workloads may be contributing to a perceived increase in turnover. This may have been confounded in Ontario with the shift to a 'managed competition' system of care and a corresponding change in the public-private mix of home care providers.

The purpose of this study is to conduct a thorough analysis of the factors affecting turnover decisions among visiting home care workers. To gather in-depth information on the topic, we surveyed home care nurses and personal support workers (PSWs) in a medium sized city in Ontario at two time periods, in 1996, prior to managed competition and, in 2001, when managed competition had been established. We discuss the results and consider how hospital restructuring and the introduction of managed competition contributed to the dramatic rise in turnover for nurses and personal support workers from 1996 to 2001. Finally, we suggest policy implications for agencies and for the health care system as a whole.

## **LITERATURE REVIEW**

While much has been written about the determinants of turnover<sup>1</sup>, there is a limited knowledge base on turnover in the home care sector. This literature review will first briefly introduce the turnover literature, then move to a more detailed review of turnover in home health care. We will then provide an overview of the implementation of managed competition to home care in Ontario and discuss its impact on the turnover of nurses and PSWs.

### **Turnover literature**

While some turnover in firms may actually be beneficial (Abelson and Baysinger, 1984), most research on turnover has been guided by the assumption that turnover is costly to firms and should be prevented if possible (Steel, 2002). Past research on turnover suggests that there is a multitude of factors that contribute to turnover. A meta-analysis by Griffeth, Hom and Gaertner (2000) found important correlates of turnover to be job satisfaction, job search, and comparison of alternatives. Other determinants include dimensions of work experience such as job content, stress, work group cohesion, autonomy, leadership, distributive justice, and promotional chances. Few demographic attributes have been found to predict turnover, the exception being company tenure and number of children. The job search process is also an important predictor of turnover (Steel, 2002). It is also suggested in the literature that turnover can be directly affected by role stressors such as role ambiguity, role conflict and role overload (Fang and Baba, 1997; Lyons, 1971). Stress can also play an indirect role in the prediction of turnover through these attitudinal measures (Fang and Baba, 1993). There is also evidence that

---

<sup>1</sup> (See Griffeth, Hom and Gaertner, 2000 for a meta-analysis of antecedents and correlates of employee turnover),

suggests that nonwork factors such as past time activities and hobbies and family responsibilities may influence job satisfaction and subsequently predict turnover (Cohen, 1995; Lee and Maurer, 1999). More recent research on turnover has unveiled the concept of job embeddedness and its relation to turnover. Job embeddedness entails one's connection to their fellow employees and employer groups, perceived comfort with their working environment and costs of leaving their occupation (Mitchell et al, 2001). It was concluded that people who were more embedded in their job had the lowest inclination to leave their occupations (Mitchell et al, 2001).

Most theorists model turnover as a process incorporating attitudinal and behavioural measures, yet most research uses a static design and reports results from survey research done at one point in time. As noted by Steel (2002) longitudinal forms of research would be most appropriate for turnover research.

### **Literature on turnover in homecare**

While many studies have looked at issues of recruitment and retention of nurses in health care (See Tai, Bame and Robinson, 1998) little is known about how these issues affect workers in home care. A few studies focus on nurses in home health care (Cushman et al., 2001; Kiyak, Namazi and Kahana, 1997; Savorgnani, Haring, and Galloway, 1993) very few consider personal support workers (Aronson, Denton, & Zeytinoglu 2004; Cushman, Barnette and Williams, 2001; Feldman, 1993; Gilbert, 1991).

There are many reasons why it is difficult to recruit and retain home health care workers. Primarily, workers are leaving because they are attracted to better wages, benefits and job security in long term care and hospital settings (OCSA, 2000; CARP, 2001; Cushman, Barnette and Williams, 2001; Cushman, Ellenbecker and Wilson, 2001).



In fact, it is estimated that workers in nursing homes and hospitals in Ontario earn up to 50% more wages than the average home care worker (OCSA, 2000). Further, the wages of home care workers working for for-profit employers are less than those working for a public employer or a not-for-profit organization (Canadian Home Care Human Resources Study, 2003). Workers leave because full time jobs are almost non-existent in home care which renders home care employment to be mainly casual and part time (OCSA, 2000; CARP, 2001). This casualization of the home care sector allows employers a flexible labour supply, where employers can adjust the supply to correspond to changing needs. It permits employers to keep costs down by eliminating the employer's obligations to provide benefits such as vacation, sick leave, extended medical coverage and pensions (Canadian Home Care Human Resources Study, 2002). Job-specific factors such as high travel costs, occupational health and safety issues in client's homes, unpaid paper work at home, and evening and weekend work further contribute to the difficulties in attracting and retaining home care workers (CARP, 2001). Furthermore, heavy client loads, limited time to care for clients and increasing acuity of sickness in patients are additional factors (Minister of Public Works and Government Services, 1999; Fuller, 2001). Educational factors, such as limited opportunities for educational advancement, make it difficult and resistive for people to join the home care field (Minister of Public Works and Government Services, 1999; OACCAC, 2000; OHHCPA, 1999). Other factors that may contribute are job dissatisfaction (due to low wages and professional isolation) , high levels of stress or burnout, lack of recognition and injuries or disabilities of the care providers (Denton, Zeytinoglu, Davies, 2002; Denton, Zeytinoglu, Davies & Lian, 2002; Zeytinoglu, Denton and Davies, 2002; Cushman, Barnette and Williams, 2001;

Zeytinoglu, Denton, Webb & Lian, 2000; Cushman, Ellenbecker and Wilson, 2001; Gilbert, 1991).

### **Effect of managed competition on turnover**

There is speculation that the recent high turnover rate of home care workers may partly be explained by the restructuring of the health care system in Ontario. System reforms are shifting the locus of care from expensive acute care institutions into the community and home based-settings and involve reforms to both the hospital and home-based health care systems (Lesemann and Martin, 1993). As care has moved from the institution into the community, the home care sector has experienced tremendous growth. While home care budgets have increased modestly, they have not kept pace with the increasing numbers of clients coming into care. At the same time successive provincial governments have been attempting to create a “one-stop shopping” approach to long-term care. In Ontario, this resulted in the implementation of a plan in 1997 that involved the replacement of 74 Home Care and Placement Co-ordination Programs in the province with 43 Community Care Access Centres (CCACs). Under this new system, the home health care system has changed from a ‘cooperative model’ to a ‘managed competition’ model. In the earlier cooperative model, non-profit organizations worked together to provide home health care in a shared market-funding agreement. In the ‘managed competition’ model these organizations and the new entrants (who are primarily for-profit health care organizations) compete in a bidding process for multi-year contracts. Under ‘managed competition’ the agencies that can provide quality care at the lowest cost win the contracts.

The restructuring of the hospital and home care sector has contributed to intensification of work (Aronson and Sammon, 2000). As length of hospital stays has decreased, clients are released ‘quicker and sicker’ into the community care system. At the same time there have been cutbacks in time for visits, and home care workers are expected to finish tasks in a shorter period of time and to visit more clients per day. As well, the nature of the tasks have changed with the advance of medical technology. Care that was once provided in the hospital is now provided in the home and care that was once provided in the home is now left undone or passed back on to family caregivers. Further, the move to a competitive environment led to increased casualization of work (i.e. many more part-time and temporary jobs), an increase in job insecurity and a decrease in the pay and benefits to home care workers (Canadian Home Care Human Resources Study, 2003).

Focusing on the issues discussed in the literature review, this paper address a series of questions:

- 1) What is the five year turnover rate for nurses and PSWs among the three non-profit agencies included in our study since 1996?
- 2) Did the implementation of managed competition impact the turnover rate in home care agencies?
- 3) For those who left their agencies, what reasons do nurses and PSWs give for leaving their 1996 place of employment?
- 4) What were their employment experiences after leaving the home care provider agency?

- 5) What types of jobs are they currently working in and why did they choose their current job?
- 6) How does their current job compare to their 1996 job in terms of employment characteristics, job satisfaction and job stress?
- 7) Which factors distinguish the stayers from the leavers?
- 8) Which factors determine turnover in home care provider agencies?

## **METHODS**

### **Data Collection**

In an earlier research project we worked in partnership with three non-profit community and social service agencies in a mid-sized city in Ontario to study the relationship between work and health of home care workers (Denton, Zeytinoglu, Davies, 2002; Denton, Zeytinoglu, Davies & Lian 2002; Zeytinoglu, Denton, Davies and Lian, 2000; Zeytinoglu, Denton and Davies, 2002). Under a service agreement these agencies worked with the local home care program to provide care to clients in their homes. The first agency provided nursing services, and administered the home care program, the second provided nursing services and some visiting home support services and the third agency provided the majority of the visiting personal support workers. While other agencies had overflow contracts with home care, these three non-profit agencies provided about 80-85% of home health care in this mid-sized city in 1996.

In 1996, the three participating agencies provided the researchers with a list of their current employees. Study methodology included 16 focus groups with 99 home

care workers and a mailed questionnaire to 1,346 employees of these agencies, excluding the Chief Executive Officers. In total 891 respondents returned their questionnaire, for a response rate of 66%. Of these, 620 respondents identified themselves as either visiting nurses (N=214) or personal support workers (PSWs) (N=406). The remaining respondents included case managers, therapists, supervisors, managers and support staff. This paper focuses on the visiting nurses and PSWs.

In the spring of 2001 we approached the original three agencies with our list of their 1996 employees and asked them to identify those currently employed by their agency. We then cross-checked this list to our data base records and identified those employees that responded to the 1996 survey but had left the agency between 1996 and 2001. As shown in Chart 1, of the 620 nurses and PSWs, we were able to identify 320 former employees (115 nurses and 205 PSWs). In the fall of 2001, a self-completion questionnaire—the *Survey of Former Employees*-- was mailed to these former employees. In total, 169 questionnaires were returned for our sample of turnover respondents. This represents a response rate of 53%.

## **Variables**

The *Survey of Former Employees* included questions pertaining to their previous employment at the 1996 agency including the type of work, intrinsic and extrinsic job satisfaction, job stress and reasons for leaving their former agency. We then asked them to list all the jobs held since leaving the 1996 agency and for each job listed, we asked type of job, why they chose this job, type of work, job stress and a series of questions on both intrinsic and extrinsic job satisfaction. The questionnaire ended with socio-

demographic questions on education, highest level of training, marital status, subjective health and stress in life. Lastly, we asked respondents for any additional comments.

Included in the analysis are several variables measured in our 1996 study. Variables included were workload, symptoms of stress, organizational change, fear of budget cuts, fear of job loss, peer support, organizational support, years of schooling, marital status, having children at home, age, working with difficult clients, predictable hours of work, predictable earnings, work shifts, work weekends, having good benefits, and feeling fairly paid.<sup>2</sup> (See Denton, Zeytinoglu and Davies 2002 for a description of these measures).

## ANALYSIS

Four data sources were used to address the research questions. First, as noted, the sampling frame consisted of all nurses and personal support workers at the three non-profit home care provider agencies in 1996. To provide an answer to the turnover rate question, the five year turnover rate for nurses and personal support workers was calculated by dividing the number of employees that had left the agencies between 1996 and 2001 by the total number employed in 1996 multiplied by 100.

Second, descriptive data from the Survey of Former Employees was used to answer the questions: What reasons did home care workers give for leaving their 1996 place of employment? What were their employment experiences after leaving the home care provider agency? What types of job are they currently working at and why did they

---

<sup>2</sup> With the exception of years of school and age, each of these measures are summative likert scales with high reliability scores (as measured by Cronbach's alpha).

choose their current job?. How does their current job compare to their 1996 job in terms of employment characteristics, job satisfaction and job stress?

Third, to answer the question of ‘factors distinguishing the stayers from leavers’, we used longitudinal analysis and asked for differences in means. The sample for the longitudinal analysis includes 620 respondents to the 1996 survey of home care provider agencies. As noted above, by 2001, 320 of these respondents had left their agency. We added a variable to the 1996 data file to indicate whether the respondent was currently employed or a former employee (named stayers and leavers respectively). Using this data, we are able to examine differences in employment characteristics between the stayers and the leavers. We first compare the mean scores of the stayers and the leavers on a number of measures developed for the 1996 study. To examine factors that may be causally related to employee turnover we ran a logistic regression to predict turnover.

## **RESULTS**

*What is the five year turnover rate for nurses and PSWs among three not-for-profit home care provider agencies included in our study since 1996?* Of the 620 visiting home care workers employed for the three non-profit agencies in 1996, 320 or 52% had left the agency between the Spring 1996 to the Spring 2001—a five year period. The turnover rate for nurses was 54% and for PSWs 50% (See Table 1). Table 2 shows the year they left the agency and indicates that the turnover rate rose to 18% in 1997, peaked in 1998 for PSWs at nearly 30% and for nurses in 1999 at 28%. The data for 1996 and 2001 do not represent full year periods, so no conclusion on the turnover rate for those years may be drawn, though the full interval is a 5 year period.

*Did the implementation of managed competition impact the turnover rate in home care agencies?* To answer this question, we rely on two sources of information. First, we interpret the turnover rates shown in Table 2 through the lens of the implementation of managed competition in this city. Second, we rely on the verbatim responses provided in the final section of *the Survey of Former Employees* of the reason they gave as important on why they left their 1996 agency.

In 1997, the three non-profit agencies were guaranteed 75% share of their volumes for two years. At that time Agency 1 provided nursing services only, Agency 2 provided nursing services and some personal support services and, Agency 3 was the major supplier of personal support services.

We begin by focusing on visiting nurse services. In 1997, the first RFP cycle for 25% of the CCAC nursing care volume was issued. Agency 1 competed and lost a major area and that volume of nursing care was transferred to Agency 2 and to a for-profit agency. The turnover rate for nurses in 1997 and 1998 was 18% and 17% respectively as nurses switched agencies or left for other health care jobs. In 1999, the second RFP cycle for the remaining 75% of the original volume was called. Agency 1 won two-thirds of that volume with the remaining going to a new agency. Agency 2 lost an area it had held for over twenty years, but did manage to pick up a new contract area in another city. They did not lay off employees during that period of time, but they did ask some of their nurses to transfer to the new contract region. Some nurses were not happy about the move out of their core areas and voluntarily left the agency. So the dramatic rise in the turnover rate to 28% in 1999 can largely be explained as a fall out from managed competition and the loss of both volume and area by the two nursing agencies. In 2000,



there was a strike at Agency 1 and this resulted in the permanent layoff of several staff as nursing clients had to be permanently transferred to other agencies during the strike, partly explaining the 21% turnover rate in 2000. The data for 2001 represents only a nine month period, but it does appear that turnover rates began to stabilize. Although not included in this study period, a major decrease in volume occurred in the fall of 2001 and again impacted the turnover rate in the nursing agencies.

Now, turning to PSWs, Turnover rates for PSWs skyrocketed in 1998 due to a number of factors. In that year Agency 2 lost its contract for PSWs. In addition, all home care agencies were losing employees to the long-term care facilities where wages were higher and benefits were better. Lastly, there was a change to shorter visits. Clients who had been receiving 3-4 hours of care were cut to 1 hour visits for personal care only. This meant that PSWs who made 2-3 visits a day were now making 6 or 7 visits, many by bus traveling across the city. In 1999, the turnover rate for PSWs began to decrease due partly to the introduction of a neighbourhood team model by Agency 3 that reduced the time traveled between clients and this helped to reduce the number leaving. The second contract was won in April 2000 and was to be a four year contract till March 2004. For PSWs, the turnover rate leveled off in 2000 to less than ten percent. But in December of 2001 the CCAC, as the issuer of the contract, faced a budget deficit and introduced eligibility cuts. Volumes were reduced from 11,000 persons receiving care to 7000. Agency 3 was unable to provide care under the decrease in volume and the corresponding increase in complexity of care. This agency closed in August of 2002. (For more on this, see Aronson, Denton & Zeytinoglu, 2004).

In the open-ended section of the questionnaire, many respondents told us that they were happy with their jobs prior to the implementation of managed competition but became unhappy with the changes made under the new competitive process. These changes resulted in higher workloads, more client visits per day, job insecurity, decrease in the continuity of care and decrease in the quality of care to clients, increased stress, and lowered pay and benefits. One nurse describes the change:

“[Agency] was a very different place to work as compared to hospital nursing. It could be very pleasant and satisfying but as government cutbacks and budget constraints developed, it became a frightful and stressful place to work. Workloads (procedures and patient daily visits) increased greatly which led to impossible time management of daily case loads resulting in daily overtime hours – no coffee or lunch breaks – plus additional hours spent on paper work and preparation for next day’s work load.”

Another says:

“I loved working for (*Home Care Agency 1*) (before the CCAC was created). The professionalism and level of employee respect was tremendous and the management was caring and generous. When government budget cuts arrived the [agency] struggled to “cut to the bone” without interrupting quality of care for the patients but over the years the sacrifices were made on the backs of staff and nurses. Every aspect of the job was compressed, reduced, shortened, streamlined, changes was a constant source of stress but the patients came first. Staff suffered greatly...” (Nurse)

The Managed Competition model has created an unstable work environment in home care, especially for agencies in our study. Many home care workers left due to the instability of the home care environment, especially the RFP process. For example a nurse said:

“In the summer of 98, when the RFP process was being implemented, as a nurse I knew it was time to seek more stable, secure employment.”

“I was seconded to another organization and when that contract ended (*Agency*) could not guarantee the same position.”

Another describes how her clients changed when the contract with the CCAC changed to another part of the city:

“My work area changed to the city core – different types of clients – did not enjoy working in this area. We lost the contract with the CCAC [in a more pleasant area of the city].”

A personal support worker describes the job insecurity caused by the RFP process:

“[This was the ] most negative work environment I have worked in. Very difficult being an employee during RFP process because of concerns around job security. If we got the RFP, we would have too much work and they were hesitant to increase staffing, and if we did not get the RFP, we would lose our jobs.”

Personal support workers who responded to our survey described how they were forced to take a cut in pay in order to keep their jobs. This was a direct result of the change to Managed Competition. They also described the extremely low pay in their jobs. One said:

“I was not even taking home \$19 000/yr. Yet my responsibilities were increasing and the time to do my job decreased....I quit because the working conditions (time per client and travel time) are terrible and wages are the same as 3 years ago [total 8 years ago.] I can work pumping gas for the same money, with less responsibility and yet I will get yearly increases. Would you stay? The shame of it was I really enjoyed my job. I would have stayed.”

Another said:

“Well believe it or not, I am getting \$12.50 an hour as a part time self employed house keeper and I am usually getting 3 hours minimum per job per house. That is \$1.50 more than the Agency paid [to me as a PSW] plus I am not expected to work 32 weekends out of 52 weekends per year. Also,[now] I can pick my own hours.”

These personal support workers make an important point about the low wages in home care and explain why so many of the respondents to our survey did not find/seek jobs in the home care sector.

Some survey respondents felt that the implementation of managed competition resulted in a reduction in organizational support to home care workers. One nurse described the result of the loss of support from colleagues and the agency:

“When the RFP process stripped resources from community agencies, nurses lost many of their opportunities for face to face support, for example, educational committees, project work, team meetings, office entry. The isolation became unbearable and the work load unsustainable.”

A PSW described how good supervisory support can contribute to retention:

“[I had an] extremely supportive supervisor, who was one of the reasons I stayed as long as I did. Support of [my]supervisor was and is a very important value to me in the workplace.”

In competing for contracts with the CCAC, agencies competed on both price and quality. Respondents to our survey told us that the quality of client care decreased dramatically with the onset of Managed Competition. One PSW describes it this way:

“I was on the first home care case here in Hamilton. Our original purpose was to keep seniors in their homes. We cared about our clients and it was very satisfying both for our clients and workers. Now it’s just about money. Always a new worker for one hour. It’s just a business now. I guess that is progress.”

Another puts it this way:

“The cut back to save the money took away the real pleasure and compassion I wanted to share with beautiful and well deserved people. They were treated as a number, not an individual human being. It’s sad because down the road we will all experience some aspect of this outcome.”

A nurse says:

“I could no longer work in an environment that lost the “caring” out of nursing. Patients became clients, numbers etc. I was not trained to nurse in this manner.”

Another says:

“I was trained to be a bedside nurse but by the mid 90’s that aspect of nursing in community didn’t exist”.

In summary, the comments written by home support workers on the “Survey of Former Employees” lend strong support to our conclusion that the implementation of managed competition increased the turnover rate in the three home care agencies studied here.

*For those who left their agencies, what reasons do nurses and PSWs give for leaving their place of employment?* In a detailed analysis of the turnover reasons, Table 3 shows that most nurses and PSWs left their agency due to concerns with their pay, hours of work, job security, support from supervisors and/or managers, heavy workload, unsatisfactory benefits, and other factors. Some nurses and PSWs retired or left the agency to further their education or for home or family reasons.

Reasons for turnover varied by occupation. A higher proportion of nurses than PSWs indicated unsatisfactory pay, lack of support from supervisors, work-related stress, job insecurity, heavy workload, unsatisfactory benefits, lack of support from co-workers, lack of educational opportunities and simply not liking to work for that agency. PSWs were more likely to mention reasons relating to hours such as unsatisfactory hours of work, no guarantee of hours or client visits, health reasons, being laid off or having a work-related injury.

*What were their employment experiences after leaving the home care provider agency? And, what types of job are they currently working in and why did they choose their current job?* Seventy-one percent of the nurses and 61% of the PSWs held another job after leaving their 1996 employer. Table 4 shows the job title and type of business of their first job after leaving the agency. Fifty-three percent of the employed nurses were

employed in a nursing job, 20% became case managers, and 8% moved up to a manager or supervisory position. While 91% of these nurses found employment in the health care sector, only 31% remained in the home care sector, 28% found work in hospitals, 8% in nursing homes and 24% in other health care such as doctor's offices and clinics.

The story is somewhat different for PSWs and speaks to a tremendous drain of trained PSWs out of the home-care field and health care altogether. Twenty-nine percent of PSWs found employment in the same occupation, 22% took jobs as health care aides in nursing homes or other retirement residences. Over one-third of the employed PSWs found employment outside of the health care sector altogether.

In their first job after leaving their agency, 42% of the nurses and 39% of the PSWs worked full-time (35 hours per week or more) and about 60% were paid on an hourly basis (nurses, 63%; PSWs, 58%).

Now focusing on reasons for choosing their first job after leaving their agency, many respondents gave more than one reason and the nurses were more likely than the PSWs to check multiple reasons. As shown in Table 5, the most prevalent reasons for choosing their first job after leaving the home care agency were better pay, better opportunities to make use of their experience and skills, job security and location. Hours of work and scheduling of work were very important reasons for choosing their next job, especially if you consider the percentages saying less evening or weekend work, guaranteed hours, hours not split up, want to adjust own schedule, and wanting more hours. Better benefits, pay system, educational opportunities, and opportunities for advancement are also important reasons given for choosing their first job. Finally, home care providers sought more support from their supervisors/managers and their co-

workers. Less than ten percent indicated they choose their next job because that agency held the CCAC contract.

The reasons given for choosing their first job differed by occupation. On the one hand, important reasons for the nurses included having less evening or weekend work, followed by better pay, better opportunities to make use of their experience and skills and location. For nurses, location was an important reason, perhaps because they were the ones who had to move or commute to other regions when their agency lost the contract. Also more important to the nurses were better educational opportunities and more opportunities for advancement. On the other hand, PSWs considered the most important reasons for choosing their first job to be not having their hours split up, better pay and opportunities, and having guaranteed hours of work.

Often unemployed people accept the first offer given after layoffs and then look for a job they prefer. With this in mind, we also asked respondents about their current job and the reasons for choosing their current job.. Two-thirds of the nurses (68%) and one-half of the PSWs (55%) were currently employed. Table 6 shows that similar to their experience after layoffs, 36% of the employed PSWs and 15% of the nurses were no longer working in the health-care field. About one-quarter of the nurses (27%) and PSWs (23%) remained in home care, with the nurses finding employment in the hospital sector (29%) and other health-care (23%) and the PSWs finding employment in nursing homes (17%) or other health care (15%). Only 26% were currently working as PSWs. Comparing their current to their first job after leaving their agency, both the nurses and PSWs were more likely to be working full-time hours in their current jobs. Even so, only one-half had found full-time employment by 2001.

Table 7 shows the reasons respondents gave for choosing their current job. Again nurses identified less evening or weekend work, better opportunities to use experience and skills, better pay, location, job security, guaranteed hours, better educational opportunities, and better benefits. PSWs identified better pay, job security, more hours, hours not split up, guaranteed hours, location, and better benefits.

*How does the current job compare to their 1996 job in terms of employment characteristics, job satisfaction and job stress?* We asked the nurses and PSWs to compare their 1996 job and their current job on satisfaction with the way paid, with the amount paid, satisfaction with benefits, overall satisfaction with the first job and overall stress in the job. Table 8 shows a movement to salaried jobs for the PSWs with 23% currently in salaried jobs as compared to 13% in 1996. For both nurses and PSWs, there is greater satisfaction in 2001 with the way they are paid, with the amount they are paid, and overall satisfaction with the job. Nurses are more satisfied in 2001 with their benefits. In addition there is less overall job stress for PSWs.

*Which factors distinguish the stayers from the leavers?* Using the 1996 data, we compared the stayers and the leavers on a number of different measures including a number of factors found to be important determinants of stress and job satisfaction in the 1996 study (Denton, Zeytinoglu, Davies & Lian, 2002; Denton, Zeytinoglu and Davies, 2002). Table 9 shows the results of this analysis. Compared to those who stayed, nurses that left were more likely in 1996 to have higher levels of stress, perceived more organizational change, and less organizational support, have fewer difficult clients, less predictable hours of work or earnings, more likely to work shifts or weekends and poorer benefits in 2001 and they were more likely to have more years of schooling. Compared



to PSWs who stayed, the leavers had higher levels of stress, less organizational or peer support, and more likely to work with difficult clients, to have unpredictable work hours, or unpredictable earnings or to have poorer benefits.

*Which factors determine turnover in home care provider agencies?* Table 10 presents the results of a logistic regression to determine factors associated with leaving. As mentioned in the methods section, the independent variables are measured in 1996 (before the introduction of managed competition) and are used to predict leaving the 1996 agency during the period 1996-2001. Results differed by occupational group. Nurses were more likely to leave if they worked shifts, if they did not have good benefits, if their earnings were predictable, if they had higher levels of schooling or if they were divorced. They were less likely to leave if they had difficult clients, if their hours of work were predictable, if their benefits were good and if they have children at home or if they are younger. PSWs were more likely to leave if they had higher stress levels, if they had difficult clients and they were less likely to leave if they worked weekends and perceived their benefits to be good.

## **DISCUSSION**

High turnover is an important problem in home care because retention of workers promotes continuity of care for clients and families, reduced costs (training for new workers), promotes a stable work environment and allows for long-range planning (Canadian Home Care Resources Study, 2003, Appendix B). The findings presented in this paper provide evidence that the turnover rate for home care workers in a mid-sized city in Ontario increased dramatically after the introduction of managed competition in

1997. This rise in turnover, was also accelerated by the restructuring of the acute care sector that saw clients being released ‘quicker and sicker’ from the hospital with home care budgets not keeping pace with the increase of clients coming into care. These changes resulted in heavier workloads including more client visits, job insecurity, a decrease in the continuity of care and the quality of care to clients, increased job insecurity, higher levels of stress, casualization of working conditions including irregular hours and a decrease in pay and benefits. The study findings paint a disturbing picture of agencies struggling with high turnover rates and the loss of trained professionals from the home care sector.

As part of a larger study, we interviewed managers from these agencies for their views on turnover (Denton, Zeytinoglu & Davies, 2003). Managers from these agencies feared that they were losing staff to the hospitals and nursing homes as they were able to pay substantially more than the home care agencies. In fact, over one-quarter of nurses had found employment in hospitals, but only one-sixth of PSWs were currently working in nursing homes. What was even more disturbing was that of those currently employed, over one-third of the former PSWs and one-tenth of the former nurses were no longer working in the health care sector at all. This represents a tremendous loss of skilled and trained staff out of the health care sector.

A major reason nurses and PSWs left their 1996 agency of employment, related to working conditions, in particular, hours of work, job insecurity and low pay and poor benefits. In 2001, nurses in hospitals made over \$4.00 an hour more than home care nurses and had better benefits. No wonder, nurses left to find work in the hospital sector. PSWs were also more likely to obtain higher hourly rates in nursing homes, but contrary

to what the managers thought, they were more likely to find non-health care jobs than to find employment in nursing homes. Finding another job in the service, retail or manufacturing sectors that may provide better job conditions is an attractive alternative to working in an unstable home care environment for some PSWs.

The effects of managed competition on turnover were evident throughout our study. To compete for price, agencies had to keep their fees for service low, and shed extra administrative staff. Managers told us that there was very little room in the budget for education and training of staff (Denton, Zeytinoglu, & Davies, 2003). This had implications for the retention of nursing staff. Our study showed that for some nurses lack of challenging and educational opportunities were reasons for leaving their agencies. Nearly one-fifth of the nurses moved into positions as case managers and others moved into managerial or supervisory positions indicating that in order to move up, nurses had to switch employers. In providing reasons for choosing their current jobs, many nurses cited better opportunities to make use of their experiences and skills for advancement and for education as important reasons for choosing their current jobs. This points to the need for nursing agencies to provide opportunities for education and advancement in their organizations if they wish to retain nursing staff.

Home care in Ontario is changing from a caring business to a cost-effective, profit-oriented business with cost efficiency as the bottom line. The closure of non-profit agencies where care was the leading goal is just one example of this trend. With the implementation of managed competition several non-profit agencies in the surrounding regions have closed, as well as one of the agencies in our study. The loss of non-profit agencies will most certainly be detrimental to communities around Ontario. Non-profit

agencies play an invaluable role in the community because they focus on the care of clients more than profit from clients. Further, they run programs such as Meals on Wheels and Volunteer Visiting Programs, just to name a few.

In the region where we conducted our study, working conditions for staff and as an extension of that care for clients were not considered as legitimate concerns in issuing contracts. Workers were seen as dispensable factors in the cost structure and the affects of these deteriorating working conditions on staff turnover were not taken into consideration in issuing contracts. To survive agencies had to make cuts to their labour costs, but costs were cut to such a level that workers felt they had no other option but to leave the agency, and in most cases the home care sector. In a labour intensive sector such as health care, these factors are important to consider for the survival of the industry and their affect on quality of care provided to clients. In our case, political goals and aims of the government at that time (i.e., to open the market to for-profit agencies) led the agenda, triggering down to how and which contracts to be awarded. The effects of these on nurses and PSWs were detrimental as our study showed.

### **Policy Implications**

If the goal is to keep nurses and PSWs in home care, and we believe it should be, the findings of our study have implication for public policy and practice. Recommendations for retaining and recruiting visiting workers in home care are often targeted at the agency level and make suggestions about organizational arrangements, working conditions, scheduling, the physical setting, opportunities for training and advancement, pay and benefits ( Stone, 2001; Chapin, 1999; Feldman et al., 1993; Della, Harris and Yuan, 1990). But in a competitive environment, where cost is an important factor in

determining how contracts are awarded, agencies are reluctant to inflate their budgets to provide better working conditions and terms of employment for fear of losing the contract. To stop high turnover in the home care sector, governments need to divert sufficient resources to the home care sector so that jobs may be restructured to be full-time employment with good pay and benefits, that match those provided by long-term care institutions and hospitals, in continuity in hours, schedules and the place of work. As noted by Dawson and Surpin, “treating direct-care workers as not only a scarce, but a valuable, resource –is such a dramatic change from industry norms that an effective response will require fundamental, structural changes in both *industry practice* and *public policy*” (2000:228). This change in the very nature of home care work can only happen with a supportive public policy environment that recognizes the inherent benefit to both the client and to the health care system of providing health care in the home. Because the public sector is the major source of financing for home health care, the key to improved financing is what the public sector is willing to pay for home health care and the conditions that the public sector sets in its financing arrangements (Caro and Kaffenberger, 2001). Managed competition may ensure that home health care is being provided at the lowest cost, but at what expense to the client, to the home care provider and the home health care industry? It is important for policy makers to rethink which aspects of the profit-based manufacturing or competition model can be applied to health care and where costs can be cut for efficiency.

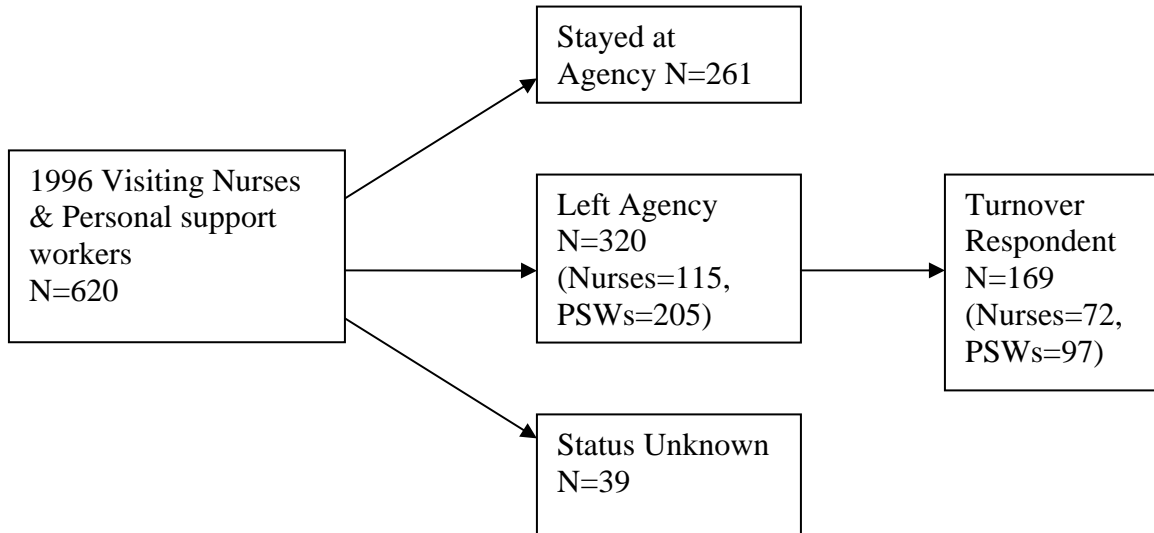
Further, funds need to be allocated to training and educational initiatives so that agencies can continue to improve quality of care and to provide challenging opportunities to their staff. This would increase the set of skills needed to address the increasing

complexity of clients and decrease the expectation that workers' have to support their training, essentially assisting the industry through their already low pay. Increased training and educational opportunities would provide opportunities for professional development and possibility open up opportunities for advancement, both important retention issues for nurses.

The key to keep nurses and PSWs in home care sector seems to be in providing good working conditions where employees have some predictability in their lives in terms of pay, hours of work and work scheduling. They want to, and should be treated in such a way that society shows the high value we put on work provided by these workers.

Our previous studies and those of others have demonstrated the important role organizational support plays in increasing job satisfaction and decreasing stress (Denton, Zeytinoglu and Davies, 2002) and musculoskeletal disorders (Zeytinoglu, Denton and Davies, 2002). Retention might be improved by making workers feel more supported by their managers and supervisors through more frequent and regular contact, sharing of information about the organization, by providing more educational opportunities, by giving workers a greater voice in decision-making in their agencies, and by a organizational philosophy of respect and care to its employees and clients (Canadian Home Care Resources Study, Appendix B).

**Chart 1: Sample**



**Table 1: Five Year Turnover Rate, Nurses (N=214) and Personal support workers (N=406)**

Status	Nurses	PSWs
	Percent (N)	Percent (N)
Current Employee	42.5 (91)	41.9 (170)
Left Agency - Non-respondents	20.1 (43)	26.6 (108)
Left Agency - Respondents	33.6 (72)	23.9 (97)
Status Unknown	3.7 (8)	7.6 (31)
Total	100 (214)	100 (406)

**Table 2: Year Left Agency**

Year Left Agency	Nurses (N=72)	PSWs (N=97)
	Percent (N)	Percent (N)
Before 1997	5.6% (4)	10.3 (10)
1997	18.1% (13)	18.6 (18)
1998	16.7% (12)	29.9 (29)
1999	27.8% (20)	15.5 (15)
2000	20.8% (15)	9.3 (9)
2001	8.3% (6)	6.2 (6)
Missing Date Left	2.8% (2)	10.3 (10)

**Table 3: Details of Reasons Why Left Agency**

	<b>Nurses (N=72)</b>	<b>PSWs (N=97)</b>
<b>Reason Left Agency</b>	<b>Percent (N)*</b>	<b>Percent (N)*</b>
Pay not satisfactory	41.7 (30)	23.7 (23)
Hours of work not satisfactory	27.8 (20)	30.9 (30)
No guarantee of hours or client visits	25.0 (18)	30.9 (30)
Lack of support from supervisors/managers	29.2 (21)	18.6 (18)
Health reasons	18.1 (13)	25.8 (25)
Work related stress	25.0 (18)	12.4 (12)
Lack of job security	22.2 (16)	13.4 (13)
Heavy workload	27.8 (20)	5.2 (5)
Retired	15.3 (11)	11.3 (11)
Benefits not satisfactory	16.7 (12)	10.3 (10)
Lack of challenging opportunities at agency	11.1 (8)	13.4 (13)
Lack of support from co-workers	13.9 (10)	7.2 (7)
Laid off	**	10.3 (10)
Lack of educational opportunities	13.9 (10)	6.2 (6)
Home or family responsibilities	9.7 (7)	7.2 (7)
Did not like working at agency	12.5 (9)	5.2 (5)
Work related injury	**	9.3 (9)

\* percentages do not add up to 100% because respondents were asked to “check all that apply” \*\*less than 5 cases

**Table 4: First Job After Left Agency**

	<b>Nurses (N=51)</b>	<b>PSWs (N=59)</b>
	<b>Percent (N)</b>	<b>Percent (N)</b>
<b>Job Title</b>		
Case Manager	19.6 (10)	0
Clerical	**	8.5 (5)
Manager or Supervisor	**	**
Nurse	52.9 (27)	**
Home Support Worker	0	27.1 (16)
Health Care Aide	0	22.0 (13)
Other	11.8 (6)	32.2 (19)
Missing	0	3.4 (2)
<b>Type of Business</b>		
Not health care	9.8 (5)	35.6 (21)
Hospital	27.5 (14)	**
Nursing home	7.8 (4)	11.9 (7)
Home Care	31.4 (16)	28.8 (17)
Other health care	23.5 (12)	13.6 (8)
Missing	0	5.1 (3)
<b>Hours per week</b>		
1-14	**	8.5 (5)
15-24	29.4 (15)	8.5 (5)
25-34	9.8 (5)	18.6 (11)
35-44	45.1 (23)	39.0 (23)
45 and more	**	**
Missing	5.9 (3)	20.3 (12)

\*\*less than 5 cases



**Table 5: Reasons to Choose First Job After Left Agency\***

	<b>Nurses (N=51)</b>	<b>PSWs (N=59)</b>
	<b>Percent (N)</b>	<b>Percent (N)</b>
Better pay	54.9 (28)	35.6 (21)
Better opportunities to make use of experience and skills	54.9 (28)	32.2 (19)
Job security	29.4 (15)	23.7 (14)
Location	49.0 (25)	27.1 (16)
Less evening or weekend work	58.8 (30)	16.9 (10)
Guaranteed hours	37.3 (19)	30.5 (18)
Hours not split up	25.5 (13)	35.6 (21)
Family friendly policies	25.5 (13)	22.0 (13)
Better benefits	27.5 (14)	25.4 (15)
Better educational opportunities	29.4 (15)	18.6 (11)
Opportunities for advancement	29.4 (15)	15.3 (9)
More support from supervisors/managers	33.3 (17)	11.9 (7)
Better pay system	27.5 (14)	16.9 (10)
Wanted to adjust own schedule	25.5 (13)	13.6 (8)
More support from co-workers	25.5 (13)	13.6 (8)
Wanted more hours	11.8 (6)	25.4 (15)
Agency held CCAC contract	**	11.9 (7)

\* percentages do not add up to 100% because respondents were asked to “check all that apply” \*\*less than 5 cases

**Table 6: Current Job**

	<b>Nurses (N=48)</b>	<b>PSWs (N=53)</b>
	<b>Percent (N)</b>	<b>Percent (N)</b>
Currently employed	66.7 (48)	54.6 (53)
Job Title		
Case Manager	16.7 (8)	0
Clerical	**	9.4 (5)
Manager or Supervisor	**	**
Nurse	56.3 (27)	**
Home Support Worker	0	26.4 (14)
Health Care Aide	0	22.6 (12)
Other	16.7 (8)	32.1 (17)
Missing	0	1.9 (1)
Type of Business		
Non health care	14.6 (7)	35.8 (19)
Hospital	29.2 (14)	**
Nursing home	**	17.0 (9)
Home Care	27.1 (13)	22.6 (12)
Other health care	22.9 (11)	15.1 (8)
Missing	0	1.9 (1)
Hours per week		
1-14	**	**
15-24	27.7 (13)	**
25-34	10.6 (5)	13.2 (7)
35-44	51.1 (24)	50.9 (27)
45 and more	**	**
Missing	2.1 (1)	15.1 (8)

\* percentages do not add up to 100% because respondents were asked to “check all that apply” \*\*less than 5 cases

**Table 7: Reasons to Choose Current Job\***

	<b>Nurses (N=48)</b>	<b>PSWs (N=53)</b>
	<b>Percent (N)</b>	<b>Percent (N)</b>
Better pay	60.4 (29)	49.1 (26)
Better opportunities to make use of experience and skills	62.5 (30)	37.7 (20)
Job security	43.8 (21)	45.3 (24)
Location	54.2 (26)	30.2 (16)
Less evening or weekend work	62.5 (30)	18.9 (10)
Guaranteed hours	45.8 (22)	34.0 (18)
Hours not split up	29.2 (14)	39.6 (21)
Family friendly policies	27.1 (13)	17.0 (9)
Better benefits	35.4 (17)	37.7 (20)
Better educational opportunities	37.5 (18)	20.8 (11)
Opportunities for advancement	35.4 (17)	20.8 (11)
More support from supervisors/managers	33.3 (16)	15.1 (8)
Wanted to adjust own schedule	31.3 (15)	11.3 (6)
Better pay system	33.3 (16)	17.0 (9)
More support from co-workers	27.1 (13)	15.1 (8)
Wanted more hours	14.6 (7)	34.0 (18)
Agency held CCAC contract	**	**

**Table 8: Current Job vs. Previous Job**

	<b>Nurses (N=48)</b>		<b>T Test Sig. (2 tailed)</b>	<b>PSWs (N=53)</b>		<b>T Test</b>
	<b>1996</b>	<b>Current</b>		<b>1996</b>	<b>Current</b>	
	<b>Percent (N)</b>	<b>Percent (N)</b>		<b>Percent (N)</b>	<b>Percent (N)</b>	
<b>Type of Pay</b>						
Hourly	56.3 (27)	60.0 (27)	Not Applicable	86.8 (46)	66.0 (31)	Not Applicable
Salaried	41.7 (20)	35.6 (16)		**	23.4 (11)	
Per Service	**	**		9.4 (5)	10.6 (5)	
<b>Satisfaction With Way Paid</b>						
Very dissatisfied/dissatisfied	20.8 (10)	**	Significant (p.<.001)	15.7 (8)	**	Significant (p.<.01)
Neither satis. nor dissatisfied	22.9 (11)	11.1 (5)		21.6 (11)	17.0 (8)	
Satisfied/very satisfied	56.2 (27)	86.6 (39)		62.7 (32)	78.7 (37)	
<b>Satisfaction With Wages/Amount</b>						
Very dissatisfied/dissatisfied	68.1 (32)	**	Significant (p.<.001)	49.1 (26)	21.7 (10)	Significant (p.<.01)
Neither satis. nor dissatisfied	**	22.2 (10)		20.8 (11)	19.6 (9)	
Satisfied/very satisfied	23.4 (11)	68.9 (31)		30.2 (16)	58.7 (27)	
<b>Satisfaction With Benefits</b>						
Very dissatisfied/dissatisfied	42.2 (19)	**	Significant (p.<.001)	21.5 (11)	21.3 (10)	Not Significant
Neither satis. nor dissatisfied	22.2 (10)	19.5 (8)		27.5 (14)	21.3 (10)	
Satisfied/very satisfied	35.5 (16)	73.2 (30)		51 (26)	57.5 (27)	
<b>Overall Satisfaction With Job</b>						
Very dissatisfied/dissatisfied	37.5 (18)	**	Significant (p.<.001)	30.8 (16)	**	Significant (p.<.001)
Neither satis. nor dissatisfied	12.5 (6)	**		23.1 (12)	17.0 (8)	
Satisfied/very satisfied	50.0 (24)	91.1 (41)		46.2 (24)	78.7 (37)	
<b>Overall Job Stress</b>						
Not at all/ not very stressful	**	**	Not Significant	15.4 (8)	34 (16)	Significant (p.<.001)
Somewhat stressful	45.8 (22)	57.8 (26)		50.0 (26)	55.3 (26)	
Very stressful/stressful	45.8 (22)	33.3 (15)		34.6 (18)	10.6 (5)	

\*\*less than 5 cases

**Table 9: 1996 Survey, Comparison of Means between the Stayers and the Leavers (Retired Persons Excluded)**

	Nurses		F Test	PSWs		F Test
	Stayers (N=91)	Leavers (N=104)		Stayers (N=170)	Leavers (N=194)	
	Mean (std. dev)	Mean (std. dev)		Mean (std. dev)	Mean (std. dev)	
Stress	31.05 (4.88)	32.73 (5.94)	4.581*	30.27 (5.51)	32.31 (6.37)	10.483**
Workload	20.07 (3.81)	21.04 (5.24)	2.139	19.01 (3.76)	19.14 (4.46)	.089
Organizational Change	14.07 (3.09)	15.02 (2.97)	4.790*	12.32 (2.91)	12.73 (3.02)	1.789
Fear of Budget Cuts	10.81 (2.39)	11.03 (2.24)	.432	11.50 (2.00)	11.22 (2.49)	1.314
Fear of Job Loss	10.40 (2.54)	10.46 (2.81)	.027	10.02 (2.81)	9.56 (3.08)	2.156
Organizational Support	33.85 (5.62)	30.88 (5.98)	12.644***	35.10 (5.99)	33.12 (6.61)	8.937**
Peer Support	14.44 (2.49)	14.00 (2.57)	1.454	13.43 (2.52)	13.12 (2.86)	1.162
Difficult Clients	8.33 (1.17)	7.84 (1.37)	7.182**	7.08 (1.60)	7.50 (1.68)	5.830*
Hours of work predictable	3.59 (1.13)	2.82 (1.41)	17.660***	3.09 (1.21)	2.76 (1.24)	6.493*
Earnings Predictable	3.70 (1.15)	2.08 (2.73)	9.988**	3.01 (1.23)	2.74 (1.24)	4.374*
Work Shifts	2.08 (0.91)	2.73 (1.30)	16.026***	1.89 (1.09)	2.07 (1.28)	2.439
Work Weekends	2.89 (0.72)	3.44 (.97)	19.333***	3.02 (1.26)	2.86 (1.30)	1.361
Benefits are Good	3.18 (1.14)	2.38 (1.16)	23.682***	3.70 (0.99)	3.13 (1.28)	22.047***
Feeling of Being Fairly Paid	2.69 (1.13)	2.64 (1.13)	.126	3.46 (1.02)	3.32 (0.98)	1.801
Years of School 1996	14.42 (1.20)	14.92 (1.50)	6.417*	12.68 (2.52)	12.76 (2.68)	.083
Age	44.09 (7.47)	40.28 (10.10)	8.738**	42.17 (9.18)	42.60 (11.83)	.150

\* p <.05; \*\* p<.01; \*\*\* p<.001

**Table 10: Logistic Regression With Stress as Mediating Variable- Dependent Variable: Left Agency (0=no; 1=yes) [Retired Persons Excluded]**

Independent Variables	Nurses (N=195)	PSWs (N=364)
	B (SE B)	B (SE B)
Stress	.037 (.045)	.061 (.023)**
Workload	.099 (.061)	-.039 (.033)
Organizational Change	.170 (.095)	-.049 (.051)
Fear of Job Loss	-.175 (.101)	-.040 (.043)
Organizational Support	-.079 (.046)	-.033 (.026)
Peer Support	.006 (.096)	.040 (.051)
Difficult Clients	-.828 (.217)***	.166 (.075)*
Hours of Work Predictable	-.924 (.335)**	-.132 (.144)
Earnings Predictable	.998 (.367)**	-.057 (.140)
Work Shifts	.800 (.246)**	.191 (.110)
Work Weekends	.397 (.294)	-.230 (.101)*
Benefits are good	-.711 (.239)**	-.378 (.117)**
Feeling of being fairly paid	.153 (.210)	.113 (.134)
Years of Schooling 1996	.607 (.173)***	.012 (.049)
Marital Status		
Married (ref)		
Divorced	2.267 (1.103)*	.502 (.430)
Never Married	-.194 (.820)	-.393 (.360)
Widowed	1.149 (1.542)	.618 (.649)
Separated	1.325 (.802)	-.050 (.480)
Missing Marital Status	-1.200 (1.578)	.079 (.661)
Children	-1.048 (.462)*	-.476 (.250)
Age	-.061 (.025)*	.005 (.012)
Constant	-2.269 (4.246)	1.003 (1.941)

\* p <.05; \*\* p<.01; \*\*\* p<.001

## REFERENCES

- Aronson, J., Denton, M. Zeytinoglu, I., & Davies, S. 2004. "Market-Modeled Home Care in Ontario: Deteriorating Working Conditions and Dwindling Community Capacity," *Canadian Journal of Public Policy* 30(1):111-125.
- Abelson, M.A. and Baysinger, B.D. 1984. "Optimal and Dysfunctional Turnover: Towards an Organizational Level Model," *Academy of Management Review* 9:331-341.
- Alnajjar, A.A. 1996. "Relationship Between Job Satisfaction and Organizational Commitment Among Employees in the United Arab Emirates," *Psychological Reports* 79:315-321.
- Aronson, J. & Sammon, S. 2000. "Practice Amid Social Service Cuts and Restructuring: Working with the Contradictions of 'Small Victories,'" *Canadian Social Work Review* 17(2):167.
- Canadian Association of Retired Persons (CARP). 2001. *Report on Home Care*.
- Caro, F. G. and Kaffenberger, K. R. 2001. "The Impact of Financing on Workforce Recruitment and Retention, *Generations* 25(1):17-20.
- Cohen-Mansfield, J. 1995. "Stress in Nursing Home Staff: A Review and a Theoretical Model," *Journal of Applied Gerontology* 14(4):444-466.
- Cushman, J., Barnette, M. and Williams, K. 2001. "Retaining Home Care Aides: Survey Results and Recommendations," *CARING Magazine* (September):54-58.
- Cushman M. J., Ellenbecker, C. H., Wilson, D. E., McNally, M. and Williams, K. 2001. "Home Health Nurses –Why They Leave and Why They Stay," *CARING Magazine* (October):62-67.
- Dawson, S. T. and Surpin R. 2000. "The Home Health Aide," *Care Management Journals* 2(4):226-230.
- Denton, M, Zeytinoglu, I. and Davies, S. 2002. "Working in Clients' Homes: The Impact on the Mental Health and Well-Being of Visiting Home Care Workers," *Home Health Care Services Quarterly* 21(1):1-27.
- Denton, M., Zeytinoglu, I. and Davies, S. 2003. *Organizational Change and the Health and Well-Being of Home Care Workers*. SEDAP Working Paper #110, <http://socserv2.socsci.mcmaster.ca/sedap>.

- Denton., M. Zeytinoglu, I., Davies, S. and Lian, J. 2002. "Job Stress and Job Dissatisfaction of Home Care Workers in the Context of Health Care Restructuring," *International Journal of Health Services* 32(2):327-357.
- Fang, Y. and Baba, V. 1993. "Stress and Turnover Intention: A Comparative Study Among Nurses," *International Journal of Comparative Sociology* 34(1/2):24-38.
- Feldman, P. 1993. "Work Life Improvements for Home Care Workers: Impact and Feasibility," *The Gerontologist* 33(1):47-54.
- Ferris, G.R. and Rowland, K.M. 1987. "Tenure as a Moderator of the Absence-Intent to Leave Relationship," *Human Relations* 40(5):255-266
- Fuller, C. 2001. *Home Care: What We Have, What We Need*. Ottawa: The Canadian Health Coalition (May).
- Gilbert, N. J. 1991. "Home Care Worker Resignations: A Study of the Major Contributing Factors," *Home Health Care Services Quarterly* 12(1):69-83.
- Griffeth, R., Hom, P. and Gaertner, S. 2000. "A Meta-Analysis of Antecedents and Correlates of Employee Turnover: Update, Moderator Tests, and Research Implications for the Next Millenium," *Journal of Management* 26(3):463-488.
- Human Resources Development Canada. 2003. Canadian Home Care Human Resources Study, Synthesis Report, <http://www.cacc-acssc.com/english/pdf/homecareresources/EngSynth.pdf>.
- Human Resources Development Canada. 2003a. Canadian Home Care Human Resources Study, Phase 1 Report: Setting the Stage: What Shapes the Home Care Labour market?, <http://www.cacc-acssc.com/english/pdf/homecareresources/final-report.pdf>.
- Human Resources Development Canada. 2003b. Canadian Home Care Human Resources Study, Technical Report, <http://www.cacc-acssc.com/english/pdf/homecareresources/EngTechnic.pdf>.
- Human Resources Development Canada. 2003c. Canadian Home Care Human Resources Study, Appendices, <http://www.cacc-acssc.com/english/pdf/homecareresources/EngAppendices.pdf>.

- Kiyak, H.A., Namazi, K.H. and Kahana, E.F. 1997. "Job Commitment and Turnover Among Women Working in Facilities Serving Older Persons," *Research on Aging* 19(2):223-246.
- Lee, T. W., and Maurer, S. D. 1997. "The Retention of Knowledge Workers With the Unfolding Model of Voluntary Turnover," *Human Resource Management Review* 7:247-275.
- Lyons, T.F. 1971. "Role Clarity, Need for Clarity, Satisfaction, Tension, and Withdrawal," *Organizational Behavior and Human Performance* 6:99-110.
- Minister of Public Works and Government Services Canada. 1999. *Human Resource Issues in Home Care in Canada: A Policy Perspective*.
- Mitchell, T.R., Brooks, C.H., Lee, T.W., Sablinski, C.J. and Erez, M. 2001. "Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover," *Academy of Management Journal* 44(6):1102-1121.
- Mowday, R.T. and Steers, R.M. 1979. "The Measurement of Organizational Commitment," *Journal of Vocational Behavior* 14:224-247.
- Ontario Association of Community Care Access Centres (OACCAC). 2000. *Human Resources: A Looming Crisis in the Community Care System in Ontario*, (July).
- Ontario Community Support Association. (OCASA). 2000. *The Effect of the Managed Competition Model on Home Care in Ontario: Emerging Issues and Recommendations*, (June).
- Ontario Home Health Care Provider's Association (OHHCPA). 1999. *Recruitment and Retention of the Home Care Sector Workforce*, (October).
- Porter, L.W., Steers, R.M., Mowday, R.T. and Boulian, P.V. 1974. "Organizational Commitment, Job Satisfaction, and Turnover Among Psychiatric Technicians," *Journal of Applied Psychology* 59(5):603-609.
- Steel, R. P. 2002. "Turnover Theory at the Empirical Interface: Problems of Fit and Function," *Academy of Management Review* 27(3):346-360.
- Stone, R. 2001. "Research on Frontline Workers in Long-Term Care," *Generations* 25(1):49-57.
- Wai Chi Tai, T., Bame, S. I., and Robinson, C.D. 1998. "Review of Nursing Turnover Research," *Social Sciences and Medicine* 47(12):1905-1923.

- Zeytinoglu, I. U. Denton, M. I & Davies, S. 2002. 'Casual Jobs, Work Schedules and Self-Reported Musculoskeletal Disorders Among Visiting Home Care Workers,' *Women's Health and Urban Life Journal* 1(1):24-31.
- Zeytinoglu, I. U. Denton, M., Davies, S. & Lian, J. 2000. "Self-Reported Musculoskeletal Disorders Among Office and Visiting Home Care Workers," *Women & Health* 31(2/3):1-35.



## QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
No. 351:	Describing Disability among High and Low Income Status Older Adults in Canada	P. Raina M. Wong L.W. Chambers M. Denton A. Gafni
No. 352:	Some Demographic Consequences of Revising the Definition of <del>Old</del> to Reflect Future Changes in Life Table Probabilities	F.T. Denton B.G. Spencer
No. 353:	The Correlation Between Husband's and Wife's Education: Canada, 1971-1996	L. Magee J. Burbidge L. Robb
No. 354:	The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1988 Tax Flattening in Canada	M.-A. Sillamaa M.R. Veall
No. 355:	Population Change and the Requirements for Physicians: The Case of Ontario	F.T. Denton A. Gafni B.G. Spencer
No. 356:	2 ½ Proposals to Save Social Security	D. Fretz M.R. Veall
No. 357:	The Consequences of Caregiving: Does Employment Make A Difference?	C.L. Kemp C.J. Rosenthal
No. 358:	Exploring the Effects of Population Change on the Costs of Physician Services	F.T. Denton A. Gafni B.G. Spencer
No. 359:	Reflexive Planning for Later Life: A Conceptual Model and Evidence from Canada	M.A. Denton S. French A. Gafni A. Joshi C. Rosenthal S. Webb
No. 360:	Time Series Properties and Stochastic Forecasts: Some Econometrics of Mortality from The Canadian Laboratory	F.T. Denton C.H. Feaver B.G. Spencer
No. 361:	Linear Public Goods Experiments: A Meta-Analysis	J. Zelmer

# QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
No. 362:	The Timing and Duration of Women's Life Course Events: A Study of Mothers With At Least Two Children	K.M. Kobayashi A. Martin-Matthews C.J. Rosenthal S. Matthews
No. 363:	Age-Gapped and Age-Condensed Lineages: Patterns of Intergenerational Age Structure among Canadian Families	A. Martin-Matthews K.M. Kobayashi C.J. Rosenthal S.H. Matthews
No. 364:	The Education Premium in Canada and the United States	J.B. Burbidge L. Magee A.L. Robb
No. 365:	Student Enrolment and Faculty Recruitment in Ontario: The Double Cohort, the Baby Boom Echo, and the Aging of University Faculty	B.G. Spencer
No. 366:	The Economic Well-Being of Older Women Who Become Divorced or Separated in Mid and Later Life	S. Davies M. Denton
No. 367:	Alternative Pasts, Possible Futures: A “What If” Study of the Effects of Fertility on the Canadian Population and Labour Force	F.T. Denton C.H. Feaver B.G. Spencer
No. 368:	Baby-Boom Aging and Average Living Standards	W. Scarth M. Souare
No. 369:	The Impact of Reference Pricing of Cardiovascular Drugs on Health Care Costs and Health Outcomes: Evidence from British Columbia – Volume I: Summary	P.V. Grootendorst L.R. Dolovich A.M. Holbrooke A.R. Levy B.J. O'Brien
No. 370:	The Impact of Reference Pricing of Cardiovascular Drugs on Health Care Costs and Health Outcomes: Evidence from British Columbia – Volume II: Technical Report	P.V. Grootendorst L.R. Dolovich A.M. Holbrooke A.R. Levy B.J. O'Brien
No. 371:	The Impact of Reference Pricing of Cardiovascular Drugs on Health Care Costs and Health Outcomes: Evidence from British Columbia – Volume III: ACE and CCB Literature Review	L.R. Dolovich A.M. Holbrook M. Woodruff

## QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
No. 372:	Do Drug Plans Matter? Effects of Drug Plan Eligibility on Drug Use Among the Elderly, Social Assistance Recipients and the General Population	P. Grootendorst M. Levine
No. 373:	Student Enrolment and Faculty Recruitment in Ontario: The Double Cohort, the Baby Boom Echo, and the Aging of University Faculty	B.G. Spencer
No. 374:	Aggregation Effects on Price and Expenditure Elasticities in a Quadratic Almost Ideal Demand System	F.T. Denton D.C. Mountain
No. 375:	Age, Retirement and Expenditure Patterns: An Econometric Study of Older Canadian Households	F.T. Denton D.C. Mountain B.G. Spencer
No. 376:	Location of Adult Children as an Attraction for Black and White Elderly <i>Return</i> and <i>Onward</i> Migrants in the United States: Application of a Three-level Nested Logit Model with Census Data	K-L. Liaw W.H. Frey
No. 377:	The Dynamics of Food Deprivation and Overall Health: Evidence from the Canadian National Population Health Survey	L. McLeod M.R. Veall
No. 378:	Quebec's Lackluster Performance in Interprovincial Migration and Immigration: How, Why, and What Can Be Done?	K-L. Liaw L. Xu M. Qi
No. 379:	Out-of-Pocket Prescription Drug Expenditures and Public Prescription Drug Programs	S. Alan T.F. Crossley P. Grootendorst M.R. Veall
No. 380:	Population Aging, Productivity, and Growth in Living Standards	W. Scarth
No. 381:	The Transition from Good to Poor Health: An Econometric Study of the Older Population	N.J. Buckley F.T. Denton A.L. Robb B.G. Spencer
No. 382:	The Evolution of High Incomes In Canada, 1920-2000	E. Saez M.R. Veall
No. 383:	Population Change and Economic Growth: The Long-Term Outlook	F.T. Denton B.G. Spencer

## QSEP RESEARCH REPORTS - Recent Releases

Number	Title	Author(s)
No. 384:	The Economic Legacy of Divorced and Separated Women in Old Age	L. McDonald A.L. Robb
No. 385:	National Catastrophic Drug Insurance Revisited: Who Would Benefit from Senator Kirby's Recommendations?	T.F. Crossley P.V. Grootendorst M.R. Veall
No. 386:	Wages in Canada: SCF, SLID, LFS and the Skill Premium	A.L. Robb L. Magee J.B. Burbidge
No. 387:	Socioeconomic Influence on the Health of Older People: Estimates Based on Two Longitudinal Surveys	N.J. Buckley F.T. Denton A.L. Robb B.G. Spencer
No. 388:	An Invitation to Multivariate Analysis: An Example About the Effect of Educational Attainment on Migration Propensities in Japan	A. Otomo K-L. Liaw
No. 389:	Financial Planning for Later Life: Subjective Understandings of Catalysts and Constraints	C.L. Kemp C.J. Rosenthal M. Denton
No. 390:	Exploring the Use of a Nonparametrically Generated Instrumental Variable in the Estimation of a Linear Parametric Equation	F.T. Denton
No. 391:	Borrowing Constraints, the Cost of Precautionary Saving, and Unemployment Insurance	T.F. Crossley H.W. Low
No. 392:	Healthy Aging at Older Ages: Are Income and Education Important?	N.J. Buckley F.T. Denton A.L. Robb B.G. Spencer
No. 393	Where Have All The Home Care Workers Gone?	M. Denton I.S. Zeytinoglu S. Davies D. Hunter