

SUPPLEMENTAL MATERIAL

Table S1. ICD-9 code definitions

Diagnosis/procedure	ICD-9-CM diagnosis codes	ICD-9-CM volume 3 procedure codes
Acute Ischemic stroke	433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.91, 436	
Thrombolytic infusion		99.10
Endovascular stroke treatment		88.41, 39.74
ICH	431	
GI bleeding	578, 578.0, 578.1, 578.9	
Gastrostomy		43.11, 43.19
Tracheostomy		31.1, 31.2, 32.21, 32.29
Atrial fibrillation	427.31	
Acute kidney failure	584.xx	
Acute myocardial infarction	410.xx	
Acute respiratory failure	518.81	
Cardiac arrest	427.5	
Deep venous thrombosis	453.2, 453.4, 453.40, 453.41, 453.42, 453.82, 453.83, 453.84, 453.85, 453.86, 453.87, 453.88, 453.89	
Dyslipidemia	272.0, 272.1, 272.2, 272.3, 272.4	
Pneumonia	480.x, 481, 482.x, 483.x, 484.x, 485, 486	
Pulmonary embolism	415.1, 415.11, 415.19	
Sepsis	995.91, 995.92, 996.64, 038, 790.7, 785.52	
Urinary tract infection	599.0	
Dialysis	V45.1, V45.11, V45.12, V56, V56.0, V56.1, V56.2, V56.3, V56.31, V56.32, V56.8, E87.91, 996.1, 996.68, 996.68, 996.56, 996.73	39.95, 54.98, 38.95

Table S2: Comparison of cases with unknown thrombolysis day (excluded from the study) and known thrombolysis day (screened for eligibility)

	Thrombolysis day unknown* (n= 2,057)	Thrombolysis day known (n= 12,991)	P value (Chi-square test)
Age, years			<0.001
≤18	0.3%	0.2%	
19-64	39.2%	37.4%	
65-79	37.7%	35.1%	
≥80	22.8%	27.4%	
Female gender	48.6%	49.2%	0.608
Ethnicity			<0.001
Caucasian	31.5%	64.0%	
African-American	6.0%	12.8%	
Hispanic	1.2%	6.0%	
Other	1.9%	5.0%	
Missing information	59.5%	12.3%	
Health insurance			0.445
Medicare	57.8%	58.5%	
Medicaid	7.7%	6.9%	
Private insurance	26.4%	26.9%	
Other	8.1%	7.7%	
Geographic region			<0.001
Northeast	2.1%	23.5%	
Midwest	53.2%	16.3%	
South	26.0%	39.1%	
West	18.7%	21.2%	
Location/teaching status of the hospital			<0.001
Rural	4.1%	5.5%	
Urban nonteaching	28.1%	39.0%	
Urban teaching	67.8%	55.5%	
Bed-size of the hospital			<0.001
Small	5.0%	5.8%	
Medium	14.3%	22.6%	
Large	80.7%	71.6%	
Elixhauser point-scale index quartile			0.502
1st (<5)	25.9%	26.3%	
2nd (5-7)	24.9%	26.2%	
3rd (8-14)	28.1%	26.8%	
4th (>14)	21.1%	20.7%	
Endovascular stroke treatment	26.5%	21.0%	<0.001
Discharge to home/self-care	25.6%	28.2%	0.016
Inpatient mortality	12.1%	11.3%	0.309
Intracerebral hemorrhage	5.1%	4.9%	0.695
Gastrointestinal hemorrhage	1.5%	1.3%	0.362
Gastrostomy tube placement	10.9%	8.8%	0.002
Tracheostomy	0.2%	0.2%	0.699

*States not reporting procedure day for thrombolysis are Illinois 2005-2008 (n=284), Ohio (n=648), Oklahoma (n=210), Utah (n=127), Washington 2005-2007 (n=97), and West Virginia (n=113).