



Factors Associated with Turnover Among Registered Nursing Staff in Ontario LTC Homes

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Context

Though nursing retention has been identified as an important concern in health care, the multi-faceted role of nurses as supervisors, clinical managers and care staff in Long Term Care (LTC) Homes, highlights the importance of sustaining this key resource. There is relatively little research examining the organizational factors that encourage RNs to stay in their current positions. Moreover, there is almost no information on the level of nursing turnover in Ontario LTC Homes. This study begins to address this gap. Understanding turnover levels and factors associated with turnover is essential given the impact high turnover can have on organization outcomes including quality of care.

Objectives

- To determine the level of turnover among full and part-time registered nursing staff in Ontario LTC Homes
- To examine whether LTC home characteristics and human resource and quality improvement practices are associated with turnover.

Methods

Design

- Cross-sectional survey of Senior Management in Ontario LTC Homes linked to Ontario Ministry of Health and Long Term Care (MOHLTC) secondary staffing data.

Study Sample and Measures

- Administrators at all Ontario LTC Homes (n=620) were e-mailed a request to complete an on-line survey in conjunction with their Director of Care. The survey examined senior management and organization characteristics, human resource and quality improvement practices provided in Ontario LTC Homes. The survey requested permission to access MOHLTC staffing data pertaining to each participant's home. Survey data was linked to MOHLTC staffing data for homes providing consent (n=188).
- Rate of turnover was calculated as the sum of Registered Nurses (RN) and Registered Practical Nurses (RPN) who left voluntarily or involuntarily over the past 12 months (reported by Administrators) divided by the sum of RN and RPN employed at the start of the period at each Home. All analyses were conducted separately for part-time (PT) and full-time (FT) nursing staff.

Analysis

- FT nursing staff:
 - Multiple regression analyses were conducted to produce the model outlined in Table 1. The model forced inclusion of Home characteristics and used stepwise regression to identify other independent predictors of RN turnover rate.
- PT nursing staff:
 - After a similar regression approach resulted in no significant Home characteristics, an exploratory full stepwise regression analyses was used to create the model presented in Table 2. The same dependent variable but related to PT was used.

Table 1: Multivariate Logistic Regression Model for Full-Time Nursing Staff Turnover (n=188)

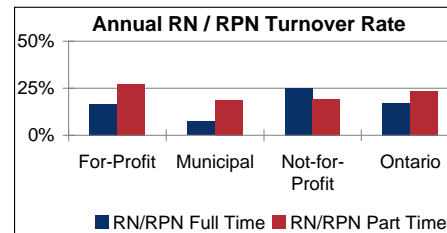
	Low Turnover n (column %) or median	High Turnover n (column %) or median	Overall	Adjusted Odds Ratio (95% CI)
RN FT Turnover (Row %)	143 (76%)	45 (24%)	188	--
Chain Affiliated				
No	36 (25%)	14 (31%)	50 (27%)	
Yes	107 (75%)	31 (69%)	138 (73%)	1.05 (0.39, 2.82)
Governance				
Private Owner	25 (17%)	13 (29%)	38 (20%)	
Charitable Board	39 (27%)	14 (31%)	53 (28%)	0.64 (0.22, 1.80)
Corporate Board	47 (33%)	14 (31%)	61 (32%)	0.72 (0.26, 2.02)
Municipal Council	32 (22%)	4 (9%)	36 (19%)	0.16 (0.04, 0.72)**
Home Size (# Beds)				
<=30	33 (23%)	17 (38%)	50 (27%)	
80-140	46 (32%)	14 (31%)	60 (32%)	0.61 (0.24, 1.57)
140+	64 (45%)	14 (31%)	78 (41%)	0.42 (0.16, 1.10)*
DoC Turnover				
<1	111 (78%)	36 (80%)	147 (78%)	
>1	32 (22%)	9 (20%)	41 (22%)	0.77 (0.29, 2.02)
DoC Tenure				
<=5 years	93 (65%)	26 (58%)	119 (63%)	
>5 years	50 (35%)	19 (42%)	69 (37%)	1.33 (0.58, 3.02)
HR Utilization				
<=3	19 (13%)	13 (29%)	32 (17%)	
3-4	54 (38%)	13 (29%)	67 (36%)	0.23 (0.08, 0.68)**
>=4	70 (49%)	19 (42%)	89 (47%)	0.18 (0.06, 0.57)**
System Culture Change				
<4	40 (28%)	11 (24%)	51 (27%)	
>=4	103 (72%)	34 (76%)	137 (73%)	2.11 (0.81, 5.52)
Culture Balance	0.6	0.6	0.6	16.36 (0.6, 444.1)*
CPG Implementation	9.0	8.0	9.0	0.93 (0.85, 1.02)

Note: DoC=Director of Care; HR=Human Resources; CPG=Clinical Practice Guidelines *p<0.10; **p<0.05

Table 2: Multivariate Logistic Regression Model for Part-Time Nursing Staff Turnover (n=188)

	Low Turnover n (column %) or median	High Turnover n (column %) or median	Overall	Adjusted Odds Ratio (95% CI)
RN/RPN PT Turnover	142 (75%)	46 (25%)	188	-----
DoC Turnover				
<1	115 (81%)	32 (70%)	147 (78%)	-----
>1	27 (19%)	14 (30%)	41 (22%)	1.71 (0.78, 3.76)
System Culture Change				
<4	35 (25%)	16 (35%)	51 (27%)	-----
>=4	107 (75%)	30 (65%)	137 (73%)	0.67 (0.31, 1.41)
Citations				
<1	139 (98%)	41 (89%)	180 (96%)	-----
>=1	3 (2%)	5 (11%)	8 (4%)	5.74 (1.29, 25.58)**
PSW on-site training participation	0.74	0.64	0.75	0.32 (0.11, 0.98)**

Note: DoC=Director of Care; PSW= Personal Support Worker *p<0.10; **p<0.05



Results

➤ Average Levels of Turnover in Ontario were 12% for Full Time and 22% for Part Time RN/RPN staff

➤ For Full Time Nursing Staff, municipal governed homes and larger homes (140+ beds) were less likely to have high turnover. Homes with strong engagement of staff in Quality Improvement (HR Utilization), a strong Culture for QI, a 'balanced' culture, and implementation of more clinical practice guidelines were less likely to have high turnover. A balanced culture score was significantly associated with higher turnover rate.

➤ For Part Time Nursing Staff, the stepwise regression model indicated that homes with high participation among Personal Support Workers in on-site training and having more than one citation under the LTC legislation were associated with a home having high RN/RPN turnover.

Limitations

This study is based on Administrator self-report. Although a 54% response rate was achieved and analyses support our sample reflect the population of Homes in Ontario, non response and response error are possible. In addition, turnover data was limited by homes agreeing to use of ministry data, thereby reducing our power. Finally the cross-sectional nature of our data limit interpretation to associations rather than causal ordering among independent variables and turnover.

Conclusions, Policy Implications & Future Research

➤ These results indicate that the factors associated with RN/RPN turnover are different for Full versus Part Time staff.

➤ Having a culture oriented to quality improvement and staff engagement in quality improvement initiatives may have important retention implications for RN staff.

➤ Survey data of staff perceptions in a representative sample of 75 Ontario homes collected as a second phase of this research project will enable us to further examine factors relating to nursing turnover including job satisfaction and intent to leave.

➤ Understanding turnover levels and the reasons for turnover are key to developing policy and interventions that effectively promote retention of nursing staff