Supplementary Table 1. Sensitivity/specificity trade-off in acute ischemic stroke triage depending on the symptom severity cut-off

	High sensitivity/low specificity	Low sensitivity/high specificity
Consequences for patient management	Almost all LVO patients and many non-LVO patients get transported directly to a CSC	Almost all non-LVO patients and many LVO patients are initially transported to a PSC
Advantages	Minimizes time to EVT for LVO patients Minimizes inter-hospital transfers	Minimizes time to IVT for LVO and non-LVO patients Avoids overwhelming of CSCs
Disadvantages	Increases time to IVT for LVO and non-LVO patients May overwhelm CSCs with non-LVO patients	Increases time to EVT for LVO patients Increases inter-hospital transfers (LVO patients initially admitted to PSCs have to be transferred to CSCs)
Scenario in which this approach might be most appropriate	Resource-rich environment in which CSC capacities are high Situations where transport times to CSCs are relatively brief Situations (e.g., COVID-19 pandemic) in which staff exposure has to be minimized Situations in which workflow efficiency at the PSC is poor	Resource-sparse environments in which CSC capacities are limited Situations in which workflow efficiency at the PSC is high

LVO, large vessel occlusion; CSC, comprehensive stroke center; PSC, primary stroke center; EVT, endovascular therapy; IVT, intravenous thrombolysis; COVID-19, coronavirus disease 2019.

Supplementary Table 2. Implications of using different LAMS cut-offs for triage of all suspected acute strokes

LAMS cut-off used	All patients with acute stroke		
	Total cases sent to CSC	Cases without LVO sent to CSC	Patients with LVOs missed
1	381,000 (73.8)	191,000 (50.1)	15,000 (7.1)
2	333,000 (64.4)	150,000 (45.0)	22,000 (10.8)
3	258,000 (49.9)	91,000 (35.3)	38,000 (18.4)
4	188,000 (36.4)	42,000 (22.3)	59,000 (29.0)
5	75,000 (14.6)	9,000 (12.0)	139,000 (67.6)

Values are presented as number (%). Numbers are rounded to the nearest 1,000. This table shows the estimated number of patients with suspected acute ischemic stroke that would be directed to CSCs in the United States, and number of patients with occlusions that would be missed, if applying different cut-offs of the LAMS pre-hospital score to all comers to decide on whether or not to transport a given patient to a CSC as opposed to the nearest hospital.
LAMS, Los Angeles Motor Scale; CSC, comprehensive stroke center; LVO, large vessel occlusion.

Supplementary Table 3. Implications of using different LAMS cut-offs for triage of suspected acute strokes of intermediate severity

LAMS cut-off used	Patients with NIHSS 5-10 alone		
	Total cases sent to CSC	Cases without LVO sent to CSC	Patients with LVOs missed
2	131,000 (100)	86,000 (65.6)	0
3	84,000 (64.4)	50,000 (59.5)	11,000 (24.4)
4	29,000 (22.5)	13,000 (44.8)	28,000 (62.2)
5	0	0	45,000 (100)

Values are presented as number (%). Numbers are rounded to the nearest 1,000. This table shows the estimated number of patients with suspected acute ischemic stroke in the intermediate range of stroke severity (corresponding to scores of 5–10 on the NIHSS) that would be directed to CSCs in the United States, and number of patients with occlusions that would be missed, if applying different cut-offs of the LAMS pre-hospital score to all comers to decide on whether or not to transport a given patient to a CSC as opposed to the nearest hospital.
LAMS, Los Angeles Motor Scale; NIHSS, National Institutes of Health Stroke Scale; CSC, comprehensive stroke center; LVO, large vessel occlusion.