

**SUPPLEMENTARY TABLE. Characteristics of patients hospitalized primarily for COVID-19\* and in-hospital deaths among patients hospitalized primarily for COVID-19† during three pre-Delta pandemic periods — Premier Healthcare Database Special COVID-19 Release,<sup>§</sup> United States, April 2020–June 2021**

	No. (column %)					
	Early pandemic (Apr–Sep 2020)		Winter 2020–2021 (Oct 2020–Feb 2021)		Spring 2021 (Mar–Jun 2021)	
	Hospitalized patients	In-hospital deaths	Hospitalized patients	In-hospital deaths	Hospitalized patients	In-hospital deaths
<b>Total Patients</b>	<b>138,605 (100)</b>	<b>22,300 (100)</b>	<b>252,758 (100)</b>	<b>37,991 (100)</b>	<b>71,554 (100)</b>	<b>7,110 (100)</b>
<b>Overall cMR</b>	16.1		15.0		9.9	
<b>Patient characteristics</b>						
<b>Age group, yrs</b>						
0–17	775 (0.6)	6 (0.0)	1,297 (0.5)	10 (0.0)	597 (0.8)	2 (0.0)
18–34	7841 (5.7)	219 (1.0)	9,327 (3.7)	264 (0.7)	5,752 (8.0)	127 (1.8)
35–49	20,835 (15.0)	1,128 (5.1)	27,531 (10.9)	1,440 (3.8)	13,740 (19.2)	586 (8.2)
50–64	40,605 (29.3)	4,651 (20.9)	67,671 (26.8)	7,065 (18.6)	24,359 (34.0)	2,001 (28.1)
65–79	43,156 (31.1)	9,074 (40.7)	92,442 (36.6)	16,763 (44.1)	18,905 (26.4)	2,801 (39.4)
≥80	25,348 (18.3)	7,222 (32.4)	54,490 (21.6)	12,449 (32.8)	8,201 (11.5)	1,593 (22.4)
<b>Sex</b>						
Male	74,113 (53.5)	13,112 (58.8)	135,393 (53.6)	22,856 (60.2)	36,398 (50.9)	4,004 (56.3)
Female	64,492 (46.5)	9,188 (41.2)	117,365 (46.4)	15,135 (39.8)	35,156 (49.1)	3,106 (43.7)
<b>Race and ethnicity</b>						
Hispanic	32,922 (23.8)	4,982 (22.3)	37,834 (15.0)	5,744 (15.1)	11,608 (16.2)	971 (13.7)
NH White	58,244 (42.0)	9,797 (43.9)	155,741 (61.6)	23,853 (62.8)	38,953 (54.4)	4,014 (56.5)
NH Black	30,057 (21.7)	4,387 (19.7)	36,013 (14.2)	4,599 (12.1)	14,614 (20.4)	1,392 (19.6)
NH Asian	3,780 (2.7)	629 (2.8)	6,281 (2.5)	942 (2.5)	1,715 (2.4)	188 (2.6)
NH Other	9,777 (7.1)	1,795 (8.0)	11,525 (4.6)	1,987 (5.2)	3,002 (4.2)	368 (5.2)
Unknown	3,825 (2.8)	710 (3.2)	5,364 (2.1)	866 (2.3)	1,662 (2.3)	177 (2.5)
<b>Insurance</b>						
Commercial	34,983 (25.2)	2,845 (12.8)	60,766 (24.0)	4,847 (12.8)	24,296 (34.0)	1,375 (19.3)
Medicare	70,162 (50.6)	15,925 (71.4)	149,100 (59.0)	28,449 (74.9)	29,525 (41.3)	4,543 (63.9)
Medicaid	19,707 (14.2)	2,259 (10.1)	25,568 (10.1)	2,759 (7.3)	11,318 (15.8)	778 (10.9)
Self-pay	4,464 (3.2)	373 (1.7)	4,631 (1.8)	454 (1.2)	2,033 (2.8)	106 (1.5)
Other/Unknown	9,289 (6.7)	898 (4.0)	12,693 (5.0)	1,482 (3.9)	4,382 (6.1)	308 (4.3)
<b>No. of underlying medical conditions<sup>¶</sup></b>						
0	17,992 (13.0)	615 (2.8)	25,284 (10.0)	736 (1.9)	10,296 (14.4)	164 (2.3)
1	30,299 (21.9)	2,506 (11.2)	49,281 (19.5)	3,802 (10.0)	16,915 (23.6)	683 (9.6)
2	30,586 (22.1)	4,539 (20.4)	56,155 (22.2)	7,472 (19.7)	16,055 (22.4)	1,447 (20.4)
3	24,820 (17.9)	5,271 (23.6)	48,599 (19.2)	9,005 (23.7)	11,985 (16.7)	1,669 (23.5)
4	17,298 (12.5)	4,460 (20.0)	35,418 (14.0)	7,846 (20.7)	8,053 (11.3)	1,474 (20.7)
≥5	17,610 (12.7)	4,909 (22.0)	38,021 (15.0)	9,130 (24.0)	8,250 (11.5)	1,673 (23.5)
<b>Disability<sup>**</sup></b>						
Yes	20,864 (15.1)	4,821 (21.6)	38,985 (15.4)	7,796 (20.5)	8,188 (11.4)	1,345 (18.9)
No	117,741 (84.9)	17,479 (78.4)	213,773 (84.6)	30,195 (79.5)	63,366 (88.6)	5,765 (81.1)
<b>Prior COVID-19<sup>††</sup></b>						
Yes	99 (0.1)	14 (0.1)	460 (0.2)	54 (0.1)	349 (0.5)	39 (0.5)
No	138,506 (99.9)	22,286 (99.9)	252,298 (99.8)	37,937 (99.9)	71,205 (99.5)	7,071 (99.5)
<b>Intensive care unit admission</b>						
Yes	37,120 (26.8)	14,154 (63.5)	57,496 (22.7)	25,860 (68.1)	15,930 (22.3)	5,447 (76.6)
No	101,485 (73.2)	8,146 (36.5)	195,262 (77.3)	12,131 (31.9)	55,624 (77.7)	1,663 (23.4)
<b>Medication treatment<sup>§§</sup></b>						

Yes	73,072 (52.7)	12,606 (56.5)	222,645 (88.1)	34,960 (92.0)	63,390 (88.6)	6,536 (91.9)
No	65,533 (47.3)	9,694 (43.5)	30,113 (11.9)	3,031 (8.0)	8,164 (11.4)	574 (8.1)
<b>Noninvasive ventilation</b>						
Yes	19,473 (14.0)	8,021 (36.0)	47,210 (18.7)	20,113 (52.9)	12,963 (18.1)	4,209 (59.2)
No	119,132 (86.0)	14,279 (64.0)	205,548 (81.3)	17,878 (47.1)	58,591 (81.9)	2,901 (40.8)
<b>Invasive mechanical ventilation</b>						
Yes	23,470 (16.9)	13,219 (59.3)	37,579 (14.9)	23,501 (61.9)	9,311 (13.0)	4,959 (69.7)
No	115,135 (83.1)	9,081 (40.7)	215,179 (85.1)	14,490 (38.1)	62,243 (87.0)	2,151 (30.3)
<b>Hospital characteristics</b>						
<b>Census Bureau region<sup>¶¶</sup></b>						
Midwest	24,545 (17.7)	3,591 (16.1)	57,323 (22.7)	8,008 (21.1)	19,317 (27.0)	1,956 (27.5)
Northeast	26,054 (18.8)	6,129 (27.5)	35,625 (14.1)	5,305 (14.0)	12,600 (17.6)	1,442 (20.3)
South	67,199 (48.5)	9,660 (43.3)	117,985 (46.7)	17,523 (46.1)	31,896 (44.6)	2,965 (41.7)
West	20,807 (15.0)	2,920 (13.1)	41,825 (16.5)	7,155 (18.8)	7,741 (10.8)	747 (10.5)
<b>No. of hospital beds</b>						
0–199	25,469 (18.4)	3,048 (13.7)	56,544 (22.4)	6,756 (17.8)	16,190 (22.6)	1,181 (16.6)
200–499	66,645 (48.1)	11,526 (51.7)	125,024 (49.5)	19,872 (52.3)	35,252 (49.3)	3,695 (52.0)
≥500	46,491 (33.5)	7,726 (34.6)	71,190 (28.2)	11,363 (29.9)	20,112 (28.1)	2,234 (31.4)

**Abbreviations:** cMR = crude mortality rate; ICD-10-CM = *International Classification of Diseases, Tenth Revision, Clinical Modification*; NH = non-Hispanic.

\* Patients hospitalized primarily for COVID-19 had a primary discharge diagnosis of COVID-19 (i.e., ICD-10-CM code of U07.1) or a secondary discharge diagnosis of COVID-19 accompanied by either treatment with remdesivir or a primary diagnosis of sepsis, pulmonary embolism, acute respiratory failure, or pneumonia.

<sup>†</sup> In-hospital deaths were patients with a discharge status of expired.

<sup>§</sup> August 2, 2022, data release. Data are from 678 hospitals that had at least one inpatient record per month during April 2020–May 2022.

<sup>¶</sup> Sixteen underlying medical conditions associated with higher risk for severe COVID-19 were assessed: asthma, cerebrovascular disease, cancer, chronic kidney disease, chronic lung disease, chronic liver disease, cystic fibrosis, dementia, diabetes, heart conditions, HIV, mental health disorder, obesity, primary immunodeficiencies, transplantation, and tuberculosis (<https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/underlying-evidence-table.html>). Condition were assessed using ICD-10-CM codes listed either at or prior to the COVID-19 health care encounter. For each patient, the number of underlying medical conditions was summed.

\*\* Presence of a disability was assessed using ICD-10-CM codes for birth defects, developmental disabilities, spinal cord injury, traumatic brain injury, and vision-, hearing-, and mobility-related disabilities.

<sup>††</sup> Prior COVID-19 was identified by presence of a COVID-19 diagnosis during an outpatient or inpatient encounter that occurred in the same hospital system ≥90 days before the current diagnosis.

<sup>§§</sup> Patient treated with one of the following COVID-19 medications: dexamethasone, remdesivir, baricitinib, tofacitinib, tocilizumab, and sarilumab.

<sup>¶¶</sup> [https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us\\_regdiv.pdf](https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf)