

Supplementary Table 1. Sensitivity analysis of the ICD-10-CM code U07.1 for COVID-19, based on outpatient and emergency encounters with six diagnosis fields

	Positive predictive value % (95 CI)	Negative predictive value % (95 CI)	Sensitivity % (95 CI)	Specificity % (95 CI)
Overall	95.4 (95.0-95.8)	78.0 (77.8-78.2)	27.2 (26.7-27.7)	99.5 (99.4-99.5)
Clinical setting				
Outpatient	98.1 (97.5-98.7)	41.3 (40.7-42.0)	13.7 (13.2-14.3)	99.6 (99.4-99.7)
Emergency	99.3 (99.0-99.6)	85.7 (85.5-85.9)	19.8 (19.2-20.4)	100.0 (100.0-100.0)
Inpatient	91.9 (91.2-92.7)	92.3 (91.8-92.8)	84.4 (83.4-85.3)	96.2 (95.8-96.5)
Time period				
January–March 2022	63.0 (50.1-75.8)	99.9 (99.9-100.0)	58.6 (45.9-71.3)	99.9 (99.9-100.0)
April–June 2022	94.7 (94.0-95.4)	57.8 (57.4-58.2)	15.2 (14.8-15.6)	99.3 (99.2-99.4)
July–September 2022	94.8 (94.1-95.6)	89.4 (89.0-89.7)	52.8 (51.6-54.0)	99.3 (99.2-99.4)
October–December 2022	98.2 (97.7-98.8)	82.8 (81.7-83.8)	71.6 (70.0-73.2)	99.1 (98.8-99.3)
Sex				
Male	95.1 (94.6-95.7)	80.1 (79.8-80.5)	30.0 (29.3-30.7)	99.5 (99.4-99.5)
Female	95.7 (95.1-96.3)	75.6 (75.2-75.9)	24.4 (23.8-25.0)	99.5 (99.5-99.6)
Age group, years				
<20	98.3 (97.6-98.9)	64.3 (63.6-64.9)	19.6 (18.8-20.4)	99.8 (99.7-99.8)
20–39	93.1 (91.4-94.9)	63.9 (63.2-64.6)	9.9 (9.3-10.6)	99.5 (99.4-99.7)
40–59	93.2 (92.0-94.3)	77.3 (76.8-77.8)	20.2 (19.4-21.1)	99.5 (99.4-99.6)
60–79	95.1 (94.4-95.8)	87.7 (87.4-88.1)	43.5 (42.4-44.6)	99.4 (99.4-99.5)
≥80	96.1 (95.3-96.9)	91.3 (90.9-91.8)	61.9 (60.3-63.5)	99.4 (99.2-99.5)
Hospital level				
Medical center	95.2 (94.7-95.7)	85.1 (84.8-85.4)	43.4 (42.7-44.2)	99.3 (99.3-99.4)
Non-medical center	95.8 (95.0-96.5)	70.6 (70.2-70.9)	14.1 (13.6-14.6)	99.7 (99.6-99.8)

Note: CI, confidence interval. For inpatient encounters, the number of diagnosis fields remained unchanged from the primary analysis.