

Table S1 – Stratified analyses by age group

Age group	Number of medications used in past year	Hospitalizations	Deaths
		aRR (95% CI)*	aRR (95% CI)*
66-69 years			
	0-4	Ref	Ref
	5-9	1.43 (1.20-1.70)	1.91 (1.07-3.39)
	10-14	1.88 (1.57-2.26)	2.91 (1.63-5.19)
	15-19	2.43 (2.00-2.96)	5.49 (3.08-9.77)
	20+	3.25 (2.71-3.90)	8.80 (5.09-15.22)
70-74 years			
	0-4	Ref	Ref
	5-9	1.10 (0.95-1.27)	1.07 (0.74-1.55)
	10-14	1.35 (1.16-1.57)	1.76 (1.24-2.50)
	15-19	1.94 (1.67-2.25)	2.53 (1.76-3.63)
	20+	2.56 (2.22-2.95)	4.05 (2.89-5.70)
75-79 years			
	0-4	Ref	Ref
	5-9	1.03 (0.89-1.19)	0.95 (0.67-1.34)
	10-14	1.21 (1.05-1.40)	1.39 (1.00-1.93)
	15-19	1.44 (1.24-1.67)	1.68 (1.19-2.35)
	20+	1.75 (1.52-2.01)	2.60 (1.88-3.58)
80+ years			
	0-4	Ref	Ref
	5-9	0.95 (0.87-1.03)	1.01 (0.86-1.19)
	10-14	0.92 (0.84-1.00)	1.06 (0.91-1.24)
	15-19	1.00 (0.91-1.09)	1.24 (1.06-1.46)
	20+	1.10 (1.01-1.21)	1.38 (1.17-1.63)

\* Adjusted for sex, living environments, material and social deprivation index, number of chronic conditions

Table S2. Adjusted relative risks of COVID-19-related hospitalizations and death according to the number of medications used among older adults in Quebec, Canada – Sensitivity analyses including the 23 individuals who died before the end of polypharmacy exposure period

Number of medications used in past year	Hospitalizations	Deaths
	aRR (95% CI)*	aRR (95% CI)*
0-4	Ref	Ref
5-9	1.11 (1.04-1.19)	1.12 (0.97-1.28)
10-14	1.19 (1.11-1.27)	1.29 (1.12-1.48)
15-19	1.36 (1.27-1.46)	1.55 (1.34-1.79)
20+	1.62 (1.51-1.75)	1.94 (1.68-2.24)

\* Adjusted for age group, sex, living environment, material and social deprivation index, number of chronic conditions

Table S3 – Sensitivity analyses using number of medications as a continuous variable

		Hospitalizations	Deaths
		aRR (95% CI)*	aRR (95% CI)*
Total population			
		1.022 (1.020-1.025)	1.032 (1.027-1.036)
Age groups			
	66-70 years	1.048 (1.042-1.054)	1.083 (1.069-1.097)
	71-74 years	1.040 (1.036-1.045)	1.059 (1.049-1.069)
	75-79 years	1.028 (1.023-1.032)	1.045 (1.036-1.054)
	80+ years	1.007 (1.004-1.010)	1.017 (1.012-1.022)

\* Adjusted for sex, living environments, material and social deprivation index, number of chronic conditions (and age group for the Total population analysis)