

Supplementary Online Content

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

eTable 1. ICD-10 codes associated with each psychiatric diagnostic category and comorbidities

Schizophrenia spectrum disorders	F20* (schizophrenia) F22* (delusional disorders) F23* (acute and transient psychotic disorders) F25* (schizoaffective disorder) F28 (other nonorganic psychotic disorders) F29 (unspecified nonorganic psychosis)
Mood disorders	F30* or F31* (bipolar disorder) F32* or F33* (major depressive disorder) F34* (persistent mood disorder) F39* (unspecified mood disorder)
Anxiety disorders	F40* (phobic anxiety disorders) F41* (other anxiety disorders)
Reference Group	Excludes diagnoses above and F42* (Obsessive-compulsive disorder) F43* (Reaction to severe stress, and adjustment disorders) F44* (Dissociative and conversion disorders) F45* (Somatoform disorders) F48* (Other nonpsychotic mental disorders) F50* (Eating disorders) F51* (Sleep disorders not due to a substance or known physiological condition) F53* (Mental and behavioral disorders associated with the puerperium) F60* (Other specific personality disorders) F68* (Other disorders of adult personality and behavior) F69* (Unspecified disorder of adult personality and Behavior) F90* (Attention-deficit hyperactivity disorders) F95* (Tic disorder) F99 (Mental disorder, not otherwise specified)
Myocardial infarction	I21-I25
Hypertension	I10-I16, H35.03, I67.4, O10.1-O10.4, O10.9
Heart failure	I50, I11.0, I13.0
Diabetes Mellitus	E08-E13
Chronic Kidney Disease	N03, N18, I12, I13, Z99.2, Z49, Z91.15, Z99.2, E10.22, E11.22, E13.22, E08.22, O10.3, D63.1
Obstructive Lung Disease	J40-J47, J60, J66, J67.2, J67.8, J67.9, J68.4, J84, G47.3
Cancer	C00-D49

eTable 2. Likelihood of Positive Test Result by Psychiatric Diagnosis

	Tested (N= 26540)	SARS-CoV-2- positive (N = 7348)	Likelihood of Positive Test (number positive/tested)	P value
Schizophrenia spectrum disorders	336	75	22.3%	0.0172
Mood disorders	2224	564	25.4%	0.0040
Anxiety disorders	1494	360	24.1%	0.0006
Reference	22486	6349	28.2%	Reference

*The p-value is based on Wald tests from a logistic regression with positive test as the dependent variable, psychiatric diagnosis group as the only predictor.

eTable 3. Multivariable-Adjusted Risk Model for 45-Day Case Fatality: Lifetime Psychiatric Diagnoses with Stepwise Variable Selection^A

Variable	OR (95% CI)
Age 75 and older ^B	35.97 (23.17, 55.83)
Age 65-74 ^B	16.56 (10.62, 25.82)
Age 55-64 ^B	7.70 (4.93, 12.04)
Age 45-54 ^B	3.87 (2.39, 6.26)
Schizophrenia spectrum disorder	2.60 (1.45, 4.67)
Male sex	1.72 (1.45, 2.02)
Other race ^C vs White race	1.47 (1.19, 1.80)
Hypertension	1.40 (1.14, 1.72)
White race vs Black race	1.38 (1.08, 1.78)
Asian race vs White race	1.30 (0.95, 1.78)
Diabetes mellitus	1.29 (1.09, 1.53)
Never smoker vs current smoker	1.28 (0.84, 1.94)
Mood disorder	1.15 (0.88, 1.49)
White race vs Mixed race	1.07 (0.59, 1.95)
Former smoker vs never smoker	1.00 (0.83, 1.21)
Anxiety disorder	0.96 (0.66, 1.41)

^AHeart failure, myocardial infarction, chronic kidney disease, cancer, and obstructive lung disease were removed from model after stepwise selection

^BCompared to age 18-44 years

^COther race includes Guamanian or Chamorro, Native American, Other Pacific Islander, Native Hawaiian, Samoan, or “other race” by patient report

eTable 4. Multivariable-Adjusted Risk Model for 45-Day Case Fatality: Recent Psychiatric Diagnoses with Stepwise Variable Selection^A

Variable	OR (95% CI)
Age 75 and older ^B	36.00 (22.96, 56.48)
Age 65-74 ^B	16.63 (10.56, 26.20)
Age 55-64 ^B	7.74 (4.90, 12.21)
Age 45-54 ^B	3.89 (2.38, 6.36)
Schizophrenia spectrum disorder	2.64 (1.24, 5.61)
Heart failure	1.76 (1.39, 2.23)
Male sex	1.75 (1.48, 2.08)
Other race ^C vs White race	1.50 (1.22, 1.85)
Hypertension	1.45 (1.17, 1.79)
White race vs Black race	1.33 (1.03, 1.72)
Diabetes mellitus	1.31 (1.10, 1.56)
Asian race vs White race	1.31 (0.96, 1.80)
Never smoker vs current smoker	1.31 (0.84, 2.03)
Mood disorder	1.29 (0.95, 1.74)
Anxiety disorder	1.22 (0.78, 1.92)
Mixed race vs White race	1.03 (0.57, 1.85)
Never smoker vs former smoker	1.01 (0.83, 1.23)

^AMyocardial infarction, chronic kidney disease, cancer, and obstructive lung disease were removed from the model after stepwise selection

^BCompared to age 18-44 years

^COther race includes Guamanian or Chamorro, Native American, Other Pacific Islander, Native Hawaiian, Samoan, or “other race” by patient report