Table S1 Thresholds used in vital sign measurements

Measurement	Low cutoff	High cutoff	Unit
Braden Score	6	23	Score
Mean arterial pressure	0	200	mmHg
GCS	3	15	Score
Pain scale	0	10	Score
SpO$_2$	0	100	%
Respiration rate	0	200	BPM
FiO$_2$	0	100	%
BMI	0	500	kg/m^2
Weight	0	700	lbs
Height	20	110	in
Heart rate	0	500	BPM
Temperature	0	120	°F

GCS, Glasgow Coma Score.

Table S2 Thresholds used in laboratory data

Name	Sex	Low_value	High_value	Normal_value
abg_lactic_acid	B	0.7	2.7	1.7
Albumin	B	3.8	4.9	4.35
alkaline_phosphatase	F	35	104	69.5
alkaline_phosphatase	M	40	129	84.5
alt_(sgpt)	B	10	42	26
anion_gap	B	4	16	10
arterial_o2	B	80	100	90
arterial_pco2	B	35	45	40
arterial_po2	B	80	100	90
arterial-venous_ph	B	7.35	7.45	7.4
ast_(sgot)	B	14	33	23.5
atypical_lymphocyte	B	0	12	0
banded_neutrophils	B	34	73	53.5
Bicarbonate	B	21	27	24
bilirubin_direct	B	0	0.2	0.1
bilirubin_indirect	B	0.2	0.9	0.55
bilirubin_total	B	0.2	1	0.6
blood_urean_nitrogen	B	6	22	14
bun-creatinine_ratio	B	7.5	34	20.75
Calcium	B	8.6	10	9.3
calcium_ionized	B	4.64	5.28	4.96
carbon_dioxide	B	22	30	26
Chloride	B	101	110	105.5
creatine_kinase	B	22	195	108.5
Creatinine	F	0.4	0.9	0.65
Creatinine	M	0.8	1.2	1
EGFR	B	59	500	60
fibrinogen_level	B	186	461	323.5
Globulin	B	2.3	3.5	2.9
Glucose	B	71	99	85
Hematocrit	M	40	54	47
Hematocrit	F	37	47	42
Hemoglobin	M	14	18	16
Hemoglobin	F	12	16	14
Inr	B	0.8	1.1	0.95
Ketones_ua	B	0	20	20
Lipase	B	0	60	30
Lymphocytes	B	24	44	34
Magnesium	B	1.8	2.6	2.2
Neutrophils	B	0	5	2.5
nt_pro_bnp	B	0	2,000	400
partial_thromboblastin_time	B	25	37	31
Phosphorus	B	2.5	4.5	3.5
plasma_lactic_acid	B	0.7	2.7	1.7
platelet_count	B	140	440	290
Potassium	B	3.3	4.6	3.95
pro_bnp	B	0	125	62.5
Procalcitonin	B	0	0.15	0.075
Protime	B	9.4	12.5	10.95
rbc_count	M	4.5	6.3	5.4
rbc_count	F	4.2	5.4	4.8
Sodium	B	136	145	140.5
total_protein	B	6.5	8.3	7.4
venous_o2	B	37	43	40
venous_pco2	B	44	46	45
venous_po2	B	37	43	40
wbc_count	B	4.5	11	7.75
arterial_o2_content	B	16	20	18
venous_o2_content	B	12	15	13.5

B, both sexes; F, female; M, male.

Table S3 Data features (continuous variables)

Features	Train—80%									Test—20%								
	Alive (n=137,000—97.0%)			Dead (n=4,220—3.0%)			Total (n=141,220)			Alive (n=34,251—97.0%)			Dead (n=1,055—3.0%)			Total (n=35,306)		
	Missing	Mean	SD	Missing	Mean	SD	Missing	Mean	SD	Missing	Mean	SD	Missing	Mean	SD	Missing	Mean	SD
Features—from cohort and vital sign measurements																		
Age at encounter (y)	0.0%	51.8	19.5	0.0%	64.4	15.5	0.0%	52.2	19.5	0.0%	51.7	19.5	0.0%	64.8	16.0	0.0%	52.0	19.6
Braden Score Last	5.8%	19.4	2.7	7.9%	11.6	3.0	5.8%	19.1	3.0	5.8%	19.3	2.8	7.7%	12.5	3.3	5.8%	19.1	3.0
Braden Score Mean	5.8%	19.1	2.6	7.9%	12.8	2.9	5.8%	18.9	2.8	5.8%	19.1	2.7	7.7%	13.2	3.1	5.8%	18.9	2.9
Braden Score Min	5.8%	17.7	3.3	7.9%	10.6	2.9	5.8%	17.5	3.5	5.8%	17.8	3.2	7.7%	11.5	3.0	5.8%	17.6	3.3
FiO₂ Last (%)	87.7%	34.6	17.3	40.2%	56.7	24.3	86.3%	37.5	19.8	88.5%	35.8	17.0	46.4%	53.8	22.8	87.3%	38.0	18.8
GCS score Last	37.6%	14.7	1.1	21.3%	8.4	4.5	37.1%	14.5	1.8	38.5%	14.7	1.2	22.8%	9.4	4.6	38.0%	14.5	1.8
GCS score Mean	37.6%	14.6	1.2	21.3%	9.9	4.1	37.1%	14.4	1.7	38.5%	14.6	1.3	22.8%	10.1	4.2	38.0%	14.4	1.7
GCS score Min	37.6%	13.7	2.7	21.3%	6.8	4.4	37.1%	13.5	3.1	38.5%	13.8	2.6	22.8%	7.8	4.6	38.0%	13.6	2.9
Heart rate Last (BPM)	0.7%	80.1	14.6	0.7%	94.5	24.0	0.7%	80.5	15.2	0.8%	80.4	14.7	1.0%	92.4	21.9	0.8%	80.7	15.1
Heart rate Max (BPM)	0.7%	114.9	32.7	0.7%	145.9	42.8	0.7%	115.9	33.5	0.8%	113.7	31.0	1.0%	138.3	41.2	0.8%	114.4	31.7
Heart rate Mean (BPM)	0.7%	81.3	13.2	0.7%	92.2	16.8	0.7%	81.6	13.5	0.8%	81.5	13.3	1.0%	91.6	16.9	0.8%	81.8	13.5
Heart rate Min (BPM)	0.7%	57.8	19.6	0.7%	51.3	27.0	0.7%	57.6	19.9	0.8%	58.8	18.9	1.0%	56.4	25.6	0.8%	58.8	19.2
Mean arterial pressure Last (mmHg)	0.4%	87.6	13.5	0.5%	74.5	19.1	0.4%	87.2	13.9	0.4%	87.7	13.7	0.9%	78.2	17.8	0.5%	87.4	13.9
Mean arterial pressure Mean (mmHg)	0.4%	87.5	11.1	0.5%	80.5	12.2	0.4%	87.3	11.2	0.4%	87.5	11.2	0.9%	81.0	11.9	0.5%	87.3	11.3
Mean arterial pressure SD (mmHg)	1.3%	11.6	4.3	0.8%	14.1	5.2	1.3%	11.6	4.3	1.3%	11.5	4.4	1.5%	14.2	5.9	1.3%	11.6	4.4
Pain Last	2.7%	2.6	3.1	33.3%	2.2	3.3	3.6%	2.6	3.1	3.3%	2.6	3.1	35.1%	2.3	3.3	4.2%	2.6	3.1
Pain Mean	2.7%	3.1	2.5	33.3%	2.3	2.5	3.6%	3.1	2.5	3.3%	3.1	2.5	35.1%	2.5	2.5	4.2%	3.1	2.5
Pain Min	2.7%	0.5	1.5	33.3%	0.5	1.9	3.6%	0.5	1.6	3.3%	0.5	1.5	35.1%	0.5	1.8	4.2%	0.5	1.5
Respiration rate Last (BPM)	25.6%	17.4	2.6	25.4%	21.1	7.4	25.6%	17.5	3.0	25.5%	17.4	2.7	25.5%	20.5	7.3	25.5%	17.5	3.0
Respiration rate Max (BPM)	25.6%	26.0	9.8	25.4%	37.6	14.2	25.6%	26.3	10.2	25.5%	25.5	9.2	25.5%	34.4	13.3	25.5%	25.8	9.4
Respiration rate Mean (BPM)	25.6%	16.8	2.9	25.4%	20.0	4.3	25.6%	16.9	3.0	25.5%	16.8	2.9	25.5%	19.4	4.4	25.5%	16.8	3.0
Respiration rate Min (BPM)	25.6%	10.6	5.4	25.4%	9.4	5.2	25.6%	10.6	5.4	25.5%	10.8	5.3	25.5%	10.2	5.2	25.5%	10.8	5.3
Respiration rate SD (BPM)	26.4%	3.0	1.9	25.6%	4.9	2.0	26.4%	3.0	1.9	26.2%	2.9	1.8	25.8%	4.6	2.5	26.2%	3.0	1.8
SpO₂ Last (%)	26.6%	96.8	3.0	25.5%	93.6	9.8	26.6%	96.7	3.4	26.5%	96.8	2.8	25.7%	95.0	7.6	26.4%	96.8	3.1
SpO₂ Mean (%)	26.6%	97.4	1.8	25.5%	96.3	3.4	26.6%	97.4	1.9	26.5%	97.4	1.9	25.7%	96.4	3.4	26.4%	97.4	2.0
SpO₂ Min (%)	26.6%	89.1	10.4	25.5%	75.5	19.3	26.6%	88.7	11.0	26.5%	89.6	9.5	25.7%	79.6	17.1	26.4%	89.3	10.0
SpO₂ SD (%)	27.4%	2.0	1.4	25.8%	3.7	2.9	27.4%	2.0	1.5	27.2%	2.0	1.3	25.9%	3.5	2.9	27.2%	2.0	1.4
Temperature Last (°F)	16.2%	98.2	1.0	13.4%	98.2	2.3	16.1%	98.2	1.1	16.7%	98.3	0.8	12.6%	98.2	2.2	16.6%	98.3	0.9
Temperature SD (°F)	18.7%	1.1	2.2	15.4%	1.6	2.0	18.6%	1.1	2.2	19.3%	1.0	2.1	14.9%	1.4	2.0	19.1%	1.0	2.1
Features—from laboratory data																		
Complete blood count																		
Lymphocytes SD (%)	0.0%	27.7	10.4	0.0%	19.0	14.6	0.0%	27.4	10.6	0.0%	27.5	10.5	0.0%	19.3	14.4	0.0%	27.3	10.8
Neutrophils Last (%)	0.0%	41.9	33.9	0.0%	60.0	34.8	0.0%	42.5	34.1	0.0%	41.7	34.3	0.0%	58.4	35.4	0.0%	42.2	34.5
Neutrophils SD (%)	0.0%	41.9	33.9	0.0%	60.0	34.8	0.0%	42.5	34.1	0.0%	41.7	34.3	0.0%	58.4	35.4	0.0%	42.2	34.5
PLT count Last (thousand/µL)	0.0%	248.3	96.8	0.0%	194.3	120.7	0.0%	246.6	98.0	0.0%	241.2	88.1	0.0%	188.0	112.7	0.0%	239.6	89.4
PLT count SD (thousand/µL)	0.0%	248.3	96.8	0.0%	194.3	120.7	0.0%	246.6	98.0	0.0%	241.2	88.1	0.0%	188.0	112.7	0.0%	239.6	89.4
RBC count Last (million/µL)	0.0%	4.2	0.9	0.0%	3.6	1.0	0.0%	4.2	0.9	0.0%	4.2	0.9	0.0%	3.6	1.0	0.0%	4.2	0.9
WBC count Last (million/µL)	0.0%	9.0	3.8	0.0%	13.6	8.4	0.0%	9.2	4.1	0.0%	9.1	3.9	0.0%	13.0	8.2	0.0%	9.2	4.2
WBC count SD (million/µL)	0.0%	9.0	3.8	0.0%	13.6	8.4	0.0%	9.2	4.1	0.0%	9.1	3.9	0.0%	13.0	8.2	0.0%	9.2	4.2
Chemistry results																		
Albumun Last (g/dL)	0.0%	4.0	0.6	0.0%	3.1	0.9	0.0%	3.9	0.6	0.0%	4.0	0.6	0.0%	3.2	0.9	0.0%	4.0	0.6
Albumun Mean (g/dL)	0.0%	4.0	0.6	0.0%	3.2	0.8	0.0%	4.0	0.6	0.0%	4.0	0.6	0.0%	3.3	0.9	0.0%	4.0	0.6
Anion gap Last (mEq/L)	0.0%	10.9	2.8	0.0%	13.8	6.0	0.0%	11.0	3.0	0.0%	10.9	2.8	0.0%	13.3	5.5	0.0%	11.0	2.9
AST (SGOT) (units/L of serum)	0.0%	28.4	25.5	0.0%	67.3	71.0	0.0%	29.5	28.7	0.0%	28.6	26.7	0.0%	61.2	66.1	0.0%	29.6	29.2
Bilirubin total Last (µmol/L)	0.0%	0.6	0.5	0.0%	1.2	1.3	0.0%	0.6	0.5	0.0%	0.6	0.5	0.0%	1.2	1.3	0.0%	0.6	0.5
BUN Last (mg/dL)	0.0%	15.9	11.0	0.0%	36.5	27.3	0.0%	16.5	12.3	0.0%	15.8	10.8	0.0%	32.4	23.1	0.0%	16.3	11.7
BUN Mean (mg/dL)	0.0%	16.4	10.9	0.0%	32.3	21.8	0.0%	16.9	11.7	0.0%	16.3	10.9	0.0%	30.5	21.0	0.0%	16.7	11.6
BUN SD (mg/dL)	0.0%	15.9	11.0	0.0%	36.5	27.3	0.0%	16.5	12.3	0.0%	15.8	10.8	0.0%	32.4	23.1	0.0%	16.3	11.7
EGFR Mean (mL/min/1.73 m²)	0.0%	62.0	20.0	0.0%	51.3	24.8	0.0%	61.7	20.2	0.0%	61.9	19.8	0.0%	51.5	25.6	0.0%	61.6	20.1
Glucose SD (mmol/L)	0.0%	114.6	45.2	0.0%	138.3	60.0	0.0%	115.3	45.9	0.0%	115.2	46.2	0.0%	139.9	60.6	0.0%	116.0	46.9
Sodium Last (mEq/L)	0.0%	139.0	3.2	0.0%	141.3	6.8	0.0%	139.0	3.4	0.0%	139.0	3.3	0.0%	140.8	6.7	0.0%	139.1	3.5
Arterial blood gas																		
Arterial pCO₂ (mmHg)	0.0%	40.2	3.6	0.0%	40.7	9.9	0.0%	40.2	4.0	0.0%	40.2	3.6	0.0%	39.9	8.5	0.0%	40.2	3.8
Arterial pO₂ (mmHg)	0.0%	96.0	28.8	0.0%	123.0	54.9	0.0%	96.8	30.3	0.0%	95.6	28.3	0.0%	120.4	55.0	0.0%	96.3	29.7
Coagulation																		
PTT Mean (s)	0.0%	31.7	6.9	0.0%	38.1	15.0	0.0%	31.9	7.3	0.0%	31.6	6.7	0.0%	37.7	15.6	0.0%	31.8	7.2
Protime Last (s)	0.0%	12.4	3.0	0.0%	17.5	7.7	0.0%	12.5	3.4	0.0%	12.3	3.0	0.0%	17.0	7.2	0.0%	12.5	3.3
Protime Mean (s)	0.0%	12.4	3.0	0.0%	17.2	6.5	0.0%	12.5	3.2	0.0%	12.4	3.0	0.0%	16.9	6.4	0.0%	12.5	3.2
Protime SD (s)	0.0%	12.4	3.0	0.0%	17.5	7.7	0.0%	12.5	3.4	0.0%	12.3	3.0	0.0%	17.0	7.2	0.0%	12.5	3.3

SD, standard deviation; GCS, Glasgow Coma Score; Min, minimum; Max, maximum; PLT, platelet; RBC, red blood cell; WBC, white blood cell; BUN, blood urea nitrogen; PTT, partial thromboblastin time.

Table S4 Data features (categorical variables)

Features	Train—80%						Test—20%					
	Alive (n=137,000—97.0%)		Dead (n=4,220—3.0%)		Total (n=141,220)		Alive (n=34,251—97.0%)		Dead (n=1,055—3.0%)		Total (n=35,306)	
	Count	Proportion	Count	Proportion	Count	Proportion	Count	Proportion	Count	Proportion	Count	Proportion
ATC R03AA—alpha and beta adrenoreceptor agonists												
0	132,663	96.8%	3,166	75.0%	135,829	96.2%	33,357	97.4%	866	82.1%	34,223	96.9%
1	4,337	3.2%	1,054	25.0%	5,391	3.8%	894	2.6%	189	17.9%	1,083	3.1%
Demographics—sex (M)												
0	76,400	55.8%	1,807	42.8%	78,207	55.4%	19,037	55.6%	482	45.7%	19,519	55.3%
1	60,600	44.2%	2,413	57.2%	63,013	44.6%	15,214	44.4%	573	54.3%	15,787	44.7%
ICD/CCSR—other lower respiratory disease												
0	122,239	89.2%	3,187	75.5%	125,426	88.8%	30,612	89.4%	811	76.9%	31,423	89.0%
1	14,761	10.8%	1,033	24.5%	15,794	11.2%	3,639	10.6%	244	23.1%	3,883	11.0%
Lab—arterial pCO_2 low												
0	129,216	94.3%	2,169	51.4%	131,385	93.0%	32,560	95.1%	599	56.8%	33,159	93.9%
1	7,784	5.7%	2,051	48.6%	9,835	7.0%	1,691	4.9%	456	43.2%	2,147	6.1%
LOS												
1	24,423	17.8%	814	19.3%	25,237	17.9%	6,106	17.8%	203	19.2%	6,309	17.9%
2	30,020	21.9%	436	10.3%	30,456	21.6%	7,505	21.9%	109	10.3%	7,614	21.6%
3	22,656	16.5%	330	7.8%	22,986	16.3%	5,664	16.5%	83	7.9%	5,747	16.3%
4	14,034	10.2%	287	6.8%	14,321	10.1%	3,509	10.2%	72	6.8%	3,581	10.1%
5	9,352	6.8%	243	5.8%	9,595	6.8%	2,338	6.8%	61	5.8%	2,399	6.8%
6	6,828	5.0%	206	4.9%	7,034	5.0%	1,707	5.0%	51	4.8%	1,758	5.0%
7+	29,687	21.7%	1,904	45.1%	31,591	22.4%	7,422	21.7%	476	45.1%	7,898	22.4%
Tobacco status—never smoker												
0	76,329	55.7%	3,013	71.4%	79,342	56.2%	19,030	55.6%	753	71.4%	19,783	56.0%
1	60,671	44.3%	1,207	28.6%	61,878	43.8%	15,221	44.4%	302	28.6%	15,523	44.0%

ICD, international classification of diseases; CCSR, clinical classifications software refined; Lab, laboratory; LOS, length of stay.

Table S5 Performance metrics with CI between MONITOR, Braden, and GCS

Model	LOS	Accuracy	AUROC	Recall	Precision	AUPRC	F1	F2
MONITOR	1	0.894 (95% CI: 0.891–0.897)	0.911 (95% CI: 0.902–0.919)	0.750 (95% CI: 0.725–0.775)	0.185 (95% CI: 0.174–0.198)	0.370 (95% CI: 0.339–0.402)	0.297 (95% CI: 0.281–0.314)	0.466 (95% CI: 0.446–0.486)
	2	0.916 (95% CI: 0.913–0.919)	0.920 (95% CI: 0.911–0.928)	0.729 (95% CI: 0.701–0.758)	0.220 (95% CI: 0.204–0.235)	0.376 (95% CI: 0.342–0.409)	0.338 (95% CI: 0.317–0.356)	0.498 (95% CI: 0.475–0.520)
	3	0.904 (95% CI: 0.900–0.908)	0.915 (95% CI: 0.904–0.924)	0.738 (95% CI: 0.707–0.769)	0.228 (95% CI: 0.212–0.245)	0.381 (95% CI: 0.346–0.421)	0.349 (95% CI: 0.328–0.370)	0.510 (95% CI: 0.485–0.535)
	4	0.885 (95% CI: 0.880–0.891)	0.901 (95% CI: 0.888–0.913)	0.740 (95% CI: 0.705–0.775)	0.231 (95% CI: 0.212–0.249)	0.381 (95% CI: 0.342–0.422)	0.352 (95% CI: 0.328–0.376)	0.513 (95% CI: 0.486–0.541)
	5	0.871 (95% CI: 0.865–0.877)	0.892 (95% CI: 0.879–0.905)	0.759 (95% CI: 0.725–0.791)	0.241 (95% CI: 0.221–0.261)	0.362 (95% CI: 0.323–0.402)	0.366 (95% CI: 0.341–0.390)	0.531 (95% CI: 0.503–0.556)
	6	0.856 (95% CI: 0.849–0.863)	0.890 (95% CI: 0.876–0.903)	0.757 (95% CI: 0.717–0.795)	0.240 (95% CI: 0.220–0.259)	0.391 (95% CI: 0.347–0.436)	0.364 (95% CI: 0.339–0.389)	0.529 (95% CI: 0.499–0.555)
	7	0.852 (95% CI: 0.845–0.860)	0.886 (95% CI: 0.870–0.900)	0.756 (95% CI: 0.717–0.795)	0.255 (95% CI: 0.232–0.279)	0.388 (95% CI: 0.340–0.436)	0.381 (95% CI: 0.354–0.410)	0.543 (95% CI: 0.512–0.575)
Braden Score	1	0.945 (95% CI: 0.942–0.947)	0.661 (95% CI: 0.646–0.676)	0.358 (95% CI: 0.330–0.389)	0.229 (95% CI: 0.210–0.250)	0.102 (95% CI: 0.089–0.115)	0.280 (95% CI: 0.257–0.302)	0.322 (95% CI: 0.297–0.347)
	2	0.919 (95% CI: 0.916–0.922)	0.752 (95% CI: 0.737–0.768)	0.575 (95% CI: 0.543–0.605)	0.199 (95% CI: 0.182–0.215)	0.127 (95% CI: 0.114–0.141)	0.295 (95% CI: 0.275–0.317)	0.417 (95% CI: 0.393–0.442)
	3	0.901 (95% CI: 0.897–0.905)	0.734 (95% CI: 0.716–0.752)	0.554 (95% CI: 0.519–0.591)	0.187 (95% CI: 0.171–0.204)	0.119 (95% CI: 0.106–0.134)	0.280 (95% CI: 0.259–0.302)	0.398 (95% CI: 0.372–0.425)
	4	0.882 (95% CI: 0.877–0.888)	0.726 (95% CI: 0.706–0.746)	0.554 (95% CI: 0.515–0.592)	0.191 (95% CI: 0.174–0.210)	0.125 (95% CI: 0.111–0.141)	0.284 (95% CI: 0.262–0.309)	0.402 (95% CI: 0.374–0.432)
	5	0.864 (95% CI: 0.859–0.870)	0.718 (95% CI: 0.699–0.740)	0.557 (95% CI: 0.518–0.599)	0.193 (95% CI: 0.175–0.212)	0.129 (95% CI: 0.115–0.145)	0.287 (95% CI: 0.264–0.311)	0.404 (95% CI: 0.377–0.434)
	6	0.850 (95% CI: 0.843–0.857)	0.717 (95% CI: 0.696–0.738)	0.568 (95% CI: 0.525–0.608)	0.197 (95% CI: 0.177–0.216)	0.135 (95% CI: 0.119–0.151)	0.292 (95% CI: 0.267–0.316)	0.412 (95% CI: 0.379–0.440)
	7	0.838 (95% CI: 0.830–0.847)	0.707 (95% CI: 0.684–0.731)	0.557 (95% CI: 0.510–0.605)	0.199 (95% CI: 0.177–0.222)	0.138 (95% CI: 0.120–0.157)	0.293 (95% CI: 0.265–0.322)	0.410 (95% CI: 0.374–0.446)
GCS Score	1	0.946 (95% CI: 0.944–0.948)	0.657 (95% CI: 0.644–0.671)	0.351 (95% CI: 0.323–0.378)	0.232 (95% CI: 0.212–0.253)	0.101 (95% CI: 0.089–0.113)	0.279 (95% CI: 0.258–0.301)	0.318 (95% CI: 0.294–0.342)
	2	0.946 (95% CI: 0.943–0.948)	0.674 (95% CI: 0.658–0.690)	0.385 (95% CI: 0.353–0.417)	0.238 (95% CI: 0.215–0.260)	0.110 (95% CI: 0.096–0.125)	0.294 (95% CI: 0.269–0.319)	0.342 (95% CI: 0.314–0.370)
	3	0.938 (95% CI: 0.935–0.941)	0.670 (95% CI: 0.652–0.688)	0.381 (95% CI: 0.346–0.417)	0.247 (95% CI: 0.224–0.274)	0.116 (95% CI: 0.101–0.133)	0.300 (95% CI: 0.273–0.328)	0.344 (95% CI: 0.313–0.376)
	4	0.927 (95% CI: 0.923–0.931)	0.663 (95% CI: 0.645–0.682)	0.376 (95% CI: 0.338–0.411)	0.254 (95% CI: 0.227–0.283)	0.122 (95% CI: 0.105–0.141)	0.303 (95% CI: 0.273–0.333)	0.343 (95% CI: 0.310–0.375)
	5	0.917 (95% CI: 0.911–0.921)	0.661 (95% CI: 0.641–0.679)	0.377 (95% CI: 0.339–0.412)	0.259 (95% CI: 0.230–0.288)	0.128 (95% CI: 0.110–0.146)	0.307 (95% CI: 0.275–0.336)	0.345 (95% CI: 0.310–0.377)
	6	0.906 (95% CI: 0.901–0.912)	0.665 (95% CI: 0.642–0.688)	0.394 (95% CI: 0.350–0.440)	0.262 (95% CI: 0.230–0.295)	0.137 (95% CI: 0.115–0.159)	0.315 (95% CI: 0.279–0.349)	0.358 (95% CI: 0.318–0.397)
	7	0.898 (95% CI: 0.891–0.905)	0.666 (95% CI: 0.643–0.688)	0.402 (95% CI: 0.358–0.447)	0.269 (95% CI: 0.235–0.304)	0.144 (95% CI: 0.123–0.168)	0.322 (95% CI: 0.287–0.358)	0.365 (95% CI: 0.327–0.404)

CI, confidence intervals; GCS, Glasgow Coma Score; LOS, length of stay; AUROC, area under the receiver operating characteristic curve; AUPRC, area under the precision-recall curve.