

Appendix 4, supplemental Table S2 (as supplied by the authors): Adjusted risk multiplier for dementia by age and number of morbidities in the oldest participants

Morbidities	No of participant-years (%)	Mortality	Physician visits	ED visits	Hospitalizations	Discharge to long-term care
		HR (95%CI)	RR (95%CI)	RR (95%CI)	RR (95%CI)	HR (95%CI)
Age 85-89 y	371,349					
None	31,025 (8.4)	4.37 (4.09,4.66)	3.47 (3.35,3.59)	4.06 (3.64,4.52)	7.79 (6.62,9.16)	35.15 (24.65,50.13)
One	40,346 (10.9)	2.14 (2.06,2.23)	1.46 (1.43,1.48)	1.83 (1.74,1.94)	3.29 (3.04,3.56)	8.24 (7.00,9.69)
Two	63,481 (17.1)	2.14 (2.08,2.20)	1.30 (1.29,1.32)	1.63 (1.57,1.69)	2.67 (2.54,2.81)	4.90 (4.43,5.42)
Three	68,628 (18.5)	2.03 (1.98,2.09)	1.25 (1.24,1.27)	1.45 (1.41,1.49)	2.27 (2.18,2.36)	2.98 (2.76,3.21)
Four	57,909 (15.6)	1.87 (1.82,1.92)	1.22 (1.20,1.23)	1.31 (1.27,1.34)	1.78 (1.71,1.84)	1.86 (1.75,1.98)
Five or more	109,960 (29.6)	1.53 (1.51,1.56)	1.21 (1.20,1.22)	1.21 (1.19,1.23)	1.47 (1.44,1.50)	1.29 (1.25,1.33)
Age 90-94 y	168,388					
None	18,149 (10.8)	6.35 (5.85,6.89)	6.05 (5.79,6.33)	5.38 (4.66,6.22)	12.15 (9.67,15.27)	30.10 (19.04,47.57)
One	15,026 (8.9)	1.96 (1.87,2.06)	1.67 (1.63,1.71)	1.72 (1.60,1.85)	2.94 (2.64,3.28)	4.44 (3.69,5.35)
Two	25,454 (15.1)	1.86 (1.79,1.93)	1.43 (1.41,1.45)	1.44 (1.37,1.51)	2.51 (2.35,2.68)	2.53 (2.27,2.82)
Three	29,431 (17.5)	1.77 (1.72,1.83)	1.34 (1.32,1.36)	1.22 (1.17,1.26)	1.87 (1.77,1.96)	1.93 (1.78,2.10)
Four	26,489 (15.7)	1.64 (1.58,1.69)	1.29 (1.28,1.31)	1.15 (1.11,1.19)	1.56 (1.50,1.63)	1.40 (1.31,1.49)
Five or more	53,839 (32.0)	1.42 (1.39,1.45)	1.24 (1.23,1.26)	1.02 (1.00,1.04)	1.21 (1.18,1.24)	1.11 (1.07,1.15)
Age 95 y+	70,811					
None	21,391 (30.2)	19.57 (17.36,22.06)	25.60 (23.89,27.44)	14.04 (11.17,17.65)	26.93 (19.01,38.15)	54.52 (31.64,93.94)
One	5,407 (7.6)	2.12 (1.97,2.29)	2.05 (1.96,2.13)	1.46 (1.29,1.65)	2.21 (1.84,2.66)	2.14 (1.72,2.67)
Two	8,193 (11.6)	1.69 (1.60,1.79)	1.61 (1.57,1.66)	1.15 (1.06,1.24)	1.69 (1.50,1.89)	1.78 (1.54,2.06)
Three	9,832 (13.9)	1.60 (1.52,1.68)	1.45 (1.42,1.49)	0.95 (0.89,1.01)	1.28 (1.17,1.39)	1.16 (1.05,1.29)
Four	8,843 (12.5)	1.40 (1.33,1.48)	1.36 (1.33,1.39)	0.90 (0.85,0.95)	1.03 (0.95,1.11)	1.04 (0.95,1.14)
Five or more	17,145 (24.2)	1.35 (1.30,1.40)	1.29 (1.26,1.31)	0.90 (0.87,0.93)	1.02 (0.98,1.07)	0.98 (0.92,1.03)

CI = confidence interval, HR = hazard ratio, RR - rate ratio, ED = emergency department

Ratios are adjusted for sex, Aboriginal status, and rural/urban. These models include 3-way and 2-way interactions terms for dementia, age, and number of morbidities.

The Table shows the likelihood of a two-fold increase in the risk of the outcomes with repeat events (i.e., physician visits, ED visits, hospitalizations) that is associated with dementia, along with the risk of mortality and discharge to long-term care. For example, a two-fold increase in the number of physician visits is 3.47 times more likely among those who are aged 85-89 years with no comorbidities except for dementia, as compared to those of similar age, also with no comorbidities including no dementia.