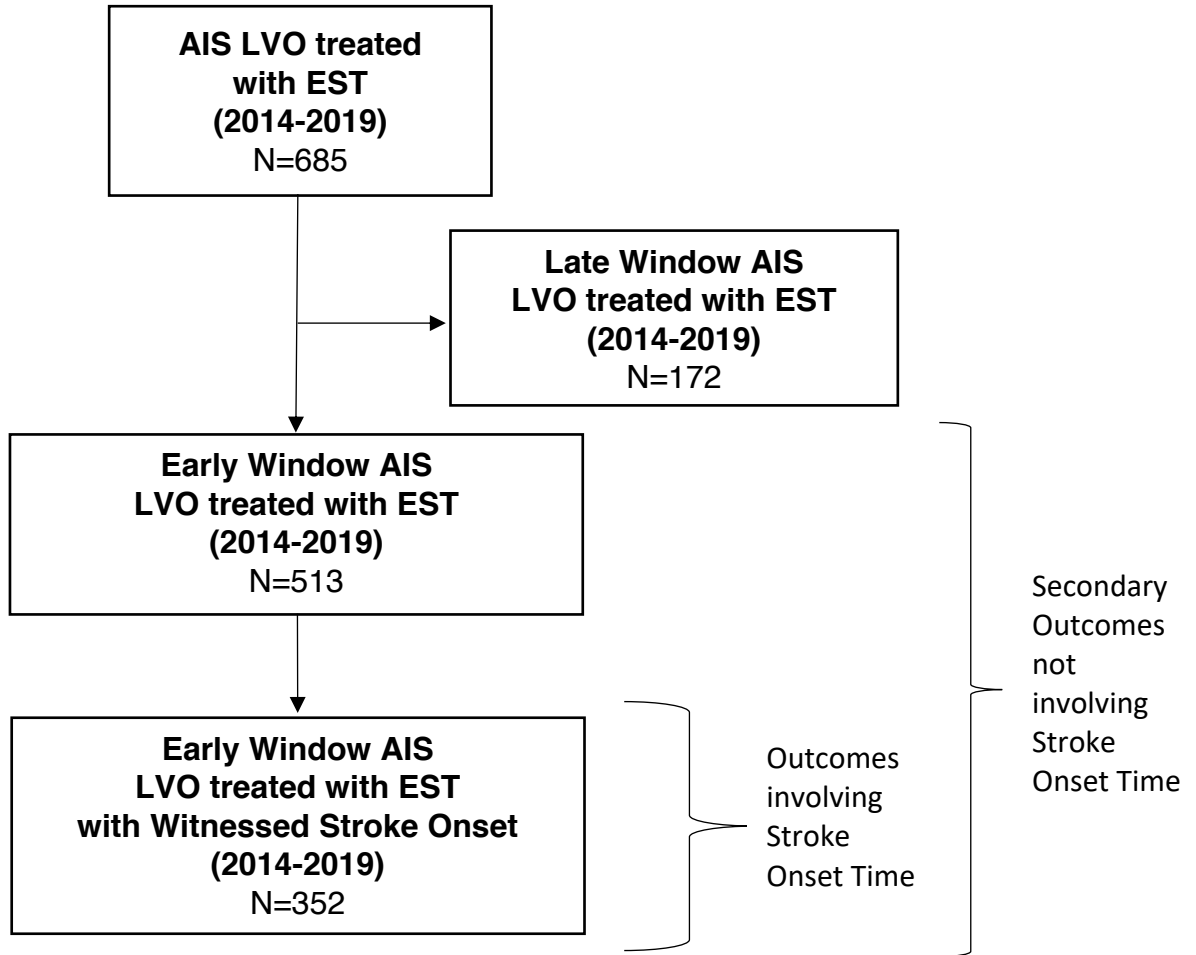


Supplemental Material

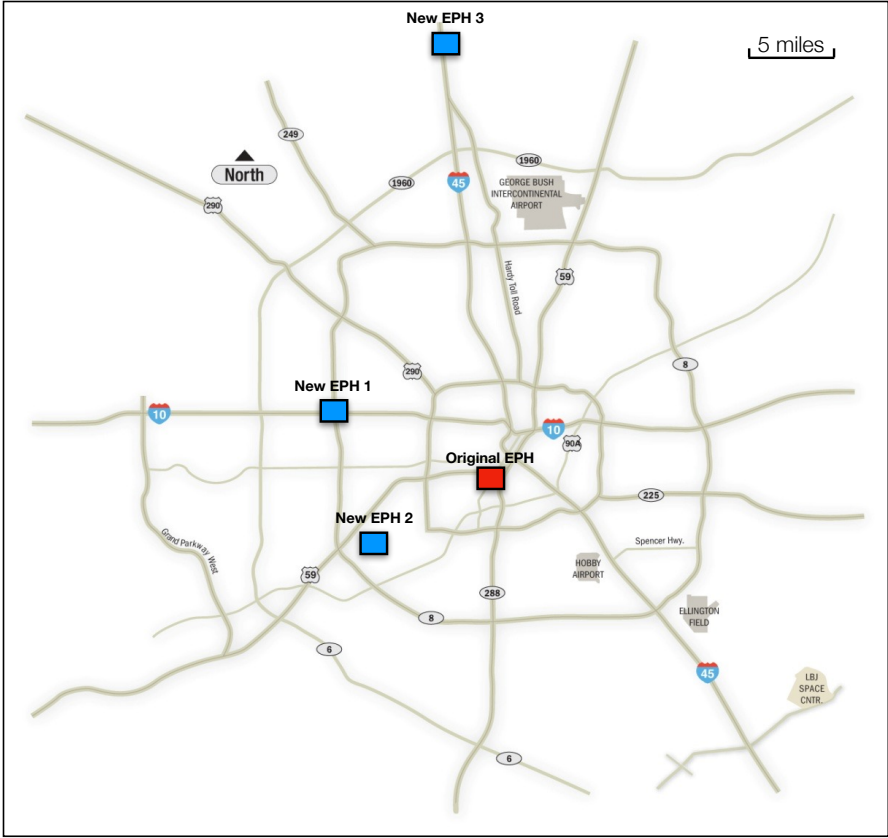
Expanding Endovascular Stroke Therapy Availability While Maintaining Quality Outcomes: The Integrated Stroke System Model

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Supplemental Figure I. CONSORT DIAGRAM

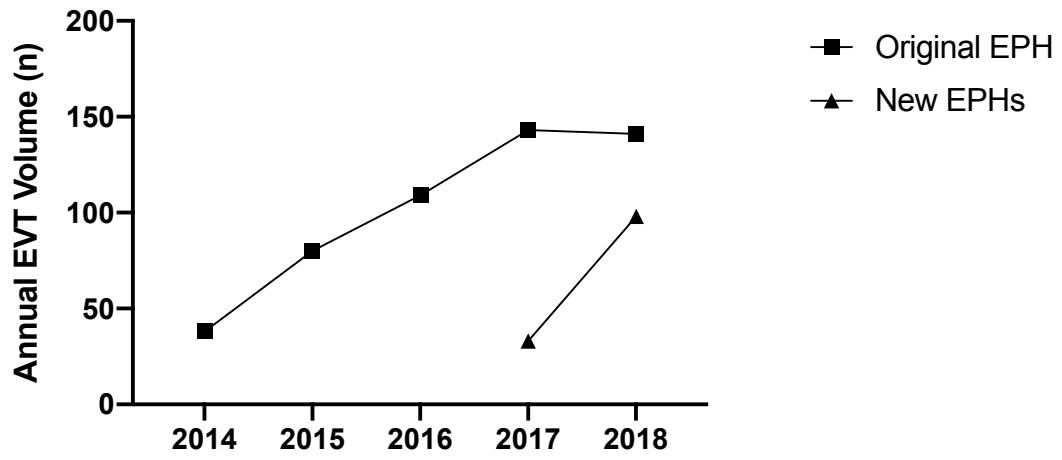


Supplemental Figure II. Geographic region and the location of the new EPHs.

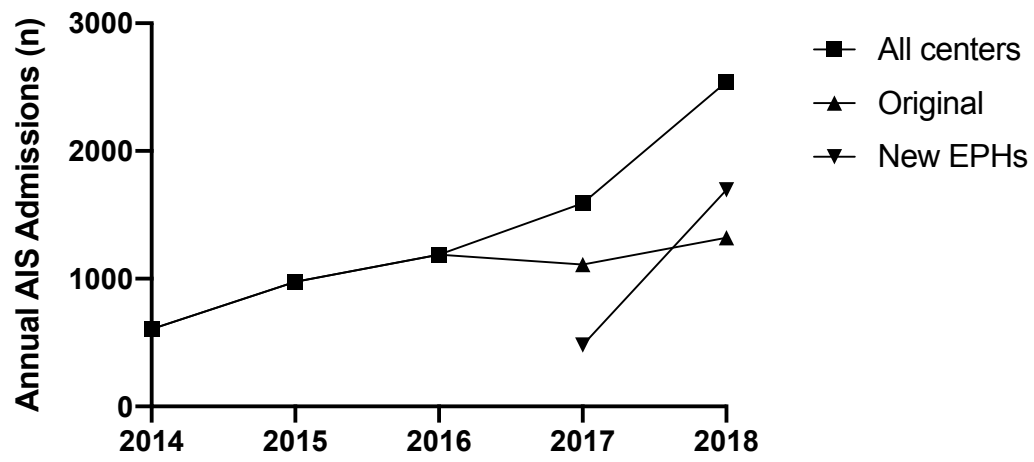


Supplemental Figure III. Total AIS and EVT volume over time.

A.



B.



Supplemental Table I. Quality metrics of each EPH during the study period.

	Original EPH N=416	New EPH-1 N=64*	New EPH-2 N=20*	New EPH-3 N=13*
Time from Door to Groin Puncture, mins, median [IQR]	102 [77-126]	88.5 [54.5-128.5]	96 [40-126.5]	128 [62-187]
Time from Door to Recanalization, mins, median [IQR]	148 [114-179]	123 [83-166]	131 [96-170.5]	173.5 [85.5-249.5]
Time from Onset to Groin Puncture, mins, median [IQR]	220 [175.5-294.5]	268.5 [167-329]	284 [208-286]	200 [153-232]
Time from Onset to Recanalization, mins, median [IQR]	269 [219-344]	276 [189-356]	306 [257-347]	270 [191-337]
Successful reperfusion (mTICI 2b/3), %	86%	94%	100%	100%
PH-2 ICH	3%	0%	5%	0%
Length of Stay, days, median [IQR]	6 [3.5-10]	4.5 [2.5-7.5]	6.5 [4-9.5]	6 [4-12]
90d mRS 0-2, %	36%	38%	24%	36%

*Note that a total of 10 EST procedures were performed at the New EPHs prior to the ISS implementation.

Supplemental Table II. Baseline characteristics of EST patients by treating center after implementation of ISS

	Original EPH N=131	New EPHs N=87	P
Age, median [IQR]	65 [54-76]	70 [60-81]	<0.01
Age group, %			0.570
18-40	7	2	
40-60	29	19	
60-80	68	43	
80-	27	23	
Female, %	172	54	0.081
Race, %			<0.0001
White	55	21	
Black or African American	30	9	
Asian	5	4	
Hispanic or Latino, %	16	6	<0.0001
Past Medical History, %			
Prior Stroke	15	4	0.195
Atrial Fibrillation	41	16	0.227
Coronary Artery Disease/Myocardial Disease	20	12	0.697
Diabetes Mellitus	41	25	0.481
Hyperlipidemia	59	19	<0.05
Hypertension	93	47	0.673
Direct Presentation, %	75	58	0.303
NIH Stroke Scale, median [IQR]	17 [12-22]	16 [11-23]	0.9057
Receipt of IV t-PA, %	93	48	<0.05

Supplemental Table III. Summary of endovascular devices used pre- and post-ISS.

Device	Pre-ISS	Post-ISS
Stent Retriever	232	92
Aspiration	9	23
Stent retriever + Aspiration	30	103
Other	14	10
Total	285	228