

Supplemental Table 7. Factors associated with ICU admission, mechanical ventilation, and death during hospitalization in influenza-positive patients

Factor	Age group	OR (95% CI)		
		ICU admission	Mechanical ventilation	Death during hospitalization
COPD	15 to <50	0.69 (0.10, 4.87)	1.47 (0.12, 18.81)	-
	50 to <65	2.88 (1.21, 6.84)	2.17 (0.91, 5.19)	0.60 (0.15, 2.40)
	≥65	2.84 (1.44, 5.57)	2.33 (1.33, 4.07)	0.89 (0.49, 1.62)
Cardiovascular disease	15 to <50	4.11 (1.29, 13.13)	0.74 (0.12, 4.68)	-
	50 to <65	1.73 (0.78, 3.84)	1.08 (0.46, 2.56)	0.54 (0.17, 1.71)
	≥65	1.00 (0.50, 2.01)	1.02 (0.57, 1.81)	1.88 (1.01, 3.50)
Diabetes	15 to <50	2.87 (0.85, 9.65)	2.28 (0.50, 10.43)	-
	50 to <65	1.59 (0.60, 4.23)	2.67 (0.97, 7.39)	0.95 (0.22, 4.19)
	≥65	1.08 (0.50, 2.32)	1.28 (0.71, 2.33)	0.96 (0.53, 1.73)
Obesity	15 to <50	2.18 (0.75, 6.36)	3.69 (1.00, 13.63)	-
	50 to <65	0.92 (0.34, 2.50)	0.62 (0.20, 1.91)	1.91 (0.22, 4.19)
	≥65	1.90 (0.75, 4.82)	2.64 (1.36, 5.13)	1.15 (0.58, 2.30)
Other chronic conditions	15 to <50	1.26 (0.50, 3.21)	2.29 (0.78, 6.69)	-
	50 to <65	0.52 (0.21, 1.29)	0.55 (0.20, 1.48)	1.46 (0.45, 4.72)
	≥65	0.71 (0.33, 1.52)	0.66 (0.35, 1.25)	1.52 (0.84, 2.76)
Male	<15	1.20 (0.64, 2.26)	1.49 (0.26, 8.63)	1.20 (0.29, 5.07)
	15 to <50	1.21 (0.50, 2.91)	1.30 (0.47, 3.57)	-
	50 to <65	2.20 (0.97, 4.96)	3.11 (1.28, 7.59)	8.34 (2.08, 33.47)
	≥65	0.83 (0.42, 1.64)	0.65 (0.37, 1.14)	1.18 (0.67, 2.08)
Current smoker	15 to <50	1.76 (0.71, 4.38)	0.53 (0.14, 1.94)	-
	50 to <65	1.20 (0.53, 2.73)	0.79 (0.34, 1.85)	0.38 (0.10, 1.39)
	≥65	3.26 (1.44, 7.35)	2.09 (1.00, 4.39)	0.93 (0.37, 2.33)
Influenza B (vs. A)	<15	0.94 (0.44, 1.99)	13.44 (1.32, 136.8)	3.32 (0.69, 16.04)
	15 to <50	0.67 (0.23, 1.92)	0.28 (0.07, 1.22)	-
	50 to <65	0.55 (0.20, 1.49)	0.71 (0.26, 1.99)	0.44 (0.11, 1.75)
	≥65	0.93 (0.40, 2.13)	1.01 (0.52, 1.95)	0.56 (0.29, 1.08)
Use of antivirals during the current influenza episode	<15	0.98 (0.21, 4.53)	None observed	None observed
	15 to <50	3.86 (1.37, 10.82)	3.87 (1.13, 13.28)	-
	50 to <65	4.80 (1.53, 15.08)	1.20 (0.36, 4.01)	0.99 (0.22, 4.38)
	≥65	1.74 (0.60, 5.02)	1.11 (0.53, 2.34)	0.76 (0.39, 1.47)
Hospitalization during the last 12 months	<15	0.90 (0.42, 1.93)	3.78 (0.71, 20.21)	1.20 (0.26, 5.53)
	15 to <50	0.86 (0.33, 2.25)	0.40 (0.11, 1.41)	-
	50 to <65	2.97 (1.28, 6.91)	1.86 (0.78, 4.42)	2.86 (0.89, 9.22)
	≥65	0.58 (0.28, 1.21)	0.84 (0.47, 1.51)	1.46 (0.83, 2.56)
Any chronic condition	<15	2.24 (0.88, 5.76)	0.94 (0.07, 11.95)	0.88 (0.06, 13.44)

Abbreviations: ICU, intensive care unit; OR, odds ratio

Adjusted ORs were determined by mixed effects logistic regression adjusted for age and vaccination for influenza during the previous 12 months and with site as a random effect. For patients aged 15 to <65 years (N=1,193) and ≥65 years (N=776), covariates included cardiovascular disease, COPD, diabetes, obesity, other chronic conditions, sex, current smoking, influenza B, antiviral use during the current influenza episode, hospitalization during the previous 12 months, site (as random effect), vaccination, and age. For patients aged <15 years (N=1,309), covariates included any chronic condition, sex, age, influenza B, antiviral use during the current influenza episode, hospitalization during the previous 12 months, site (as random effect), vaccination, and age. Factors associated with ICU admission, mechanical ventilation, or death during hospitalization are indicated in bold text.