

Supplementary Online Content

Song Y, Hoben M, Norton P, Estabrooks CA. Association of work environment with missed and rushed care tasks among care aides in nursing homes. *JAMA Netw Open*. 2020;3(1):e1920092. doi:10.1001/jamanetworkopen.2019.20092

eTable 1. Psychometric Properties of the Alberta Context Tool

eTable 2. Characteristics of Care Aides With Complete Data and Those With Incomplete Data

eTable 3. Multivariable Analyses of Organizational Context With Missed Care

eTable 4. Multivariable Analyses of Organizational Context With Rushed Care

eTable 5. Multivariable Analyses of 10 Elements of Organizational Context With Missed Care

eTable 6. Multivariable Analyses of 10 Elements of Organizational Context With Rushed Care

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Psychometric Properties of the Alberta Context Tool

Reliability	Result
Internal consistency	The Cronbach's alpha for 8 of the 10 elements exceeded 0.7, which is a commonly accepted standard.
Validity	
Internal structure	Confirmatory factor analyses demonstrated that the overall pattern of the data tested was consistent with the structure hypothesized in the development of ACT.
Convergent validity	Bivariate associations with instrumental research use (which the ACT was designed to predict) showed that more positive contextual were statistically significant for 8 of the 10 ACT elements.

eTable 2. Characteristics of Care Aides With Complete Data and Those With Incomplete Data

Variable	Care aides with complete data n (%)	Care aides with incomplete data n (%)	Total n (%)
Number of care aides	3957 (98.53)	59 (1.47)	4016 (100)
Age, y			
<29	391 (9.88)	5 (8.47)	396 (9.86)
30–39	852 (21.5)	11 (18.6)	863 (21.5)
40–49	1251 (31.6)	24 (40.7)	1275 (31.7)
50–59	1030 (26.0)	16 (27.1)	1046 (26.0)
>60	433 (10.9)	3 (5.08)	436 (10.9)
Female	3529 (89.2)	45 (83.3)	3574 (89.1)
Health Care Aide certificate	3702 (93.6)	56 (96.6)	3758 (93.6)
English as first language	1327 (33.5)	26 (44.8)	1353 (33.7)
Shift worked most often			
Day	1940 (49.0)	28 (47.5)	1968 (49.0)
Evening	1556 (39.3)	22 (37.3)	1578 (39.3)
Night	461 (11.7)	9 (15.3)	470 (11.7)
Variable	Mean (SD)	Mean (SD)	Mean (SD)
Experience on current unit, y	5.83 (5.93)	4.57 (3.83)	5.81 (5.91)
Responsive behaviors by residents	3.26 (1.66)	2.96 (1.73)	3.25 (1.66)
Job satisfaction	4.24 (0.64)	4.44 (0.51)	4.24 (0.64)
Burnout			
MBI Emotional Exhaustion	2.61 (1.68)	2.24 (1.69)	2.60 (1.68)
MBI Cynicism	2.68 (1.63)	2.77 (1.77)	2.68 (1.63)
MBI Efficacy	5.40 (0.85)	5.49 (0.70)	5.40 (0.85)
Physical health	49.1 (8.18)	50.0 (8.58)	49.1 (8.18)
Mental health	51.9 (8.48)	53.6 (8.05)	51.9 (8.48)

Abbreviations: MBI, Maslach Burnout Inventory; SD, standard deviation.

eTable 3. Multivariable Analyses of Organizational Context With Missed Care

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimate	P value	RR (95% CI)	Estimate	P value
Intercept	0.01 (0.003-0.04)	-4.52	<.001	3.31 (1.76-6.25)	1.20	<.001
Organizational context						
Less favorable	1 [Reference]	NA	NA	1 [Reference]	NA	NA
More favorable	1.59 (1.34-1.90)	0.47	<.001	0.92 (0.84-1.01)	-0.08	.08
Age, y						
<29	1 [Reference]	NA	NA	1 [Reference]	NA	NA
30–39	1.32 (1.00-1.74)	0.28	.05	0.88 (0.76-1.01)	-0.13	.06
40–49	1.32 (1.00-1.72)	0.27	.05	0.96 (0.84-1.09)	-0.04	.55
50–59	1.44 (1.08-1.91)	0.36	.01	1.03 (0.90-1.18)	0.03	.65
>60	1.52 (1.09-2.12)	0.42	.01	0.96 (0.81-1.14)	-0.04	.64
Sex						
Male	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Female	0.84 (0.67-1.05)	-0.18	.12	1.12 (0.98-1.28)	0.11	.09
Healthcare aide certificate received						
No	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Yes	1.32 (0.99-1.76)	0.28	.06	1.03 (0.87-1.22)	0.03	.71
English as first language						
Yes	1 [Reference]	NA	NA	1 [Reference]	NA	NA
No	1.57 (1.33-1.85)	0.45	<.001	1.06 (0.97-1.15)	0.06	.17
Shift worked most of the time						
Day	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Evening	1.36 (1.18-1.58)	0.31	<.001	0.89 (0.82-0.97)	-0.11	.005
Night	2.95 (2.33-3.74)	1.08	<.001	1.1 (0.97-1.25)	0.09	.15
Experience on current unit, y	1 (0.99-1.01)	-0.002	.80	1.01 (1.00-1.02)	0.01	.005
Responsive behaviors from residents	0.87 (0.83-0.91)	-0.14	<.001	1.07 (1.04-1.09)	0.06	<.001
Job satisfaction	1.51 (1.33-1.72)	0.41	<.001	0.9 (0.85-0.95)	-0.11	<.001
Burnout						
MBI_Exhaustion	0.88 (0.83-0.94)	-0.13	<.001	1.05 (1.02-1.09)	0.05	.002
MBI_Cynicism	1.03 (0.98-1.09)	0.03	.22	1.03 (1.00-1.07)	0.03	.02
MBI_Efficacy	1.11 (1.02-1.21)	0.10	.02	0.95 (0.91-0.99)	-0.05	.01
Physical health	1.01 (1.00-1.02)	0.01	.26	1 (0.99-1.00)	-0.004	.12
Mental health	1.02 (1.01-1.03)	0.02	<.001	1 (1.00-1.01)	0.001	.67
Unit type						

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimate	P value	RR (95% CI)	Estimate	P value
General nursing home	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Secure dementia	1.07 (0.84-1.36)	0.07	.58	1.04 (0.91-1.18)	0.04	.59
Non-secure dementia	1.31 (0.90-1.91)	0.27	.16	0.94 (0.75-1.18)	-0.06	.60
Secure mental health/psychiatric	2.27 (0.84-6.13)	0.82	.10	0.65 (0.27-1.58)	-0.43	.34
Other	0.76 (0.54-1.08)	-0.27	.12	0.9 (0.72-1.11)	-0.11	.31
Unit staffing level	1.09 (0.99-1.20)	0.08	.09	0.95 (0.90-1.01)	-0.05	.12
Percent of care aide staffing hours out of total staffing	1 (0.99-1.01)	-0.001	.81	1 (1.00-1.01)	0.003	.20
Owner-operator model						
Public not-for-profit	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Private for-profit	1.08 (0.86-1.36)	0.08	.51	0.84 (0.74-0.96)	-0.17	.01
Voluntary not-for-profit	0.75 (0.59-0.96)	-0.28	.02	1.04 (0.91-1.18)	0.04	.60
Nursing home size						
Small	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Medium	1.17 (0.90-1.53)	0.16	.24	0.93 (0.81-1.07)	-0.07	.32
Large	1.02 (0.79-1.31)	0.02	.90	0.79 (0.70-0.90)	-0.23	.001
Health region						
Winnipeg Regional Health Authority	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Alberta Health Edmonton zone	1.41 (1.08-1.84)	0.34	.01	0.72 (0.62-0.84)	-0.32	<.001
Alberta Health Calgary zone	1.17 (0.89-1.54)	0.16	.25	0.83 (0.71-0.96)	-0.19	.02
BC Fraser Health Authority	0.67 (0.53-0.86)	-0.39	.002	0.82 (0.72-0.93)	-0.20	.003
BC Interior Health Authority	1.75 (1.14-2.68)	0.56	.01	0.79 (0.62-1.01)	-0.24	.06
Random intercept for unit clustering	1.08 (1.01-1.17)	0.08	.03	1.04 (1.01-1.06)	0.03	.001

Abbreviations: OR, odds ratio; NA, not applicable; RR, relative rate; MBI, Maslach Burnout Inventory; BC, British Columbia.

^a Models the likelihood of 0 missed or rushed care.

^b Compares numbers of missed or rushed care tasks among individuals with at least 1 missed or rushed care task.

eTable 4. Multivariable Analyses of Organizational Context With Rushed Care

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimate	P value	RR (95% CI)	Estimate	P value
Intercept	0 (<.001-0.01)	-6.54	<.001	7.46 (5.28-10.5)	2.01	<.001
Organizational context						
Less favorable	1 [Reference]	NA	NA	1 [Reference]	NA	NA
More favorable	1.66 (1.38-1.99)	0.50	<.001	0.93 (0.88-0.98)	-0.07	.007
Age, y						
<29	1 [Reference]	NA	NA	1 [Reference]	NA	NA
30–39	1.17 (0.86-1.58)	0.15	.33	1.05 (0.97-1.13)	0.05	.22
40–49	1.22 (0.90-1.63)	0.20	.20	1.04 (0.97-1.12)	0.04	.25
50–59	1.22 (0.89-1.66)	0.20	.21	1.03 (0.95-1.11)	0.03	.50
>60	1.21 (0.84-1.73)	0.19	.31	1.01 (0.92-1.10)	0.01	.90
Sex						
Male	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Female	0.93 (0.73-1.17)	-0.08	.52	1.01 (0.95-1.08)	0.01	.71
Healthcare aide certificate received						
No	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Yes	1.24 (0.91-1.68)	0.21	.17	1.04 (0.95-1.13)	0.03	.43
English as first language						
Yes	1 [Reference]	NA	NA	1 [Reference]	NA	NA
No	1.81 (1.51-2.18)	0.59	<.001	0.93 (0.89-0.97)	-0.07	.002
Shift worked most of the time						
Day	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Evening	1.38 (1.17-1.61)	0.32	.0001	0.93 (0.89-0.97)	-0.07	.0009
Night	2.19 (1.72-2.77)	0.78	<.001	0.72 (0.66-0.78)	-0.33	<.001
Experience on current unit, y	0.99 (0.98-1.00)	-0.01	.20	1 (1.00-1.01)	0.003	.08
Responsive behaviors from residents	0.82 (0.79-0.86)	-0.19	<.001	1.05 (1.04-1.07)	0.05	<.001
Job satisfaction	1.86 (1.61-2.15)	0.62	<.001	0.88 (0.85-0.91)	-0.13	<.001
Burnout						
MBI_Exhaustion	0.82 (0.77-0.87)	-0.20	<.001	1.03 (1.02-1.05)	0.03	<.001
MBI_Cynicism	1.07 (1.01-1.13)	0.07	.02	0.99 (0.98-1.01)	-0.01	.34
MBI_Efficacy	1.15 (1.05-1.27)	0.14	.003	1 (0.97-1.02)	-0.004	.75
Physical health	1.02 (1.01-1.03)	0.02	.003	1 (1.00-1.00)	<.001	.88
Mental health	1.02 (1.01-1.03)	0.02	.001	1 (1.00-1.00)	-0.001	.23
Unit type						

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimate	P value	RR (95% CI)	Estimate	P value
General nursing home	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Secure dementia	1.32 (1.03-1.70)	0.28	.03	1 (0.93-1.08)	0.003	.93
Non-secure dementia	1.21 (0.82-1.81)	0.19	.34	1.04 (0.94-1.16)	0.04	.45
Secure mental health/psychiatric	1.37 (0.58-3.24)	0.32	.47	0.9 (0.66-1.22)	-0.11	.49
Other	0.99 (0.69-1.41)	-0.01	.94	0.98 (0.89-1.09)	-0.02	.71
Unit staffing level	1.35 (1.22-1.50)	0.30	<.001	0.99 (0.95-1.02)	-0.01	.39
Percent of care aide staffing hours out of total staffing	0.99 (0.98-1.00)	-0.01	.02	1 (1.00-1.00)	0.001	.62
Owner-operator model						
Public not-for-profit	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Private for-profit	1.24 (0.98-1.58)	0.22	.07	0.93 (0.87-0.99)	-0.07	.03
Voluntary not-for-profit	0.87 (0.68-1.12)	-0.13	.29	0.97 (0.91-1.04)	-0.03	.38
Nursing home size						
Small	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Medium	1.24 (0.94-1.64)	0.22	.13	0.95 (0.88-1.02)	-0.05	.17
Large	1.22 (0.93-1.59)	0.20	.15	0.95 (0.88-1.02)	-0.06	.13
Health region						
Winnipeg Regional Health Authority	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Alberta Health Edmonton zone	0.97 (0.74-1.28)	-0.03	.83	0.96 (0.88-1.03)	-0.05	.26
Alberta Health Calgary zone	0.97 (0.74-1.28)	-0.03	.84	0.9 (0.83-0.98)	-0.10	.01
BC Fraser Health Authority	0.9 (0.70-1.15)	-0.11	.39	0.94 (0.87-1.01)	-0.06	.09
BC Interior Health Authority	1.35 (0.86-2.12)	0.30	.19	0.9 (0.80-1.02)	-0.10	.09
Random intercept for unit clustering	1.06 (0.97-1.15)	0.06	.19	1.01 (1.00-1.02)	0.009	.009

Abbreviations: OR, odds ratio; NA, not applicable; RR, relative rate; MBI, Maslach Burnout Inventory; BC, British Columbia.

^a Models the likelihood of 0 missed or rushed care.

^b Compares numbers of missed or rushed care tasks among individuals with at least 1 missed or rushed care task.

eTable 5. Multivariable Analyses of 10 Elements of Organizational Context With Missed Care

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimate	P value	RR (95% CI)	Estimate	P value
Intercept	0.01 (0.00-0.06)	-5.13	<.0001	14.0 (4.10-48.0)	2.64	<.0001
Organizational context element						
ACT - Leadership	1.33 (0.86-2.05)	0.28	.20	0.84 (0.67-1.06)	-0.17	.15
ACT - Culture	0.38 (0.19-0.73)	-0.98	.004	1.51 (1.06-2.14)	0.41	.02
ACT - Evaluation	1.02 (0.64-1.65)	0.02	.92	1.07 (0.83-1.37)	0.06	.62
ACT - Formal interaction	0.90 (0.64-1.25)	-0.11	.52	1.08 (0.91-1.29)	0.08	.38
ACT - Informal interaction	1.09 (0.94-1.27)	0.09	.25	0.96 (0.88-1.05)	-0.04	.40
ACT - Social capital	1.06 (0.59-1.88)	0.06	.85	0.51 (0.36-0.70)	-0.68	<.0001
ACT - Structural and electronic resources	1.00 (0.84-1.18)	-0.004	.97	0.97 (0.88-1.07)	-0.03	.55
ACT - Organizational slack-staff	1.65 (1.32-2.05)	0.50	<.0001	0.80 (0.71-0.90)	-0.22	.0004
ACT - Organizational slack-space	0.98 (0.86-1.12)	-0.02	.78	1.01 (0.94-1.08)	0.01	.85
ACT - Organizational slack-time	2.03 (1.44-2.86)	0.71	<.0001	1.25 (1.03-1.50)	0.22	.02
Age, y						
<29	1 [Reference]	NA	NA	1 [Reference]	NA	NA
30–39	1.28 (0.97-1.68)	0.25	.08	0.88 (0.77-1.01)	-0.13	.06
40–49	1.30 (1.00-1.70)	0.26	.05	0.97 (0.85-1.10)	-0.03	.60
50–59	1.43 (1.08-1.89)	0.36	.01	1.03 (0.90-1.18)	0.03	.67
>60	1.51 (1.09-2.11)	0.41	.01	0.96 (0.81-1.13)	-0.04	.61
Sex						
Male	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Female	0.85 (0.68-1.07)	-0.16	.16	1.11 (0.97-1.26)	0.10	.13
Healthcare aide certificate received						
No	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Yes	1.26 (0.94-1.68)	0.23	.12	1.01 (0.86-1.20)	0.01	.87
English as first language						
Yes	1 [Reference]	NA	NA	1 [Reference]	NA	NA
No	1.48 (1.25-1.75)	0.39	<.0001	1.04 (0.96-1.14)	0.04	.34
Shift worked most of the time						
Day	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Evening	1.39 (1.20-1.62)	0.33	<.0001	0.89 (0.82-0.96)	-0.12	.004
Night	3.00 (2.37-3.80)	1.10	<.0001	1.10 (0.97-1.25)	0.09	.15
Experience on current unit, y	1.00 (0.98-1.01)	-0.003	.69	1.01 (1.00-1.02)	0.01	.004
Responsive behaviors from residents	0.87 (0.83-0.91)	-0.14	<.0001	1.07 (1.04-1.09)	0.06	<.0001

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimate	P value	RR (95% CI)	Estimate	P value
Job satisfaction	1.47 (1.29-1.67)	0.38	<.0001	0.91 (0.86-0.97)	-0.09	.003
Burnout						
MBI_ Exhaustion	0.89 (0.84-0.95)	-0.11	.0002	1.06 (1.02-1.09)	0.05	.0008
MBI_ Cynicism	1.03 (0.97-1.08)	0.02	.36	1.03 (1.00-1.06)	0.03	.03
MBI_ Efficacy	1.11 (1.02-1.21)	0.10	.02	0.95 (0.91-0.99)	-0.05	.02
Physical health	1.00 (1.00-1.01)	0.005	.34	1.00 (0.99-1.00)	-0.004	.14
Mental health	1.02 (1.01-1.03)	0.02	<.0001	1.00 (1.00-1.01)	0.0009	.69
Unit type						
General nursing home	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Secure dementia	1.19 (0.95-1.49)	0.17	.13	1.02 (0.90-1.16)	0.02	.75
Non-secure dementia	1.08 (0.76-1.54)	0.08	.66	0.87 (0.36-2.09)	-0.14	.76
Secure mental health/psychiatric	1.61 (0.63-4.13)	0.47	.32	0.92 (0.75-1.13)	-0.09	.42
Other	0.84 (0.60-1.16)	-0.18	.29	0.99 (0.80-1.23)	-0.01	.96
Unit staffing level	0.97 (0.88-1.06)	-0.03	.48	0.96 (0.91-1.02)	-0.04	.20
Percent of care aide staffing hours out of total staffing	1.00 (0.99-1.01)	-0.0003	.93	1.00 (1.00-1.01)	0.002	.28
Owner-operator model						
Public not-for-profit	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Private for-profit	0.93 (0.74-1.16)	-0.07	.52	0.87 (0.77-0.99)	-0.14	.04
Voluntary not-for-profit	0.74 (0.59-0.92)	-0.30	.007	1.08 (0.95-1.23)	0.08	.23
Nursing home size						
Small	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Medium	1.13 (0.87-1.45)	0.12	.36	0.86 (0.75-0.98)	-0.15	.03
Large	1.05 (0.82-1.34)	0.05	.70	0.74 (0.65-0.84)	-0.31	<.0001
Health region						
Winnipeg Regional Health Authority	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Alberta Health Edmonton zone	1.62 (1.26-2.09)	0.48	.0002	0.73 (0.63-0.84)	-0.32	<.0001
Alberta Health Calgary zone	1.04 (0.79-1.37)	0.04	.77	0.81 (0.69-0.95)	-0.21	.01
BC Fraser Health Authority	0.69 (0.55-0.88)	-0.37	.002	0.83 (0.73-0.94)	-0.19	.003
BC Interior Health Authority	1.56 (1.04-2.35)	0.45	.03	0.82 (0.64-1.04)	-0.20	.10
Random intercept for unit clustering	1.00 (0.95-1.06)	0.004	.88	1.02 (1.00-1.03)	0.02	.07

Abbreviations: ACT, the Alberta Context Tool; OR, odds ratio; NA, not applicable; RR, relative rate; MBI, Maslach Burnout Inventory; BC, British Columbia.

^a Models the likelihood of 0 missed or rushed care.

^b Compares numbers of missed or rushed care tasks among individuals with at least 1 missed or rushed care task.

eTable 6. Multivariable Analyses of 10 Elements of Organizational Context With Rushed Care

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimat	P value	RR (95% CI)	Estimate	P value
Intercept	0.86 (0.04-16.8)	-0.15	.92	1.26 (0.56-2.85)	0.23	.58
Organizational context element						
ACT - Leadership	0.75 (0.45-1.25)	-0.29	.26	0.93 (0.81-1.07)	-0.07	.31
ACT - Culture	0.70 (0.34-1.45)	-0.36	.33	1.34 (1.09-1.65)	0.29	.006
ACT - Evaluation	0.78 (0.46-1.30)	-0.25	.34	1.04 (0.89-1.21)	0.04	.63
ACT - Formal interaction	1.02 (0.71-1.46)	0.02	.91	1.06 (0.95-1.18)	0.06	.27
ACT - Informal interaction	0.90 (0.76-1.06)	-0.11	.20	1.03 (0.98-1.08)	0.03	.32
ACT - Social capital	0.67 (0.35-1.28)	-0.41	.22	1.24 (1.02-1.50)	0.21	.03
ACT - Structural and electronic resources	1.25 (1.03-1.52)	0.23	.02	0.94 (0.89-0.99)	-0.06	.03
ACT - Organizational slack-staff	1.91 (1.51-2.42)	0.65	<.0001	0.91 (0.85-0.98)	-0.09	.01
ACT - Organizational slack-space	0.95 (0.82-1.10)	-0.05	.50	1.00 (0.96-1.04)	-0.0009	.97
ACT - Organizational slack-time	1.14 (0.79-1.65)	0.13	.47	0.90 (0.80-1.01)	-0.11	.06
Age, y						
<29	1 [Reference]	NA	NA	1 [Reference]	NA	NA
30–39	0.98 (0.72-1.32)	-0.02	.89	1.07 (1.00-1.16)	0.07	.06
40–49	1.04 (0.78-1.40)	0.04	.77	1.06 (0.99-1.14)	0.06	.10
50–59	1.08 (0.80-1.46)	0.08	.63	1.04 (0.97-1.13)	0.04	.25
>60	1.01 (0.71-1.45)	0.01	.95	1.03 (0.94-1.13)	0.03	.53
Sex						
Male	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Female	0.85 (0.67-1.07)	-0.16	.18	1.02 (0.95-1.09)	0.02	.54
Healthcare aide certificate received						
No	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Yes	1.00 (0.74-1.34)	-0.004	.98	1.08 (0.99-1.18)	0.08	.10
English as first language						
Yes	1 [Reference]	NA	NA	1 [Reference]	NA	NA
No	1.76 (1.47-2.11)	0.57	<.0001	0.94 (0.90-0.99)	-0.06	.02
Shift worked most of the time						
Day	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Evening	1.28 (1.09-1.50)	0.25	.003	0.93 (0.89-0.97)	-0.07	.0006
Night	1.81 (1.43-2.29)	0.59	<.0001	0.73 (0.67-0.79)	-0.32	<.0001
Experience on current unit, y	0.99 (0.98-1.01)	-0.01	.37	1.00 (1.00-1.01)	0.004	.02
Responsive behaviors from residents	0.82 (0.78-0.86)	-0.20	<.0001	1.05 (1.04-1.07)	0.05	<.0001

Variable	Logistic Component ^a			Poisson Component ^b		
	OR (95% CI)	Estimat	P value	RR (95% CI)	Estimate	P value
Job satisfaction	1.79 (1.55-2.08)	0.58	<.0001	0.86 (0.83-0.89)	-0.15	<.0001
Burnout						
MBI_ Exhaustion	0.80 (0.75-0.85)	-0.23	<.0001	1.04 (1.02-1.06)	0.04	<.0001
MBI_ Cynicism	1.06 (1.00-1.12)	0.06	.05	0.99 (0.97-1.01)	-0.01	.22
MBI_ Efficacy	1.10 (1.01-1.21)	0.10	.04	1.01 (0.98-1.03)	0.01	.52
Physical health	1.01 (1.00-1.02)	0.01	.11	1.00 (1.00-1.00)	0.001	.32
Mental health	1.01 (1.00-1.02)	0.01	.12	1.00 (1.00-1.00)	-0.0002	.84
Unit type						
General nursing home	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Secure dementia	1.22 (0.95-1.56)	0.20	.12	0.96 (0.89-1.04)	-0.04	.2935
Non-secure dementia	1.00 (0.69-1.46)	0.003	.99	1.09 (0.97-1.22)	0.08	.1343
Secure mental health/psychiatric	1.02 (0.43-2.46)	0.02	.96	0.93 (0.68-1.28)	-0.07	.6557
Other	1.01 (0.70-1.46)	0.01	.94	0.94 (0.85-1.05)	-0.06	.2709
Unit staffing level	1.18 (1.06-1.31)	0.16	.002	1.01 (0.97-1.04)	0.01	.77
Percent of care aide staffing hours out of total staffing	0.98 (0.97-0.99)	-0.02	<.0001	1.00 (1.00-1.00)	0.003	.03
Owner-operator model						
Public not-for-profit	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Private for-profit	1.11 (0.87-1.42)	0.11	.40	0.98 (0.91-1.06)	-0.02	.66
Voluntary not-for-profit	0.84 (0.67-1.07)	-0.17	.15	0.97 (0.90-1.04)	-0.03	.35
Nursing home size						
Small	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Medium	1.01 (0.77-1.33)	0.01	.93	0.98 (0.91-1.06)	-0.02	.66
Large	0.99 (0.76-1.28)	-0.01	.91	0.97 (0.90-1.05)	-0.03	.41
Health region						
Winnipeg Regional Health Authority	1 [Reference]	NA	NA	1 [Reference]	NA	NA
Alberta Health Edmonton zone	0.98 (0.74-1.28)	-0.02	.86	0.95 (0.87-1.03)	-0.05	.24
Alberta Health Calgary zone	1.09 (0.81-1.46)	0.08	.57	0.93 (0.85-1.02)	-0.07	.14
BC Fraser Health Authority	0.79 (0.62-1.02)	-0.23	.07	0.94 (0.87-1.02)	-0.06	.12
BC Interior Health Authority	1.03 (0.65-1.63)	0.03	.89	0.92 (0.81-1.05)	-0.08	.21
Random intercept for unit clustering	1.00 (0.90-1.12)	0.004	.94	1.01 (1.00-1.02)	0.01	.01

Abbreviations: ACT, the Alberta Context Tool; OR, odds ratio; NA, not applicable; RR, relative rate; MBI, Maslach Burnout Inventory; BC, British Columbia.

^a Models the likelihood of 0 missed or rushed care.

^b Compares numbers of missed or rushed care tasks among individuals with at least 1 missed or rushed care task.