

Management and Delivery of Community Nursing Services in Ontario: Impact on the Quality of Care and the Quality of Worklife of Community-based Nurses

Report of Community Nursing Services Study

Principal Investigators Diane Doran, PhD, RN
Jennie Pickard, MScN, RN

Co-Investigators Janet Harris, MScN, RN
Peter C. Coyte, PhD
Andrew MacRae, PhD
Heather Laschinger, PhD, RN
Gerarda Darlington, PhD

Research Coordinator Jennifer Carryer, MN, RN



Research Team

Principal Investigators	Diane Doran, RN, PhD Associate Dean, Research and International Relations Faculty of Nursing, University of Toronto Toronto, Ontario
	Jennie Pickard, RN, MScN Director, Quality, Contracts, Research and Organizational Development Durham Access To Care Whitby, Ontario
Co-Investigators	Janet Harris, RN, MScN Executive Director Durham Access To Care Whitby, Ontario
	Peter C. Coyte, PhD Professor Dept. of Health Policy, Management and Evaluation University of Toronto
	Andrew MacRae, PhD Director and CEO The Research Institute at Lakeridge Health Oshawa, Ontario
	Heather Spence Laschinger, RN, PhD Professor and Associate Director Research School of Nursing, University of Western Ontario London, Ontario
	Gerarda Darlington, PhD Assistant Professor, Mathematics and Statistics University of Guelph Guelph, Ontario
Research Coordinator	Jennifer Carryer, RN, MN

Correspondence regarding this report can be directed to
Diane Doran, Assoc. Dean Research and International Relations
Faculty of Nursing, University of Toronto
50 St George Street, TORONTO ON M5S 3H4
e-mail diane.doran@utoronto.ca

© Diane Doran, Faculty of Nursing, University of Toronto 2004

Table of Contents

RESEARCH TEAM	II
TABLE OF CONTENTS	III
ACKNOWLEDGEMENTS	IV
MAIN MESSAGES.....	V
Background.....	1
What have others written about Managed Competition?.....	1
Purpose of the Study	3
Study Design, Phase 1	3
Results, Phase 1	4
1. What is the extent of for-profit and not-for-profit involvement in home care nursing services?.....	4
2. How similar is the competitive bidding process at CCACs?.....	4
3. How are service agreements monitored?.....	5
4. What are the Advantages and Challenges of the Competitive Bidding Process?.	5
Study Design, Phase 2	6
Study Results, Phase 2	9
I. Quality of Care	9
a. Consistency: What proportion of each client’s visits was made by the same nurse?	9
b. How Did Clients Perceive the Quality of Care?.....	10
c. How Did Nurses Perceive the Quality of Care?	10
d. How Did CCACs and Nursing Agencies Perceive Quality of Care?	11
e. What Proportion of Visits Were Made by Registered Nurses?	12
II. Client Outcomes.....	13
a. How satisfied were clients with their nursing care?	13
b. How did clients’ health status change?.....	13
III Cost of Nursing Care	14
IV Nurse Outcomes.....	15
a. How satisfied were community-based nurses with their jobs?.....	15
b. How satisfied were the nurses with their job security?	16
c. How did staff retention change after competitive bidding began?	16
Conclusions and Policy Implications.....	18
References.....	20

ACKNOWLEDGEMENTS

We gratefully acknowledge Canadian Health Services Research Foundation, the Ontario Ministry of Health and Long-Term Care, and the Nursing Evaluation, Utilization and Outcomes Research Unit, Faculty of Nursing, University of Toronto for their support of this research. The opinions, results and conclusions are those of the authors. No endorsement by the funders is intended or should be inferred.

We would like to thank the Community Care Access Centres, nursing agencies, nurses and clients who participated in this study. The research team recognizes the time and commitment that this study required from all of these people. We also thank them for being open and accommodating when asked to share sensitive data.

We would also like to acknowledge the following Research Assistants: Suzanne Fredericks, Jiao Jiang, Shannon Carey, Katie Fisher, Helen Mann, Tania Arko and Antonio Valente. Special thanks to Sharon Relova, Barbara Thomson and the Statistical Consulting Service, Dept. of Statistics, University of Toronto.

Steering Committee

A Steering Committee has provided consultation since the preliminary planning stages of the study. The same organizations have been represented on the Steering Committee throughout the study, although the names of representatives have changed for some organizations.

Comcare Health Services
Mary Jo Dunlop, Marg McAllister, Heather Arts, Greg More

Ministry of Health and Long-Term Care
Susan Chernin, Irene Medcof

Ontario Association of Community Care Access Centres
Georgina White

ParaMed Home Health Care
Steve Haas

Saint Elizabeth Health Care
Shirlee Sharkey

Victorian Order of Nurses
Sue VanDeVelde-Coke, Diane McLeod

MAIN MESSAGES

This study investigated the impact of the competitive model for awarding home care nursing service contracts in Ontario, on the quality of care, nurse and client outcomes.

Quality of Care

- Clients evaluated the quality of nursing care very highly. Clients cared for by for-profit agencies reported higher quality of care and higher satisfaction than clients cared for by not-for-profit agencies. The differences in client perceptions were statistically significant, but small: for perceived quality of care (4.43 compared to 4.29; standardized effect size 0.17), for client satisfaction (4.20 compared to 4.11; standardized effect size 0.18).
- Nurses evaluated the quality of nursing care moderately high. There was no difference in nurses' perception of the quality of care between for-profit and not-for-profit agencies.
- Consistency of care provider varied by agency but not ownership type, and was enhanced when agencies were awarded longer contracts.
- Consistency of care provider was associated with lower nursing costs, but was not related to client outcomes.
- The majority of CCACs and agency management perceived that quality of care had either remained the same or improved. However, some of the not-for-profit agencies noted the quality of care has declined since the introduction of competitive bidding.

Nurse Outcomes

- Nurses reported moderate work enjoyment, and low satisfaction with their time for care and job security.
- Differences in nurses' work enjoyment, satisfaction with time for care, and job security were observed among agencies, but these were not related to ownership type.
- 54.4% of nurses reported that they do not receive employment benefits.
- 77% of nurses reported that mileage was reimbursed; 53% reported that travel time was reimbursed.
- Nurses who were compensated for their work on an hourly basis reported higher satisfaction with the time for care than those reimbursed per visit.
- There were mixed perceptions across CCACs and agency management about the impact of managed competition on the quality of worklife for nurses.

Client Outcomes

- With the exception of mental health outcomes, there were no differences in client outcomes between for-profit agencies and not-for-profit agencies. Clients from for-profit agencies reported small, but statistically significant higher mental health outcomes than clients from not-for-profit agencies (69.54 vs. 65.64; standardized

effect size of 0.18).

- Client outcomes were related to the client's baseline health status, their baseline functional status and age.
- Clients who received a higher proportion of visits from Registered Nurses (RNs) reported higher psychosocial outcomes than those who received a lower proportion of visits from RNs.

Policy Implications

- The study findings suggest that agency structure (for-profit or not-for-profit) was less of a factor in determining the quality of care or quality of nursing worklife, than other factors related to the nurses' conditions of employment and work experience.
- The observation that the percentage of RN visits was positively related to better psychosocial outcomes suggests research is needed to guide decision-making about which clients benefit from a higher proportion of RN visits.
- The policy direction towards awarding contracts for up to five years should enhance provider agencies' ability to acquire greater stability in staff resources to increase the consistency of care provider.
- Research is needed investigating the best practices within agencies and branches that result in more satisfied staff. The variation in nurses' job satisfaction across agencies suggests that attention should be focused on developing a better understanding of the management and care practices that are most influential in promoting quality of work life in the home health care setting.
- It is unknown if specialty contracts predict nurse or client outcomes. Such contracts are only feasible if there is a critical mass of both clients and nurses. This critical mass is more likely to be found in urban areas than rural areas of the province.
- The CCACs and agencies reported that quality improvement initiatives had either stayed the same or improved with the introduction of competitive bidding, perhaps by creating an incentive for organizations to maintain or improve their services and programs in order to maintain a competitive advantage. However, the process is also creating significant challenges for nurses' job security and quality of worklife, the long-term effect of which is unknown. These challenges need to be addressed through better opportunities for full or part-time employment, better employment benefits, an examination of models for salary reimbursement, and other resources and infrastructure supports that can be provided for community nurses.

Management and Delivery of Community Nursing Services in Ontario: Impact on the Quality of Care and the Quality of Worklife of Community-based Nurses

Background

In 1997, the Ministry of Health and Long-Term Care created 43 Community Care Access Centers (CCACs) to provide a single point of access for home care and for long-term placement coordination services. CCACs were mandated to award service contracts to provider agencies using a competitive ‘request-for-proposals’ (RFP) process. Both for-profit and not-for-profit agencies submit proposals to the CCACs in response to RFPs, and in turn are awarded contracts for pre-determined periods of time. This study described the competitive model and examined its impact on the quality of care and quality of work-life of community-based nurses. Specifically, the study’s objectives focused on identifying 1) the extent of for-profit and not-for-profit involvement in the delivery of home care nursing services, 2) the methods used to award and monitor nursing contracts and 3) the relationship between the methods and the quality of client care, client satisfaction, nurse satisfaction, job security and nurse turnover.

The examination of the competitive model for awarding home care nursing contracts in Ontario was timely in that the model was still in the early stages of development; evaluation has provided useful information to refine the model. Furthermore, knowledge of the strengths and weaknesses of the model can inform health care policy in other parts of Canada. Since completing the study, the request for proposal template and guidelines for awarding and monitoring service contracts have continued to evolve, as have provider agencies’ experience with managed competition. The study findings reflect the early stages of the implementation of managed competition.

What have others written about Managed Competition?

Managed competition is a topic of interest in health care as systems around the world seek cost effective solutions to escalating costs. Much of the international research on managed competition has focused on the acute care sector and on physician services. In response to the mandatory contracting for home care services in Ontario, an increasing amount of research focusing on the community sector has developed.

Abelson et al. (2004, in press) noted that the implementation of the competitive contracting model has focused attention on improved accountability relationships between purchasers and providers, and has begun to improve accountability for meeting contractual obligation. However, they also noted the emerging benefits might be outweighed by “the transaction costs incurred by purchaser and provider

agencies as well as the quality of care and continuity concerns raised by individual clients and providers who must establish and build new relationships following the awarding of new contracts and agency transfers". Denton, Zeytinoglu, and Davies (2003) documented high levels of stress, burnout and physical health problems among home care workers, many of which were deemed to be preventable. The study concluded that restructuring and organizational change were significant factors in decreasing job satisfaction, increasing absenteeism rates, increasing fear of job loss, and propensity to leave.

In another line of enquiry, a study by Brega, Jordan and Schlenker (2003) examined the variation in home care utilization at 44 agencies in eight American states. The sample included Medicare clients aged 65 or older, with congestive heart failure or diabetes mellitus. Patients whose initial assessments were conducted by more experienced care providers had longer lengths of stay; proprietary agencies had significantly higher visit intensity, shorter lengths of stay, and more alternative services. Agencies that used standardized care plans had longer episode lengths than did agencies without such plans. Such care plans may ensure that appropriate care standards are met, regardless of utilization policies.

Ontario has experienced many changes with respect to home care services. In a policy analysis of relevant literature, Deber (2002) described several issues that arose with the creation of CCACs and the use of Requests for Proposals (RFPs). Deber submitted that some of the complaints regarding the delivery model, and disparity in compensation levels could occur regardless of ownership; however, there have been criticisms specifically directed towards for-profit private delivery of care. Such complaints included the challenges related to obtaining data when for-profit providers can control disclosure.

The cost of managed competition and care has also been explored. Browne (2000) acknowledged that although market competition could lower costs, improve efficiency, and enhance the quality and the quantity of service in the short-term, it does not have positive long-term effects. He contends quality and efficiency have been redefined and made more measurable but trust has been undermined. He argues that competitive bidding has the goal of making workers, agencies, and CCACs more accountable to the provincial government but ultimately, continuity of care could be weakened if staff turnover results from contracts that could change every few years. Williams et al (1999) noted concerns in the long term care sector with capped budgets and increasing demands on CCACs, coupled with managed competition, which could result in a decline in service quality and consumer choice. Cloutier-Fisher (2003) later documented concern that the restructuring of community services and the substantial reinvestment in residential long-term care facilities would result in greater institutional care than home care for some elderly people.

In summary, debate about the comparative performance of for-profit and not-for-profit home health care services have been prevalent in the health care literature (Rosenau & Linder, 2001). Much of this debate has yet to be informed with the

findings of evaluation studies. Managed competition, and in particular, the competitive model for awarding home care services in Ontario, has spawned its own debate in the literature. In response, researchers have begun to address the gap in our scientific knowledge about the impact of managed competition. Key findings from the recent literature suggest that home care restructuring has resulted in decreased job satisfaction of home health care workers, increased absenteeism, and fear of job loss (Denton et al., 2003); undermined trust (Browne, 2000); and perhaps compromised the long-term continuity of care because of staff turnover (Browne, 2000). Most of the studies have focused on care provider and agency perspectives. None of the studies have addressed the hidden costs of managed competition, such as the administrative costs for CCACs and provider agencies. Evaluation of the relative performance of for-profit and not-for-profit home health care services is a research priority urgently needed (Rosenau & Linder, 2001), as is greater knowledge of the impact of the Ontario model for awarding home care services on the quality of care, outcomes and costs for clients. This study was aimed at addressing some of these gaps in the literature.

Purpose of the Study

The study was conducted over two phases. Phase One described the competitive bidding process, and Phase Two examined its impact on the quality of care, client outcomes, costs for home care nursing services and nurse outcomes. Phase 1 included data from 1995 to 2001. Highlights from this report are included immediately below. The complete report of Phase One of the Study can be accessed at www.nursing.utoronto.ca/faculty/bios/CNSS_Phase_1_Reportb.pdf

Study Design, Phase 1

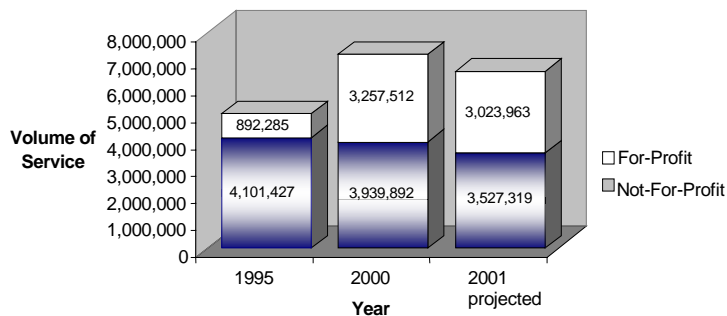
A descriptive design was used to collect qualitative and quantitative data from 42 of the 43 CCACs in Ontario concerning the process by which they selected providers through a contracting process based on competitive bidding. Sources for data collection at CCACs included the Executive Director (ED), or designate, the RFP Coordinator, as well as corporate documents. The methods included self-report of contract characteristics (length of contract, for-profit or not-for-profit status of service provider, nature of services offered, rates and volumes of service), as well as document review (RFPs, evaluation tools, and policies about awarding contracts). In addition, CCACs and selected provider agencies were invited to participate in a semi-structured interview that focused on their experience with the competitive bidding process.

Results, Phase 1

1. What is the extent of for-profit and not-for-profit involvement in home care nursing services?

Market Share changed dramatically following the introduction of competitive bidding. Figure 1 represents the nursing service volumes that increased substantially after 1995. The figure demonstrates that the not-for-profit volumes of service declined marginally, while the for-profit agencies gained significant market share from 1995 to 2001.

Figure 1. Volume of Nursing Service by For-Profit and Not-For-Profit Agencies for 1995, 2000, and 2001



2. How similar is the competitive bidding process at CCACs?

Every CCAC had a structured process for reviewing and scoring proposals that were submitted by agencies. A detailed review of nursing RFPs from 39 CCACs was conducted. A performance framework with 28 themes was developed to describe the variation among RFPs. Although there was general consistency in expectations about what service attributes are important to demonstrate, there was variability in the level of detail concerning how the service attributes were defined and/or assessed. There was wide variation in what the RFPs included about consistency of care provider, ratio of RN/RPN visits, timeliness of response to service referrals, evidence of effectiveness, and accountability expectations. CCACs were unanimous in commenting that paper documents did not consistently reflect the reality of how agencies manage their operations and deliver care. For this reason, some sites allocate marks for “credibility” of the proposal, and 61% of CCACs conducted site visits to agencies as a component of the evaluation process. Price performance was only considered after an agency had met mandatory quality requirements. The weighting that was given to the price varied from 0 to 30% of the final score.

3. How are service agreements monitored?

Thirty-six CCACs provided information about how they managed nursing service contracts. Monitoring billings, service delivery, and client satisfaction are established processes at all sites. Expectations of formal communication varied widely. Four key strategies were identified: 1) ask agencies to report agency data regarding client satisfaction, consistency of nursing staff, and recruitment and retention of nursing staff using agency-specific formats; 2) ask agencies to compile reports on a pre-set schedule using CCAC documents; 3) conduct site audits to manually abstract information from agency sources; 4) convene formal meetings with providers, either individually or as a group, to discuss current issues. There was wide variation about which performance standards were monitored routinely.

4. What are the Advantages and Challenges of the Competitive Bidding Process?

Both CCAC and agency management had an opportunity to comment on their opinions about the competitive bidding process for nursing contracts.

Advantages

- More equitable, transparent and rigorous than contracting out under pre-RFP processes;
- More accountability, clearer expectations; CCACs required to develop standards;
- More business-like contract performance management;
- More information available to CCACs about the nursing provider agencies, resources and management practices;
- Clearer reporting processes about client care;
- Improved invoicing;
- Capacity: broader scope of services available, some agencies have built capacity;
- Access: Improved hours of service, improved access to multi-lingual services;
- Raised the bar for continuity and consistency of care;
- More collaboration among providers (except at RFP time or relating to competitive advantage); collaborative staff education in some communities;
- Some CCACs confident that quality of care has improved, some believe that it has declined, some are undecided.

Challenges

- Costly for CCACs and agencies; in particular, there are high administrative costs associated with responding to RFPs. These administrative costs are difficult to quantify, but are perceived to be quite significant. One report sites the costs at approximately \$30,000.00 per RFP (Ontario Community Support Association, 2000).
- Significant non-direct costs because administrative staff are withdrawn from supervisory and management activities to respond to RFPs.
- Not conducive to inter-disciplinary and inter-agency collaboration because of competitive pressures;
- Destabilizing when contracts change: disruptive for CCACs, agencies, nurses and clients;
- Economy of scale: hard for small businesses to compete; volume drives price; staff training is burdensome to small agencies; may need contracts for both nursing and personal support to ensure viability in small communities; rural areas are more costly to service;
- Existing providers seem to have a competitive advantage because they have acquired experience in responding to RFPs and because they have established credibility with CCACs;
- Challenge to develop realistic quality and human resource standards in a complex, dynamic environment;
- Perceived negative impact on nurses (seniority, pensions, benefits) when they change employers because of an RFP process;
- Inconsistent RFP expectations and reporting requirements among CCACs results in increased administrative costs for provider agencies who are expected to tailor their response to these different expectations and requirements;
- Fee-for-service promotes task orientation;
- Challenge for CCACs to manage service needs of clients and costs of service contracts in the face of fiscal uncertainties.

Study Design, Phase 2

Descriptive data were collected from nurses and clients at 11 CCACs that were sampled randomly and stratified by region. All regions of Ontario were represented, both rural and urban. Data on the contract volume, duration, and potential for renewal were compiled from the Phase 1 data or updated if a new contract had been issued since the completion of Phase 1. One agency, with a single contract, declined to participate, resulting in *11 agencies with 34 nursing contracts* included in Phase 2. This study did not evaluate how nurse or client outcomes have changed since the introduction of managed competition because

historic data were not available for comparison.

Contracts: The study excluded “overflow” or single-client contracts that are commonly used at some sites for challenging-to-serve clients and during peak demand periods. Eighteen (52.9%) contracts were held by for-profit agencies. CCACs issued an average of 3.1 nursing contracts (minimum 2, maximum 5). The average contract volume was 56,352 visits and shift hours; the high standard deviation reflected a broad range of small and large volume contracts. Nine of the 11 CCACs had awarded contracts concurrently to both for-profit and not-for-profit agencies. Nine agencies held contracts with more than one CCAC.

Variables that were studied in Phase 2 are listed in Table 1. They are described in more detail in the sections of the report that follow.

Table 1. Study Variables

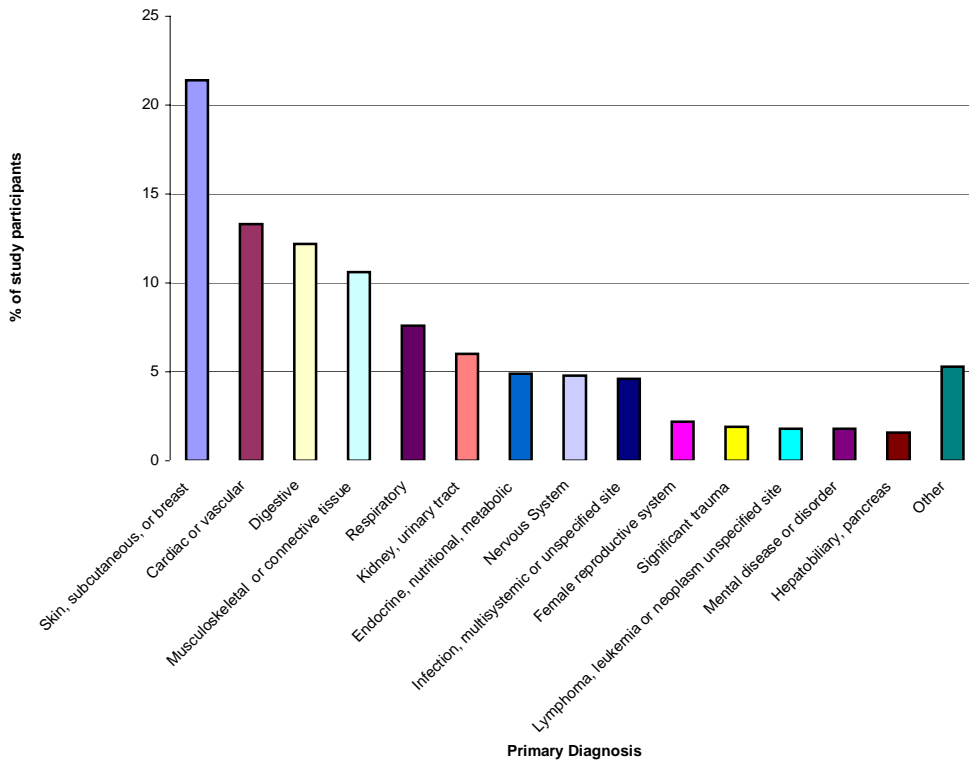
Input (structural) Variables	Process Variables	Outcome Variables
<i>Client characteristics</i>	Client perceived quality of nursing care	<i>Client Outcomes</i>
Age		Client satisfaction with nursing care
Gender		
Marital	Nurse perceived quality of nursing care	
Live alone (yes/no)		SF-36 subscales:
Change in health status in past week		General health
Anticipated duration of service	Consistency of care provider	Physical function
Cancer diagnosis (yes/no)		Role physical
Diagnosis category	% of visits by a Registered Nurse (RN)	Role emotional
Telephone screener general activities of daily living (ADL)		Social function
Telephone screener instrumental activities of daily living (IADL)		Bodily pain
<i>Nurse characteristics</i>		Vitality
Age		Mental health
Experience with community nursing (years)		<i>Nurse Outcomes</i>
Experience with agency (years)		Work enjoyment
Employment status (full-time, part-time, casual)		
Hours worked per week		Satisfaction with time for care
		Perception of job security
<i>Contract Characteristics</i>		Nurse retention
Agency structure (for-profit or not-for-profit)		Turnover rate
Contract length		
Potential length of contract if renewed		Cost of nursing care paid by CCACs
Volume of service		

Participants

Nurses: A total of 700 nurses participated, representing a response rate of 49.0%. Questionnaires were distributed to all nurses who had been employed by participating agencies for 6 months or longer. The “average” nurse respondent was a 45-year-old female, working 29.1 hours/week, and employed in the community for 8.2 years. The average length of employment with the current agency was 6.0 years, but the high standard deviation indicated wide variation among respondents. Of the respondents, 30.4% reported that they were employed on a regular full-time basis, 39.3% part time, and 31.4% casual. 29.9% of nurses reported that they work for more than one nursing employer. More nurses from for-profit agencies were employed on a casual basis than nurses from not-for-profit agencies (38% versus 25%). More nurses from not-for-profit agencies were employed on a full-time basis than for-profit agencies (35% versus 26%). There was little difference in the number of nurses employed on a part-time basis between for-profit agencies (36%) and not-for-profit agencies (40%).

Clients: Data from 740 clients aged 19 to 87, recruited through the Community Care Access Centres, were included in the study. The mean age of clients was 63.7 years; 60.7% of participants were married or cohabitating; and 61.2% were female. The anticipated duration of service varied from 2 weeks or less (14.8%) to 6 weeks or more (55.1%). The clients’ primary diagnoses are presented in Figure 2. Carcinoma was recorded as the primary diagnosis for 20.8% of clients, represented proportionally among for-profit and not-for-profit agencies.

Figure 2. Primary Diagnoses of Clients



Study Results, Phase 2

I. Quality of Care

Quality was evaluated using 4 factors: consistency of nurse, client perception of quality, nurse perception of quality, and proportion of RN visits. In addition, senior management at each participating CCAC and agency were surveyed regarding their perceptions of changes in quality of care and other factors following the introduction of competitive bidding.

a. Consistency: What proportion of each client’s visits was made by the same nurse?

Consistency of care provider is one measure of continuity (Reid et al., 2002; Woodward et al., 2004). One hundred percent continuity is not an achievable target for all clients, and probably not even a desirable target, because a change in staffing provides the opportunity for the infusion of new perspectives in care, cross-checking, and exposes the nurse to different clients, resulting in the enrichment of nursing knowledge and skills. Clients received, on average, 67% of visits from the same nurse. Approximately 22% of clients had all of their visits by the same nurse; 34% of the sample had 80% or more of their visits by the same nurse. Consistency of care provider can be expected to be lower if a client

requires more than one visit per day, if daily visits are required including weekends, if a client is admitted on a Friday or Saturday, and if a client's level of care changes, with a resultant switch from RN to RPN or vice versa. Clients in the study received a median of 10 visits (25th and 75th percentiles = 5 and 26) during study participation, a maximum of 6 weeks.

- Consistency was not predictive of client outcomes
- As the number of visits increased, consistency decreased
- Consistency varied by agency, but not ownership type
- Higher consistency was associated with lower costs CCACs paid for nursing services
- Older clients and longer contracts were linked with higher consistency

The relationship between longer contracts and consistency might reflect the fact that when agencies are awarded longer contracts, they are able to build their staffing to levels that provide them with the flexibility and staff resources to optimize nurse assignments.

b. How Did Clients Perceive the Quality of Care?

A mean score of 4.38 on a 5-point scale indicated clients considered the quality of community nursing care to be very high.

- Clients cared for by for-profit agencies perceived higher quality care than clients cared for by not-for-profit agencies. The differences in client perceptions were statistically significant, but small: (4.43 compared to 4.29; standardized effect size 0.17).
- Female and married clients reported higher quality of nursing care
- Clients who needed more assistance with instrumental activities of daily living had a higher perception of the quality of nursing care.

The observation that clients with for-profit agencies viewed the quality of nursing care more favorably than clients with not-for-profit providers is contrary to the highly publicized criticisms that have surfaced in the debates about managed competition. It is possible that the clients' perceptions could have been adversely affected if they were cared for by an agency that was experiencing significant organizational changes or shifts in service volumes.

c. How Did Nurses Perceive the Quality of Care?

Nurses' Perception of Quality of Care on a 5-point scale ranged from 1.3, indicating low quality care, to 5.0, indicating very high quality of care. The mean score of 3.8 suggests a moderate level of nurses' satisfaction with the quality of nursing care. None of the contract characteristic variables or nurse variables influenced nurses' perceptions of the quality of care. Scores were comparable for for-profit and not-for-profit agencies.

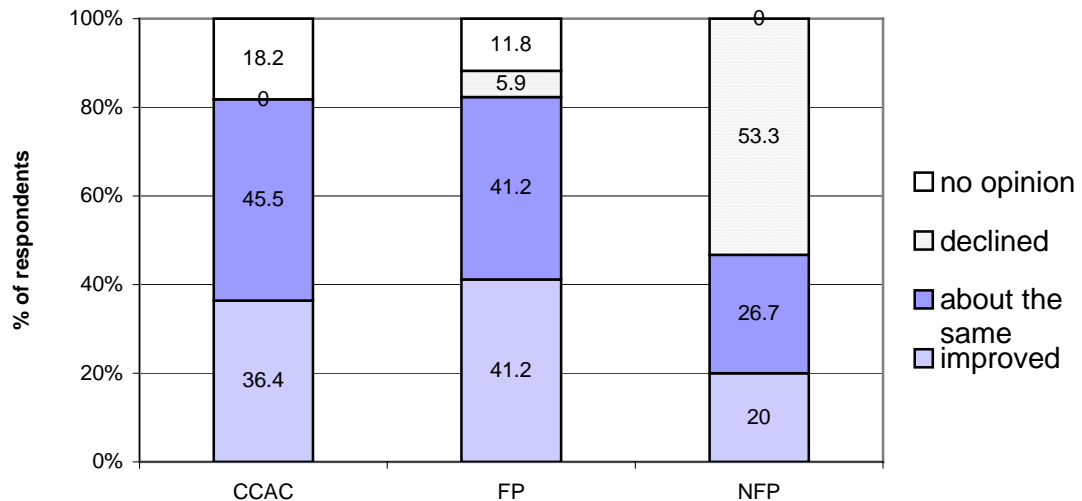
- Nurses were least satisfied with their ability to provide high quality care.

- Nurses were most satisfied with their ability to keep clients comfortable, with patient care, and with the technical nature of care.

d. How Did CCACs and Nursing Agencies Perceive Quality of Care?

CCACs and nursing agencies were surveyed to learn their opinion about factors that might have changed following the introduction of competitive bidding for contracts. The data in Figures 3 and 4 demonstrate wide variation in views. For instance, 53% of the not-for-profit agencies expressed the opinion that the quality of care has declined following managed competition. None of the CCACs expressed this opinion, and approximately 6% of the for-profit agencies expressed this opinion.

Figure 3. Corporate Perception of Quality of Nursing Care



Competitive bidding was perceived to result in benefits, such as increases in quality improvement initiatives, although there was wide variation in opinions, with approximately 64% of the CCACs and for-profit agencies expressing this opinion and only 20% of the not-for-profit agencies expressing this opinion. Forty six percent of the not-for-profit agencies expressed the opinion that quality improvement initiatives have declined, whereas none of the CCACs representatives or for-profit agency representatives expressed this opinion. It is possible that managed competition creates incentives for organizations to maintain or improve their services and programs in order to maintain competitive advantage, although as noted above this impact is not universally expressed.

Figure 4. Corporate Perception of Quality Improvement Initiatives

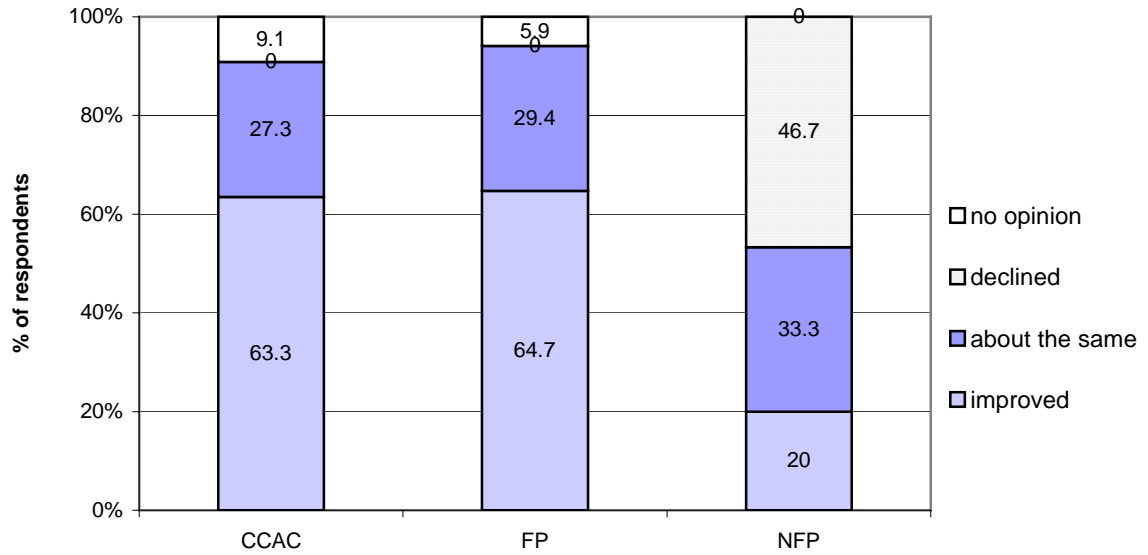


Table 2. Corporate Perception of Change Following Competitive Bidding

Item		CCAC (n=11)	FP agencies (n=17)	NFP agencies (n=15)
Orientation and ongoing education for nurses	improved	36.4%	47.1	33.3
	about the same	18.2%	47.1	33.3
	declined	27.3%	0	33.3
	no opinion	18.2%	5.9	0
Administrative resources	improved	18.2%	23.5	6.7
	about the same	18.2%	70.6	60.0
	declined	27.3%	0	33.3
	no opinion	36.4%	5.9	0
Clinical resources/support	improved	11.1%	41.2	20.0
	about the same	54.5%	52.9	53.3
	declined	9.1%	0	26.7
	no opinion	27.3%	5.9	0
Continuity (consistency) of nurse	improved	45.5%	41.2	20.0
	about the same	18.2%	41.2	40.0
	declined	18.2%	11.8	40.0
	no opinion	18.2%	5.9	0

e. What Proportion of Visits Were Made by Registered Nurses?

Based on client-specific data provided by agencies, study clients received an average of 72.3% of their nursing visits by a Registered Nurse, and the remainder by a Registered Practical Nurse. The percentage of RN visits was positively related to better emotional and social functional outcomes for clients.

II. Client Outcomes

a. How satisfied were clients with their nursing care?

A mean score of 4.16 on a 5-point scale indicated that clients were highly satisfied with the technical and interpersonal aspects of nursing care.

- Client satisfaction was higher for clients being cared for by for-profit agencies than not-for-profit agencies; the differences were statistically significant but small (4.20 compared to 4.11; standardized effect size 0.18).
- Younger females were more satisfied than younger males, but older females were less satisfied than older males.

b. How did clients' health status change?

Health status was assessed using the 8 subscales of the SF-36 v2. Outcomes were assessed when clients were admitted to the study, and again after approximately six weeks, or on discharge from nursing care, whichever came first. There was a significant improvement in four of these outcomes from baseline to follow-up: clients' physical function, social function, vitality, and mental health.

Physical Function: Older clients, those who scored lower on the Instrumental Activities of Daily Living on admission, and those who were expected to require nursing care for a longer duration, were more likely to have lower physical function scores at follow-up. Higher physical function at baseline, and clients who lived with someone, were more likely to have higher scores of physical function at follow-up. For clients with a diagnosis of cancer, baseline physical function was not as highly related to follow-up physical function as for clients without cancer.

Social Function at follow-up was predicted by social function at baseline and by Activities of Daily Living score at baseline. Clients who received a greater proportion of visits from an RN had higher social function scores at follow-up. Diagnosis category also predicted social function at follow-up. Clients who reported that they had experienced a change in their general health during the past week were more likely to have lower social function scores at follow-up.

Vitality scores at follow-up were predicted by vitality scores and Instrumental Activities of Daily Living scores on admission. Clients with shorter duration of nursing care were more likely to have higher vitality scores at follow-up.

Mental Health scores at follow-up were predicted by mental health scores at baseline. Clients from for-profit agencies reported statistically significant higher mental health outcomes than clients from not-for-profit agencies (69.54 vs. 65.64;

standardized effect size of 0.18). This difference could have occurred by chance but may also reflect a qualitative difference in the experience of clients.

Emotional role was rated higher for females than males. Clients who had a higher proportion of their visits from an RN had higher emotional role function scores at follow-up than those who had a lower proportion of RN visits. Emotional role and Instrumental Activities of Daily Living score at baseline also predicted the corresponding score at follow-up.

General Health: Clients who had higher scores on the general health subscale on admission, and those who scored higher on the Screener general function, had higher scores on general health at follow-up.

Physical Role: Females had higher scores than males at follow-up. Higher physical role score at baseline, and shorter duration of care, predicted higher physical role score at follow-up.

Bodily Pain. As scores for baseline pain increased, scores for pain at follow-up also increased. Diagnosis category was a determinant of bodily pain at follow-up. Having a higher volume contract was also associated with higher pain scores on follow-up. Finally, younger clients with lower scores of IADL experienced less bodily pain at follow-up than older clients with higher IADL scores.

Consistency of care provider was not a significant predictor of client health outcomes. As well, for all but the mental health outcome, there were no significant differences in client outcomes between for-profit and not-for-profit agencies. The percentage of visits made by a RN was positively associated with clients' emotional and social function outcomes. It approached significance for the outcome physical function ($p=0.10$). These findings are consistent with the results of a previous study of home care nursing (O'Brien-Pallas et al, 2002) and with what has been reported about nursing skill mix in the acute care sector (Aiken et al., 2003; McGillis Hall et al., 2003; Needleman et al., 2002; Tourangeau et al., 2002). The findings underscore the need for further research and policy recommendations concerning appropriate nursing skill mix in home care. This is an underdeveloped area of research, without clear guidelines about the appropriate skill mix for various client populations in order to optimize outcomes.

III Cost of Nursing Care

CCACs paid an average (median) of \$419.85 for nursing care provided to clients during the study for an average (median) of 10.5 visits. These median costs reflect only the costs that were paid to agencies by CCACs.

- There was no significant difference in the CCACs' costs of nursing care that was provided by for-profit or not-for-profit agencies.

- Higher consistency of nurse provider was associated with lower costs paid by CCACs for nursing services, suggesting that consistency in care provider might result in better coordinated planning and care, which in turn, leads to more efficient care.
- A diagnosis of cancer predicted lower nursing costs. It is possible that a wide range of clients with varying stages of cancer are represented, some clients requiring only short term visits for a treatment such as chemotherapy. Technological advances may also enable fewer nursing visits for medication management.

IV Nurse Outcomes

a. How satisfied were community-based nurses with their jobs?

On a 5-point scale, nurses reported moderate work enjoyment with an overall score of 3.84, and low satisfaction with time for care (score 2.83). Nurses were least satisfied with their pay schedule, conditions of the job, balance between work and leisure, job security, and time for care. They were moderately satisfied with their freedom to make decisions, and highly satisfied with their client care and ability to keep clients comfortable. Fifty percent of the nurses indicated they were not satisfied with their job security. There were significant differences in nurse outcomes among agencies. These differences were not related to whether a nurse worked for a for-profit or not-for-profit agency.

- Older nurses reported more work enjoyment than younger nurses.
- Nurses who were compensated on an hourly basis rather than per visit reported higher satisfaction with time for care.
- Nurses who had been with the same agency for a longer time were less satisfied with the time for care. This could reflect the fact that nurses who had worked with an agency for a long time might have experienced different time pressures and expectations previously, prior to increases in the acuity of clients now being cared for in their homes. There has also been an increased need for care around the clock, seven days a week.

77% of nurses reported that mileage was reimbursed by their employer. Statistically significantly more nurses were reimbursed by not-for-profit agencies than by for-profit agencies (85% versus 70%).

53% of nurses reported that travel time was reimbursed by their employer. Statistically significantly more nurses were reimbursed by not-for-profit agencies than by for-profit agencies (61% versus 25%).

45.5% of nurses reported that they receive employment benefits, although not necessarily paid for or subsidized by the employer. There were no differences in nurses' reports of access to employment benefits between for-profit (42%) and not-for-profit (48%) agencies. Nurses employed by not-for-profit agencies were

more likely to be compensated on a 'per hour' basis, while nurses employed by a for-profit agency were most often compensated on a 'per visit' basis.

b. How satisfied were the nurses with their job security?

Only 33.9% of nurses agreed or strongly agreed that they were satisfied with the amount of job security they had.

- Casual nurses were least satisfied.
- There were significant differences in perception of job security among agencies.

c. How did staff retention change after competitive bidding began?

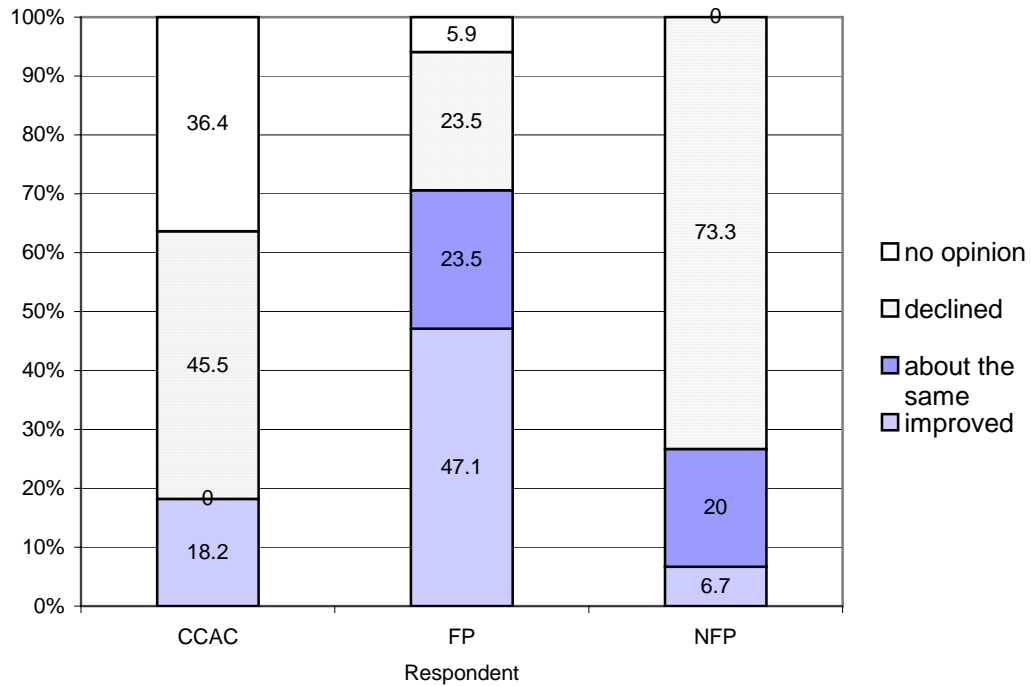
Neither nurse nor contract characteristics explained the variation in nurse retention rates.

Turnover was measured for each year, 1997 to 2002, and ranged from a high of 73% in 1999 to a low of 24% in 2001. Turnover can be expected to increase during years in which an agency gains or loses a contract during an RFP process or if service volumes change significantly.

Several dominant themes have emerged in the literature about the impact of managed competition on the quality of home health care services and outcomes for nurses. The discussion has reflected concern that home health care restructuring has resulted in increased stress and burnout, and decreased physical health and job satisfaction for home care workers (Denton et al., 2003). It has led to increased absenteeism and fear of job loss (Denton et al., 2003); undermined trust (Browne, 2000); and perhaps compromised continuity of care (Browne, 2000).

The data in Figure 5 indicate that in this study approximately 73% of the not-for-profit agencies reported a decline in the quality of work life for visiting nurses, compared to 23.5% of for-profit agencies and 45.5% of CCACs. The observation that competitive bidding in Ontario has had an adverse impact on nurses' quality of work life is consistent with the conclusion of Denton, Zeytinoglu, and Davies (2003), who found increased occupational stress among home care workers following the introduction of managed competition. That study concluded that restructuring and organizational change were significant factors in decreasing job satisfaction, increasing absenteeism rates, increasing fear of job loss, and propensity to leave.

Figure 5. Corporate Perception of Quality of Worklife for Nurses



Study Limitations

Generalizability: The study acquired a sample of convenience for clients. Therefore the findings are not generalizable to all home care clients. As this was a research study, informed consent was required of all clients. This resulted in the most acutely ill clients, and those with severe cognitive impairment, being excluded from the sample. It is unknown what impact this had on the results. Certainly it impacts on the generalizability of the findings. In addition, the study was conducted in English, with selected components of the client questionnaire available in French. Clients whose first language is not English are under-represented. Clients who received care for less than five days are also under-represented due to the lack of feasibility of recruiting very short-term clients.

Client Classification: The research team had planned to use the RAI-HC assessment tool to describe clients' health on admission to the study but it was not being used by CCACs for all clients. The MI-Choice Screener, a telephone screen for health needs, was used in its place. A uniform client classification system is essential for future multi-site studies. Medical diagnosis may not reflect care needs. It is important that CCACs continue to move toward full implementation of a standardized assessment tool.

Specialty Contracts: It would have been helpful to learn if nurse or client outcomes were influenced by the presence of specialty contracts, for example, in areas such as palliative care. Unfortunately, the subsample of clients who

received care under the terms of specialty contracts was inadequate to compare with clients who had received care under comprehensive nursing contracts.

Transition: Much of the concern about the impact of competitive bidding relates to the impact of the transition period when a contract ends and different agencies acquire new or increased volumes. The current study did not focus on transition. Study participants were all involved in active contracts at the time of data collection; nurses who had left the sector or the profession as a result of an employer losing a contract or experiencing reduced service volumes were not included in the study unless they had transferred their employment to an agency that was participating in the study. While all of the multi-site provider agencies in the study had both won and lost contracts in various communities, the not-for-profit agencies had a large market dominance that was significantly impacted after managed competition was implemented.

New RFP Template: Following the completion of study data collection, the Ministry of Health and Long-Term Care introduced a revised policy to standardize the procurement of client services by CCACs. Future contracts will be issued for up to 5 years including any renewals. Longer RFP cycles should result in less administrative burden for agencies and CCACs; however, for some CCACs and provider agencies, this will represent shorter contract terms than were previously in place and may not be responsive to unforeseen market and labour changes. In general longer contracts should result in increased contract stability, which in turn should result in greater job security for nurses and enable the development of infrastructure to support nurses. There are policies about monitoring contract volumes and performance standards, as well as a mechanism for managing the risks of fluctuations in service levels due to unpredictable funding levels.

Conclusions and Policy Implications

The study findings suggest that agency structure (for-profit or not-for-profit) is less of a factor in determining quality of care or quality of nursing worklife, than other factors related to conditions of employment and work. Nurses from both types of agencies expressed moderate levels of work enjoyment, and low levels of satisfaction with time for care and job security. Therefore, a policy implication is the need for changes in home care nursing to enhance nurses' job satisfaction and job security. For instance, employment of *fewer casual nurses, providing benefits, and ensuring adequate time to provide care* are three directions the findings from this study point to. Specific strategies may need to be targeted to the younger nurses who expressed less work enjoyment than the older nurses. This is particularly important because of the implications for the future workforce in community nursing. Strategies are also needed to mitigate the job uncertainty that arises for nurses in the RFP cycle, including the provision for *longer contracts* and other policy initiatives that provide greater employment stability. Because differences were observed at the agency level, *we need further investigation of the*

best practices within agencies that result in more satisfied staff. It is also possible that the concern about having adequate time to provide care may not be sector specific, but could be common to nursing in areas such as acute care.

Increased consistency of care provider was related to lower costs that CCACs paid for nursing services but not to client outcomes. Agencies with longer contracts appeared to offer higher consistency of nurse provider, possibly because of the infrastructure support and staff resources the longer contracts afforded them. The recent change toward issuing contracts for up to five years should enhance provider agencies' ability to ensure stability in their staff resources.

The observation that the percentage of RN visits was positively related to better psychosocial functional outcomes suggests that additional research is needed to guide decision-making about *when and which types of clients benefit from a higher proportion of RN visits.* This is an under-researched area of home health care.

In conclusion, debates about the comparative performance of for-profit and not-for-profit home health care providers have been prevalent in the health care literature (Rosenau & Linder, 2001). Much of this debate has yet to be informed by the findings of evaluation studies. The current study has begun to address this gap. In this study, we found that the quality of care was highly regarded by clients of for-profit and not-for-profit agencies. There were differences in nurses' job satisfaction among agencies, but this difference was not related to ownership model. It is important to develop a better understanding of the management and care practices that are most influential in promoting quality performance and optimum outcomes for clients in the home health care setting.

References

- Abelson, J., Gold, S.T., Woodward, C., O'Connor, D., Hutchison, B. (2004, in press). Managing under managed community care: The experiences of clients, providers, and managers in Ontario's competitive home care sector. *Health Policy*.
- Aiken, L.H., Clarke, S.P., Cheung, R.B., Sloane, D.M., & Silber, J.H. (2003). Educational levels of hospital nurses and surgical patient mortality. *JAMA*, 290, 1617-1623.
- Brega, A.G., Jordan, A.K., & Schlenker, R.E. (2003). Practice variations in home health care. *Home Health Care Services Quarterly*, 23(3), 41-64.
- Browne, P.L. (2000). *Unsafe Practices; Restructuring and Privatization in Ontario Health Care*. Ottawa, Canada: Canadian Centre for Policy Alternatives.
- Cloutier-Fisher, D. & Joseph, A.E. (2000). Long-term care restructuring in rural Ontario: retrieving community service user and provider narratives. *Social Science & Medicine*, 50, 1037-1045.
- Deber, R.B. (2002). *Delivering Health Care Services: Public, Not-For-Profit, or Private?* Discussion Paper No. 17, Commission on the Future of Health Care in Canada. http://www.hc-sc.gc.ca/english/pdf/romanow/pdfs/17_Deber_E.pdf
- Denton, M., Zeytinoglu & Davies, S. (2003). *Organizational Change and the Health and Well-being of Home Care Workers. Final Report*. Submitted to Workplace Safety and Insurance Board.
- McGillis Hall, L., Doran, D., Baker, G.R., Pink, G., Sidani, S., O'Brien Pallas, L., & Donner, G. (2003). Nurse Staffing Models as Predictors of Patient Outcomes. *Medical Care*, 41, 1096-1109.
- Needleman, J., Buerhaus, P., Mattke, S., Stewart, M., & Zelevinsky, K. (2002). Nurse-staffing levels and the quality of care in hospitals. *The New England Journal of Medicine*, 30, 1715-1722.
- O'Brien-Pallas, L.L., Irvine Doran, D.M., Murray, M., Cockerill, R., Sidani, S., Laurie-Shaw, B., Gerlach, J.L. (2002). Evaluation of a client care delivery model, Part 2: Variability in client outcomes in community home nursing. *Journal of Nursing Economic\$,* 20(1), 13-21,36.
- Ontario Community Support Association (2000). *The effect of the*

managed competition model on home care in Ontario: Emerging issues and recommendations. Toronto, Canada: author.

Reid, R., Haggerty, J., & McKendry, R. (2002). *Defusing the Confusion: Concepts and Measure of Continuity of Health Care.* Vancouver, Canada: University of British Columbia Centre for Health Services and Policy Research.

Rosenau, P.V., & Linder, S.H. (2001). The comparative performance of for-profit and nonprofit home health care services in the US. *Home Health Care Services Quarterly*, 20(2), 47-59.

Tourangeau, A.E., Giovannetti, P., Tu, J.V., & Wood, M. (2002). Nursing-related determinants of 30-day mortality for hospitalized patients. *Canadian Journal of Nursing Research*, 33, 71-88.

Williams, A.P., Barnsley, J., Leggatt, S., Deber, R. & Baranek, P. (1999). Long-term care goes to market: Managed competition and Ontario's reform of community-based services. *Canadian Journal of Aging*, 18, 125-153.

Woodward, C.A., Abelson, J., Tedford, S., & Hutchison, B. (2004). What is important to continuity in home care? Perspectives of key stakeholders. *Social Science & Medicine*, 58. 177-192.

