## Accreditation and Resident Safety in Ontario Long-Term Care Homes

Shawna M. McDonald, Laura M. Wagner and Andrea Gruneir

## Appendix A: Tables A1, A2, A3

## TABLE A1.

Characteristics of residents in accredited and non-accredited LTC homes in Ontario, 2010\*\*

Variables	Accredited (N = 60,147)	Non-accredited (N = 15,541)	p-Value				
Age							
0-64 years	7%	5%	<0.001				
65–74 years	10.1%	8.2%	<0.001				
75–84 years	31.6%	30.3%	0.001				
85–94 years	43.0%	47.1%	<0.001				
>95 years	8.2%	9.3%	<0.001				
Gender							
Male	29.6%	28.4%	0.004				
Female	70.3%	71.5%	-				
Acuity							
Dementia	59.1%	58.9%	0.281				
End-stage disease	1.5%	1.5%	0.679				
Mean case mix index	1.07	1.07	‡				
Extensive to totally dependant on ADL hierarchy scale	73.5%	75.6%	0.028				

<sup>\*2010</sup> Ontario LTC home data were obtained from the CIHI.

ADL = Activities of daily living

<sup>†</sup>Pearson chi-square tests were performed to compare proportions between groups

<sup>‡</sup>t-test could not be performed as group variances were not requested

TABLE A2.

Final multivariate models examining accreditation as a predictor of quality indicator prevalence\*

Quality Indicator	Coefficient Beta (β)	Standard Error for $\beta$	Adjusted Rate Ratio for Accreditation	95% Confidence Interval	<i>p</i> -Value
Falls <sup>1</sup>	-0.074	0.030	0.929	0.875-0.985	0.014
Restraints <sup>2</sup>	-0.097	0.063	0.908	0.802-1.027	0.123
Catheters <sup>3</sup>	-0.071	0.0810	0.931	0.795-1.091	0.379
Pressure ulcers <sup>4</sup>	0.018	0.057	1.018	0.912-1.138	0.747
Infections <sup>5</sup>	0.025	0.047	1.025	0.936-1.123	0.593

<sup>\*</sup>Results correspond to five separate negative binomial regression models. CARF accreditation was not identified as a confounder in any of these five models.

TABLE A3.

Multivariate results examining organizational characteristics predictive of LTC home accreditation'

Organizational Variable	Coefficient Beta (β)	Standard Error for $\beta$	Adjusted <sup>†</sup> Odds Ratio	95% Confidence Interval	<i>p</i> -Value		
Ownership <sup>±</sup>							
Municipal	-1.818	0.306	0.162	0.089-0.295	<0.001		
Non-profit	-1.765	0.275	0.171	0.100-0.294	< 0.001		
For-profit	0 (reference	-	1.0 (reference)	-			
Chain membership <sup>§</sup>							
Chain member	1.019	0.231	2.770	1.760-4.360	<0.001		
Non-chain	0 (reference)	-	1.0 (reference)	-	-		
Facility location <sup>‡</sup>							
Urban location	0.541	0.259	1.718	1.034-2.856	0.037		
Rural location	0 (reference)	-	1.0 (reference)	-	-		
Facility size <sup>‡</sup>							
Small (25-79 beds)	-0.422	0.339	0.656	0.337-1.274	0.213		
Med (80–139 beds)	-0.339	0.281	0.713	0.411-1.237	0.229		
Large (≥140 beds)	0 (reference)	_	1.0 (reference)	_	_		

<sup>\*</sup>Results correspond to a binary logistic regression model

§Obtained from the Ontario Long-Term Care Association directory

<sup>1.</sup> The multivariate model examining fall prevalence as the dependent variable included the following organizational confounders: ownership type and facility location.

<sup>2.</sup> The multivariate model examining restraint prevalence as the dependent variable included the following organizational confounders: ownership type and chain membership.

<sup>3.</sup>The multivariate model examining catheter prevalence as the dependent variable included the following organizational confounders: ownership type and facility size.

<sup>4.</sup>The multivariate model examining pressure ulcer prevalence as the dependent variable included the following organizational confounders: ownership type and chain membership.

<sup>5.</sup>The multivariate model examining infection prevalence as the dependent variable included the following organizational confounders: ownership type, facility size, chain membership, and facility location.

 $<sup>\</sup>ensuremath{^{\dagger}}\xspace$  Each variable was adjusted for the remaining three variables

<sup>‡</sup>Obtained from the Ontario Ministry of Health Reports on LTC homes