State Stroke Workgroup

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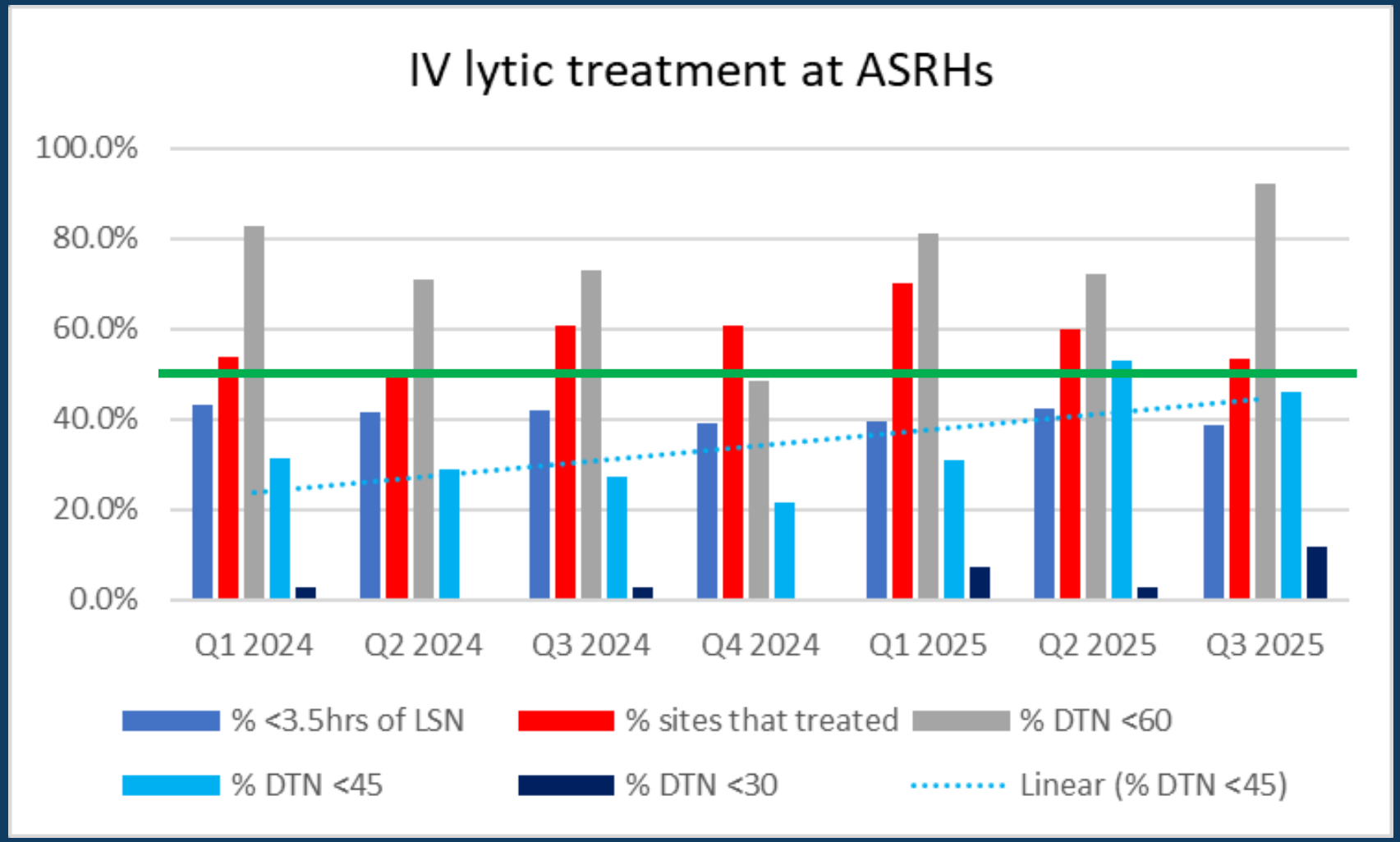
LOUISIANA EMERGENCY RESPONSE NETWORK
Right Place. Right Time. Right Care.

Welcome and Introductions

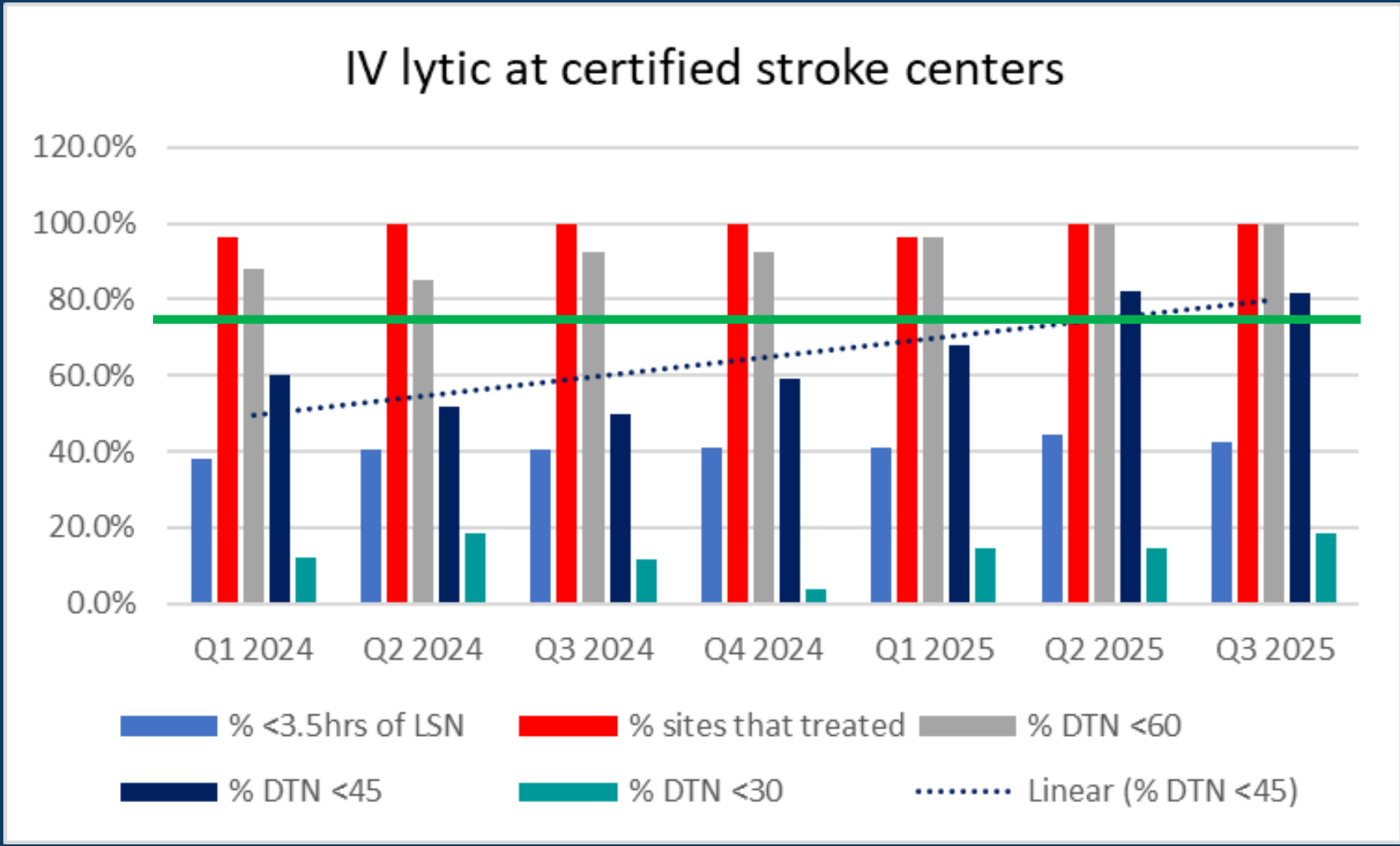
LOUISIANA EMERGENCY RESPONSE NETWORK



The goal was for 50% Acute Stroke Ready Hospitals (ASRH) to achieve a Door to Needle (DTN) time of ≤ 45 minutes by end of CY 2025.

In Q1, 2024, only 30% of ASRHs met the ≤ 45 minutes target.

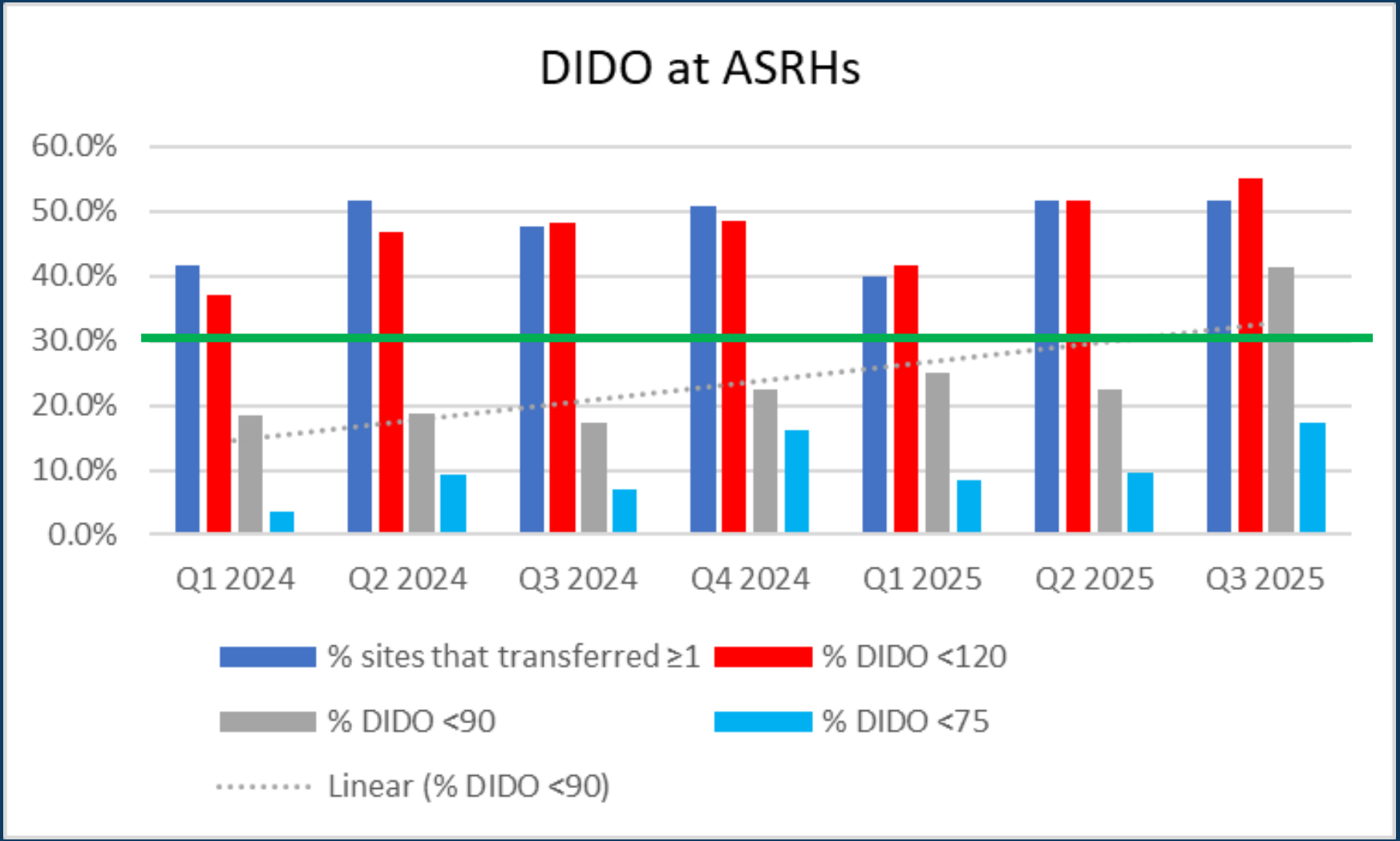
By Q2, 2025, 52.5% of ASRHs had a DTN time of ≤ 45 minutes.



The goal was for 75% of Certified Stroke Centers (PSC) achieved a DTN ≤ 45 minutes.

In Q1, 2024, only 56% of centers met the 45 minute DTN metric.

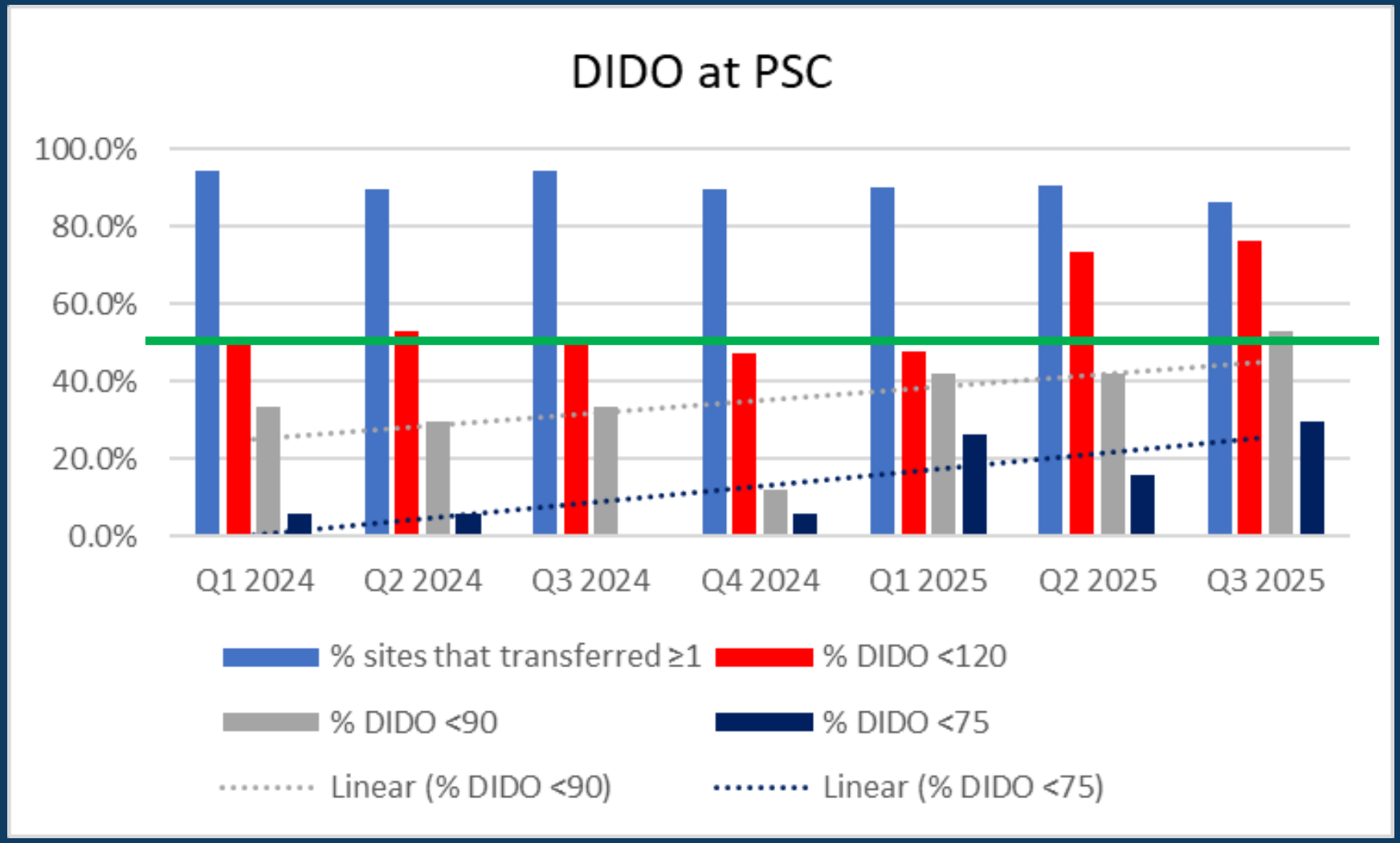
In Q2 and Q3, 2025, over 80% of Certified Stroke Centers met a DTN time of 45 minutes.



The goal was for 30% ASRHs to achieve a Door In-Door-Out (DIDO) time of ≤ 90 minutes by end of CY 2025.

In Q1, 2024, only 19% of hospitals had a DIDO of ≤ 90 minutes.

As of Q3, 2025, 41.4% of ASRHs achieved the target. Median was 89!



The goal was for 50% Primary Stroke Centers (PSC) to achieve a Door-In-Door-Out (DIDO) of ≤ 90 minutes by the end of CY 2025.

In Q1, 2024, only 33.3% met the 90 minute target.

In Q3, 2025, 52.9% of PSCs met the 90 minute metric. Median was 85!

2025 Stroke System Goals Met!!!

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Proposed 2026 LERN Stroke Strategic Priorities

Strategic Priority:
Continue buildout and refinement efforts designed to sustain LERN's statewide care coordination systems, including Trauma, Stroke, STEMI (heart attack), Burn, and MCI/Disaster Response.

2026 Proposed Goals:

50% Acute Stroke Ready Hospitals (ASRH) with Door to Needle (DTN) ≤ 45 minutes by the end of CY 2026. *Baseline Q1/Q2 2024 aggregate = 30%
30% ASRH with Door-In-Door-Out (DIDO) ≤ 90 minutes by the end of CY 2026. *Baseline Q1/Q2 2024 aggregate = 19%
50% of ASRH with Door To Transfer Request Time (DTTRT) median of ≤ 30 minutes by end of CY 2026.
75% of Primary Stroke Centers (PSC) with DTN ≤ 45 minutes by the end of CY 2026. *Baseline Q1/Q2 2024 aggregate = 56%
50% PSC with DIDO ≤ 90 minutes by the end of CY 2026. *Baseline Q1/Q2 2024 aggregate = 31%
50% of Primary Stroke Centers with DTTRT median of ≤ 30 minutes by end of CY 2026.
Continue pediatric stroke sub-committee to address pediatric stroke care. Performance Indicator: • Develop initial and secondary destination protocol for stroke. • Pursue adding Pediatric Stroke capability to the Resource Management screen in the ESF-8 Portal
Support the Stroke Recognition and Response (SRR) and Basic Stroke Education (BSE) classes in all 9 regions.

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Wake Up/Unknown Onset Stroke

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Stroke of known time of onset

- Time of onset of stroke is known when:
  1) the patient is able to provide history
  2) the onset of symptoms was witnessed

- When the time of onset of stroke is known,
  - last seen normal (LSN)/last known normal (LKN) = time symptoms noted (TSN) = time of stroke onset (TSO)

Stroke of unknown time of onset

- Almost 33% of all patients with ischemic stroke have unknown time of stroke onset
  - Most have symptoms noted upon awakening
  - Others have unwitnessed stroke onset and the patient cannot provide a time of symptom onset

- Historically, excluded from IV lytic

MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset

The WAKE UP Trial – RCT IV alteplase vs placebo

- Stroke symptoms upon waking up, or were unable to report the time of onset, and it was at least 4.5 hours since LSN
- MRI showed an acute ischemic lesion on diffusion-weighted imaging but no parenchymal hyperintensity with standard window settings on FLAIR
- Excluded if hemorrhage (n=87)
- Excluded if >1/3 MCA territory on DWI (n=45)
- Excluded if thrombectomy planned (n=15)
- Excluded if NIHSS >25
- Excluded if standard contraindication to IV alteplase

The WAKE UP Trial: *Thomalla G, Simonsen CZ, Boutitie F, et al.* ***MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset.*** *The New England journal of medicine. 2018; 379(7):611-622.* PMID: 29766770

MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset

The WAKE UP Trial – RCT IV alteplase vs placebo

- Of the 1362 patients screened:
  - 455 were excluded for FLAIR lesion
  - 137 were excluded because the DWI was negative

- The median NIHSS score on arrival was 6.
- 89% of patients had wake up strokes.
- The median time between symptoms noted and alteplase was 3.1 hours.
- The median time between LSN and alteplase was 10 hours.

MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset

The WAKE UP Trial – RCT IV alteplase vs placebo

Table 2. Primary and Secondary Efficacy Outcomes (Intention-to-Treat Population).*

Outcome	Alteplase Group (N=254)	Placebo Group (N=249)	Effect Variable	Adjusted Value (95% CI)†	P Value
Primary efficacy end point					
Favorable outcome at 90 days — no./total no. (%)‡	131/246 (53.3)	102/244 (41.8)	Odds ratio	1.61 (1.09 to 2.36)	0.02
Secondary efficacy end points					
Median score on modified Rankin scale at 90 days (IQR)§	1 (1–3)	2 (1–3)	Common odds ratio	1.62 (1.17 to 2.23)	0.003¶
Correlation between treatment response at 90 days and deficit level at baseline — no./total no. (%)‖	72/246 (29.3)	44/244 (18.0)	Odds ratio	1.88 (1.22 to 2.89)	0.004¶
Global Outcome Score at 90 days**			Odds ratio	1.47 (1.07 to 2.04)	0.02¶
Median score on Beck Depression Inventory at 90 days (IQR)††	6.0 (2.0–11.0)	7.0 (2.0–14.0)	Mean difference ($\log_e$)	−0.04 (−0.22 to 0.15)	0.69¶
Total score on EQ-5D at 90 days‡‡	1.9±2.1	2.4±2.4	Mean difference	−0.52 (−0.88 to −0.16)	0.004¶
Score on visual analog scale on EQ-5D at 90 days§§	72.6±19.7)	64.9±23.8	Mean difference	7.64 (3.75 to 11.51)	<0.001¶
Median infarct volume at 22–36 hr (IQR) — ml ¶¶	3.0 (0.8–17.7)	3.3 (1.1–16.6)	Mean difference ($\log_e$)	−0.16 (−0.47 to 0.15)	0.32¶

- NNT <9
- No safety concern
- 2.4% sICH (ns)

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EXTEND trial

- 4.5 – 9 hrs from onset or awakening with symptoms
- Perfusion lesion–ischemic core mismatch was defined as a ratio greater than 1.2 between the volume of hypoperfusion and the volume of the ischemic core, an absolute difference in volume greater than 10 ml, and an ischemic-core volume of less than 70 ml.
- No plan for thrombectomy

EXTEND trial

- 10% - 4.5 – 6 hrs
- 25% - 6 – 9 hrs
- 65% - WUS

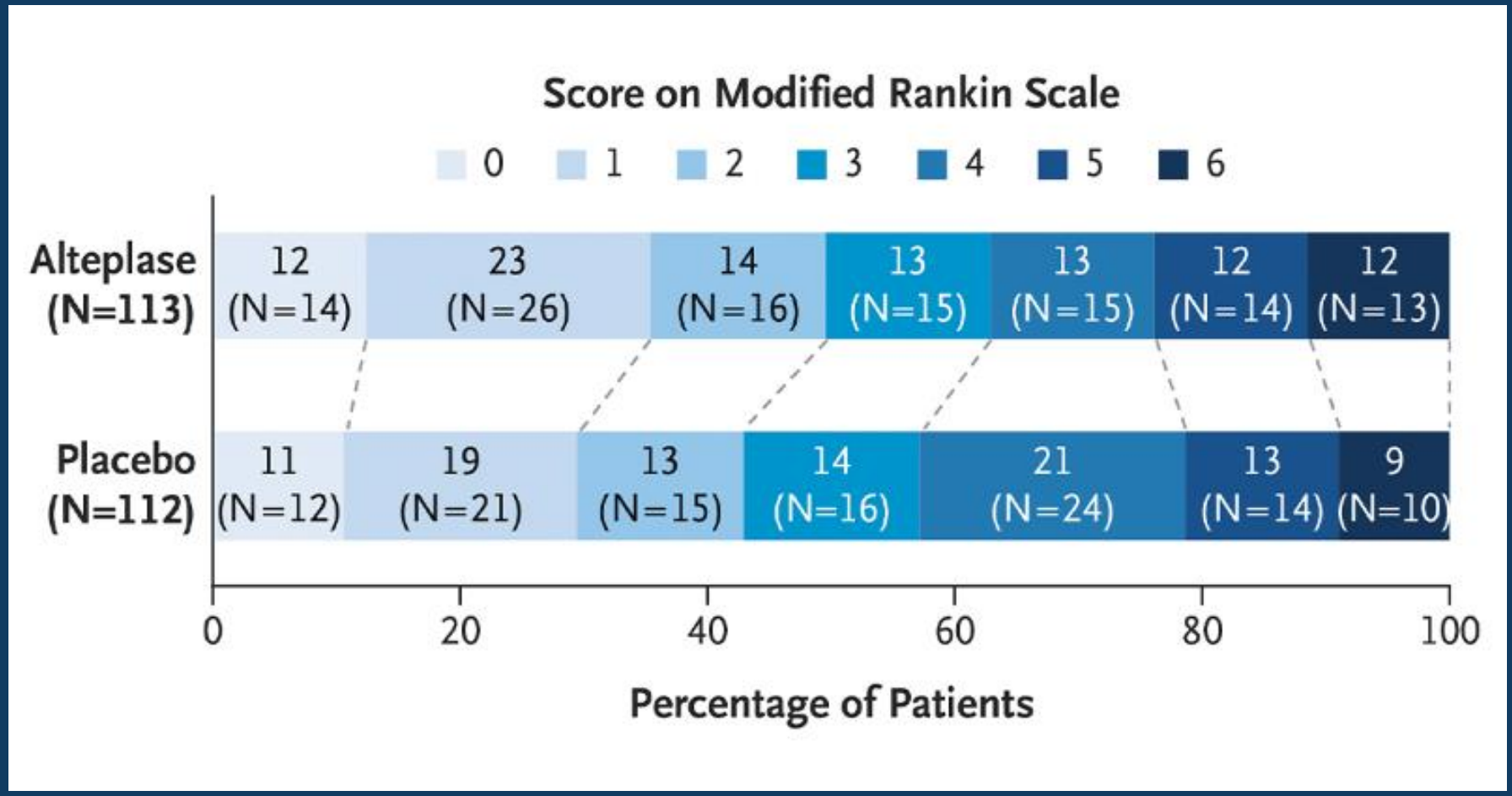
- NNT 16.7

Table 2. Efficacy and Safety Outcomes.*

Outcome	Alteplase (N=113)	Placebo (N=112)	Adjusted Effect Size (95% CI)†	P Value	Unadjusted Effect Size (95% CI)†	P Value
	no./total no. (%)					
Primary outcome						
Score of 0 to 1 on the modified Rankin scale at 90 days‡	40/113 (35.4)	33/112 (29.5)	1.44 (1.01–2.06)	0.04	1.2 (0.82–1.76)	0.35
Secondary outcomes						
Score on the modified Rankin scale at 90 days						
0	14/113 (12.4)	12/112 (10.7)				
1	26/113 (23.0)	21/112 (18.8)				
2	16/113 (14.2)	15/112 (13.4)				
3	15/113 (13.3)	16/112 (14.3)				
4	15/113 (13.3)	24/112 (21.4)				
5	14/113 (12.4)	14/112 (12.5)				
6	13/113 (11.5)	10/112 (8.9)				
Functional improvement§			1.55 (0.96–2.49)		1.18 (0.74–1.87)	
Functional independence¶	56/113 (49.6)	48/112 (42.9)	1.36 (1.06–1.76)		1.16 (0.87–1.54)	
Percentage of reperfusion at 24 hr						
≥90%	53/106 (50.0)	31/109 (28.4)	1.73 (1.22–2.46)		1.76 (1.23–2.51)	
≥50%	76/106 (71.7)	57/109 (52.3)	1.35 (1.09–1.67)		1.37 (1.10–1.70)	
Tertiary outcomes						
Recanalization at 24 hr	72/107 (67.3)	43/109 (39.4%)	1.68 (1.29–2.19)		1.71 (1.30–2.23)	
Major neurologic improvement‖						
At 24 hr	32/113 (28.3)	13/112 (11.6)	2.52 (1.40–4.56)		2.44 (1.35–4.40)	
At 72 hr	41/112 (36.6)	25/112 (22.3)	1.70 (1.11–2.59)		1.64 (1.07–2.51)	
At 90 days	56/101 (55.5)	56/99 (56.6)	1.02 (0.80–1.31)		0.98 (0.77–1.25)	
Safety outcomes						
Death within 90 days after intervention	13/113 (11.5)	10/112 (8.9)	1.17 (0.57–2.40)	0.67	1.29 (0.59–2.82)	0.53
Symptomatic intracranial hemorrhage within 36 hr after intervention	7/113 (6.2)	1/112 (0.9)	7.22 (0.97–53.54)	0.053	6.94 (0.86–55.73)	0.07

VORK

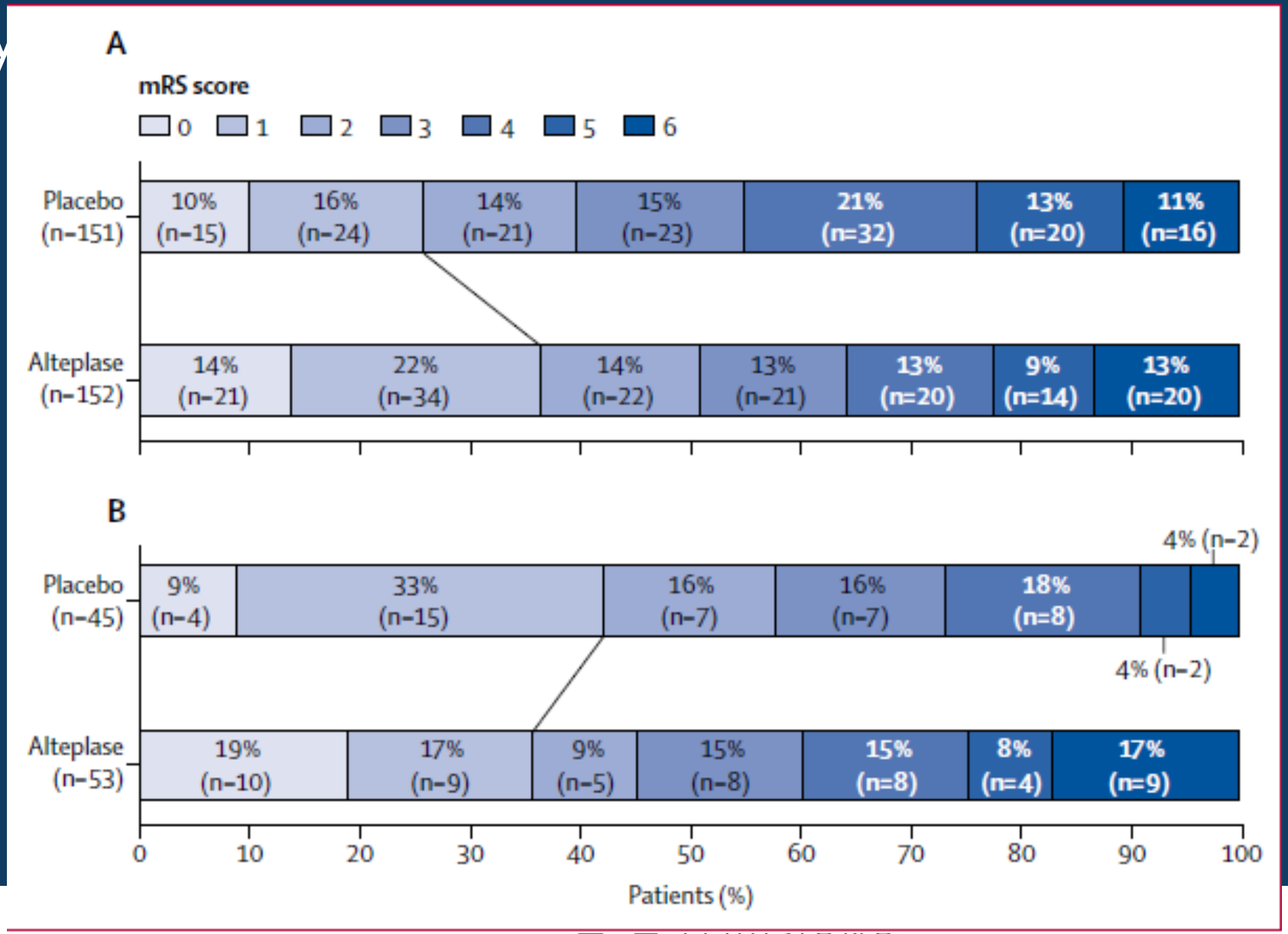
EXTEND trial



Meta-analysis of **EXTEND, ECASS4-EXTEND, and EPITHET**

	Placebo (n=201)	Alteplase (n=213)
Time from stroke onset to randomisation		
>4·5–6·0 h	49 (24%)	58 (27%)
>6·0–9·0 h	48 (24%)	50 (24%)
Wake-up stroke	104 (52%)	105 (49%)
Imaged with CT perfusion	96 (48%)	100 (47%)
Imaged with perfusion-diffusion MRI	105 (52%)	113 (53%)
Time from stroke onset* to initiation of intravenous therapy, min	413 (353–480)	417 (346–485)
Time from last known to be well to initiation of intravenous therapy, min	487 (360–655)	471 (355–649)
Large vessel occlusion	122/198 (62%)	124/205 (60%)
Ischaemic core volume† at initial imaging	8·1 (0–20·4)	8·0 (0–25·3)
Perfusion lesion volume‡ at initial imaging	64·3 (33·2–97·0)	63·9 (27·9–117·2)

Meta-analy


A
mRS score
0
1
2
3
4
5
6
Placebo (n=151)
10% (n=15)
16% (n=24)
14% (n=21)
15% (n=23)
21% (n=32)
13% (n=20)
11% (n=16)
Alteplase (n=152)
14% (n=21)
22% (n=34)
14% (n=22)
13% (n=21)
13% (n=20)
9% (n=14)
13% (n=20)
B
Placebo (n=45)
9% (n=4)
33% (n=15)
16% (n=7)
16% (n=7)
18% (n=8)
4% (n=2)
4% (n=2)
Alteplase (n=53)
19% (n=10)
17% (n=9)
9% (n=5)
15% (n=8)
15% (n=8)
8% (n=4)
17% (n=9)
0
10
20
30
40
50
60
70
80
90
100
Patients (%)

Meta-analysis of **EXTEND, ECASS4-EXTEND, and EPITHET**

	Placebo (n=152)	Alteplase (n=152)	Odds ratio (95% CI)*	p value
Primary outcome				
Excellent outcome (mRS score 0–1) at 3 months	39/151 (26%)	55/152 (36%)	2·06 (1·17–3·62)	0·012
Secondary outcomes				
Functional improvement in mRS score at 3 months†	NA	NA	1·68 (1·11–2·53)	0·014
Functional independence (mRS score 0–2) at 3 months	60/151 (40%)	77/152 (51%)	2·22 (1·25–3·94)	0·006
Early neurological improvement at 72 h‡	36/152 (24%)	58/148 (39%)	2·13 (1·28–3·51)	0·003
Safety outcomes				
Death at 3 months	16/152 (11%)	20/152 (13%)	1·28 (0·60–2·73)	0·52
Symptomatic intracerebral haemorrhage§	1/152 (1%)	7/152 (5%)	7·29 (0·88–60·18)	0·07

Intravenous thrombolytic treatment and endovascular thrombectomy for ischemic wake-up stroke (Review)

Summary of findings 1. Intravenous thrombolytic treatment compared to standard medical care for wake-up stroke

Intravenous thrombolytic treatment compared to standard medical care for wake-up stroke

Patient or population: people with stroke upon awakening
Setting: hospital emergency department
Intervention: intravenous thrombolytic treatment
Comparison: standard medical care

5 trials with 775 participants investigated intravenous thrombolytic treatment

Outcomes	Anticipated absolute effects* (95% CI)			Relative effect (95% CI)	No. of participants (studies)	Certainty of the evidence (GRADE)
	Risk with standard medical care	Risk with intravenous thrombolytic treatment				
Independent functional outcome at end of follow-up assessed with: mRS 0 to 2 at follow-up: 90 days	584 per 1000	660 per 1000 (590 to 736)	NNT 12.5	RR 1.13 (1.01 to 1.26)	763 (5 RCTs)	⊕⊕⊕⊕ HIGH
Symptomatic intracranial haemorrhage at follow-up: mean 90 days	5 per 1000	19 per 1000 (5 to 67)	1.9%	RR 3.47 (0.98 to 12.26)	754 (4 RCTs)	⊕⊕⊕⊕ HIGH
Death at follow-up: mean 90 days	99 per 1000	67 per 1000 (43 to 106)		RR 0.68 (0.43 to 1.07)	763 (5 RCTs)	⊕⊕⊕⊕ HIGH

Cochrane Database of Systematic Reviews
2021, Issue 12. Art. No.: CD010995

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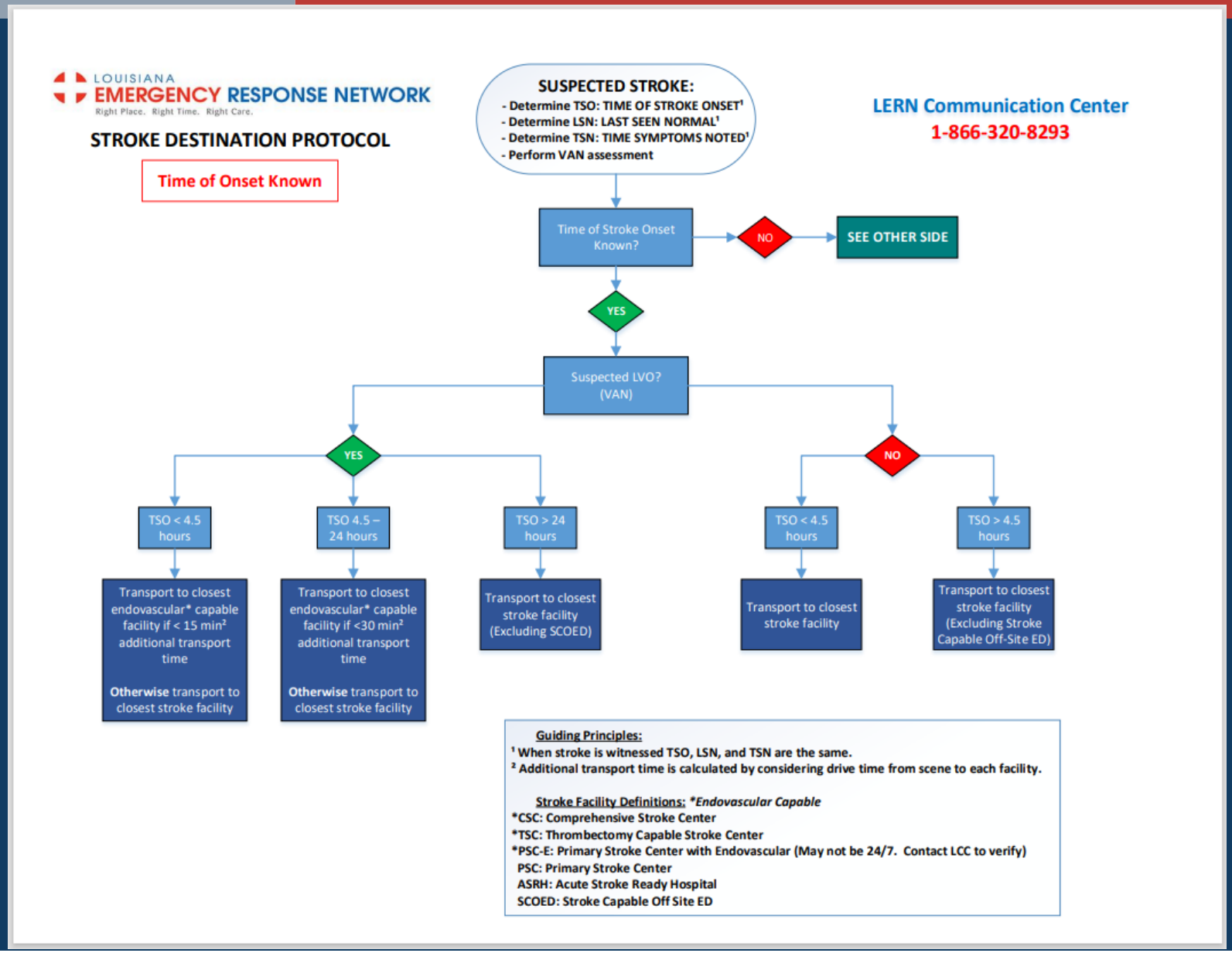
3. In patients with AIS who awake with stroke symptoms or have unclear time of onset > 4.5 hours from last known well or at baseline state, MRI to identify diffusion-positive FLAIR-negative lesions can be useful for selecting those who can benefit from IV alteplase administration within 4.5 hours of stroke symptom recognition.	**IIa**	**B-R**	New recommendation.
The WAKE-UP trial (Efficacy and Safety of MRI-based Thrombolysis in Wake-Up Stroke) randomized 503 patients with AIS who awoke with stroke or had unclear time of onset >4.5 hours from last known well and could be treated with IV alteplase within 4.5 hours of stroke symptom recognition. Eligibility required MRI mismatch between abnormal signal on DW-MRI and no visible signal change on FLAIR. DW-MRI lesions larger than one-third of the territory of the middle cerebral artery (MCA), NIHSS score >25, contraindication to treatment with alteplase, or planned thrombectomy were all exclusions. The trial was terminated early for lack of funding before the designated 800 patients were randomized. Ninety-four percent were wake-up strokes. Median NIHSS score was 6. Median time from last known well was slightly over 10 hours. At baseline, one-third of the patients had vessel occlusion on time-of-flight MRA, and three-quarters of the FLAIR lesions were <9 mL. The end point of an mRS score of 0 to 1 at 90 days was achieved in 53.3% of the IV alteplase group and in 41.8% of the placebo group (P=0.02).[88]			See Table XIX in online Data Supplement 1

Patients with wake-up stroke should be evaluated with same urgency as a patient presenting within the window for IV alteplase, because those with DWI+/FLAIR- pattern can benefit from treatment.

Stroke Destination Protocol

- Unanimously approved by the LERN Board on 11/16/2023
- Protocol went live on January 1, 2024

LERN Stroke Destination Protocol



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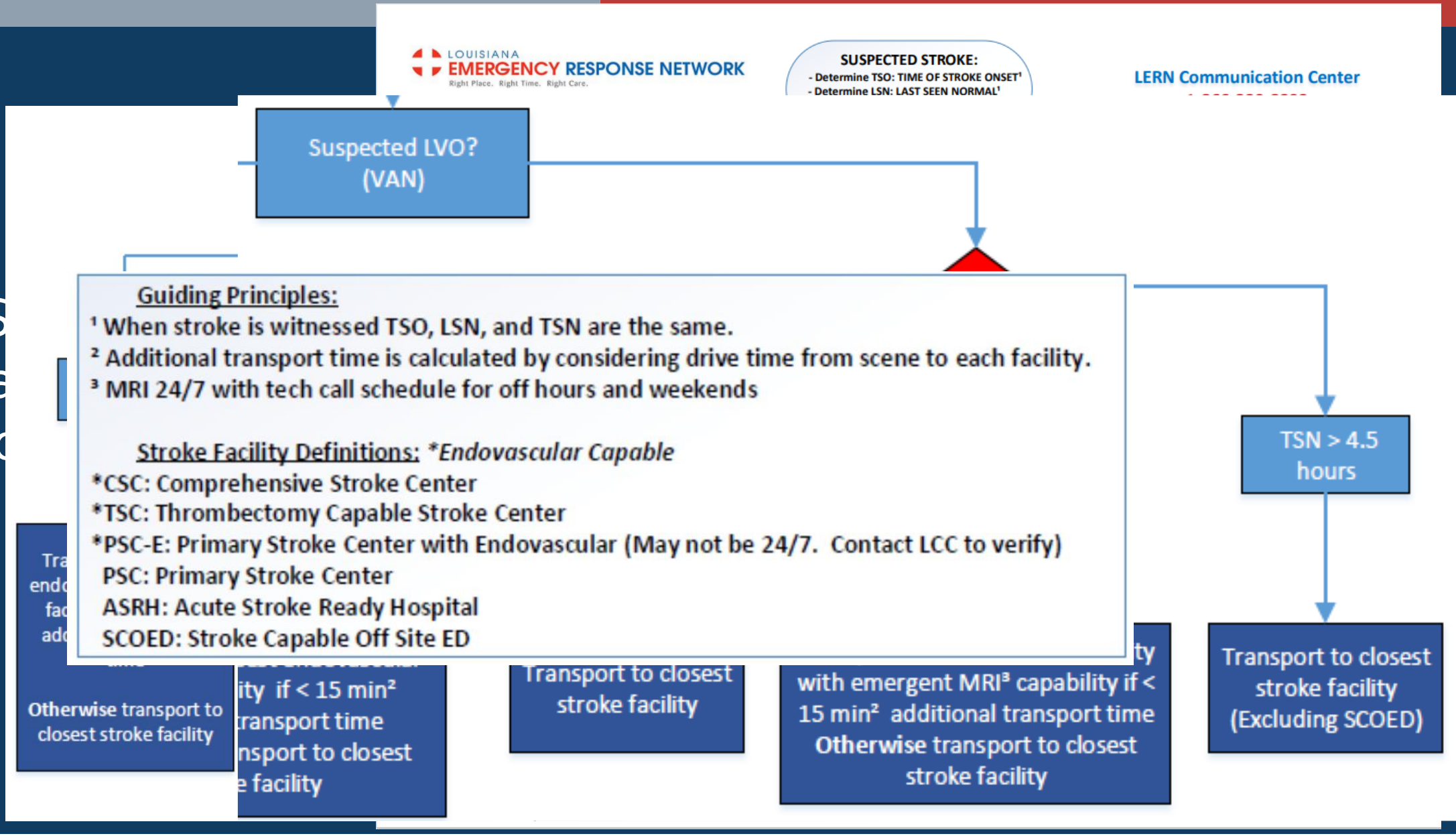

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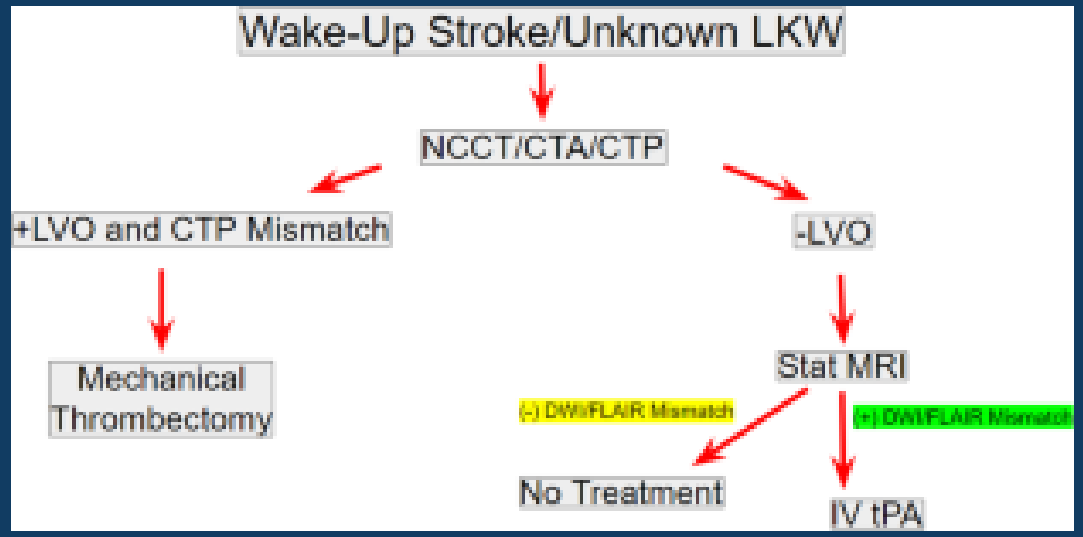
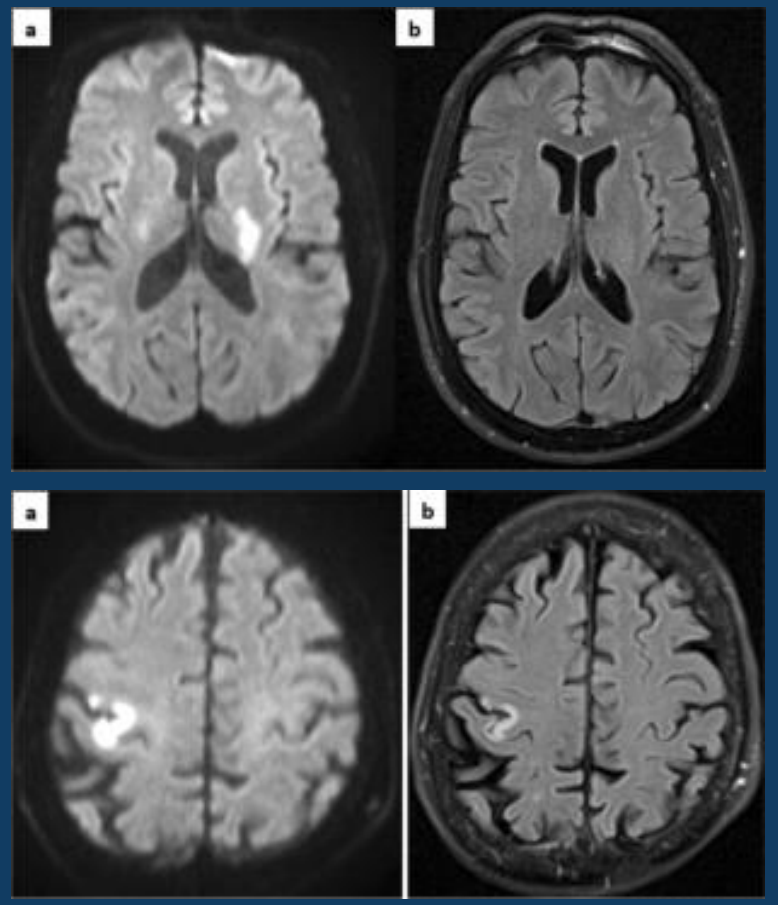
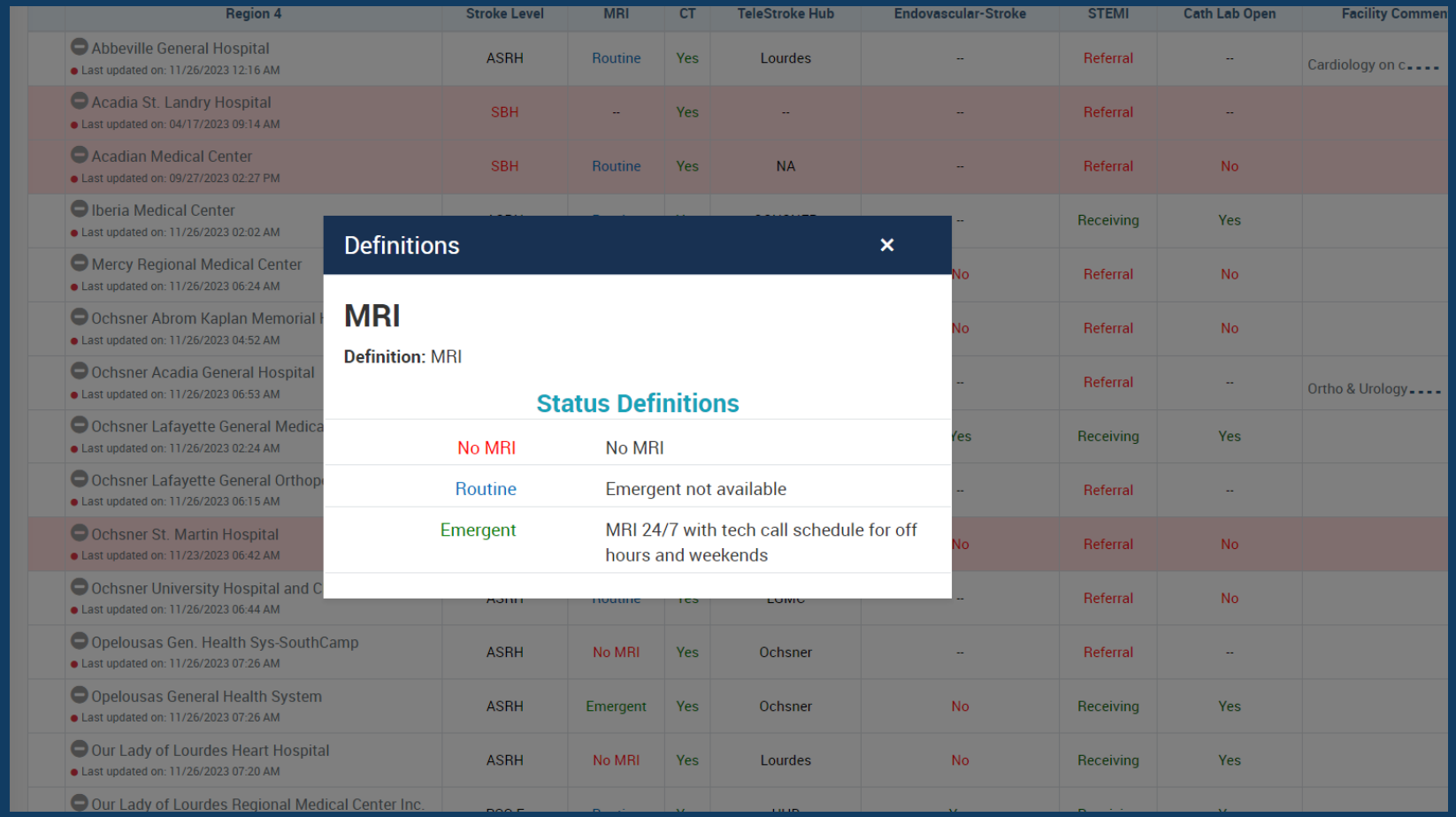
Efficiency of advanced imaging to determine eligibility





- mean interval between CT and MRI of 1.83 h

MRI 24/7 with tech call schedule for off hours and weekends



Region 4	Stroke Level	MRI	CT	TeleStroke Hub	Endovascular-Stroke	STEMI	Cath Lab Open	Facility Commen
Abbeville General Hospital Last updated on: 11/26/2023 12:16 AM	ASRH	Routine	Yes	Lourdes	--	Referral	--	Cardiology on c----
Acadia St. Landry Hospital Last updated on: 04/17/2023 09:14 AM	SBH	--	Yes	--	--	Referral	--	
Acadian Medical Center Last updated on: 09/27/2023 02:27 PM	SBH	Routine	Yes	NA	--	Referral	No	
Iberia Medical Center Last updated on: 11/26/2023 02:02 AM					--	Receiving	Yes	
Mercy Regional Medical Center Last updated on: 11/26/2023 06:24 AM					No	Referral	No	
Ochsner Abrom Kaplan Memorial Last updated on: 11/26/2023 04:52 AM					No	Referral	No	
Ochsner Acadia General Hospital Last updated on: 11/26/2023 06:53 AM					--	Referral	--	Ortho & Urology----
Ochsner Lafayette General Medica Last updated on: 11/26/2023 02:24 AM					Yes	Receiving	Yes	
Ochsner Lafayette General Orthop Last updated on: 11/26/2023 06:15 AM					--	Referral	--	
Ochsner St. Martin Hospital Last updated on: 11/23/2023 06:42 AM					No	Referral	No	
Ochsner University Hospital and C Last updated on: 11/26/2023 06:44 AM					--	Referral	No	
Opelousas Gen. Health Sys-SouthCamp Last updated on: 11/26/2023 07:26 AM	ASRH	No MRI	Yes	Ochsner	--	Referral	--	
Opelousas General Health System Last updated on: 11/26/2023 07:26 AM	ASRH	Emergent	Yes	Ochsner	No	Receiving	Yes	
Our Lady of Lourdes Heart Hospital Last updated on: 11/26/2023 07:20 AM	ASRH	No MRI	Yes	Lourdes	No	Receiving	Yes	
Our Lady of Lourdes Regional Medical Center Inc.								

Definitions ×

MRI

Definition: MRI

Status Definitions

No MRI	No MRI
Routine	Emergent not available
Emergent	MRI 24/7 with tech call schedule for off hours and weekends

LOUISIANA EMERGENCY RESPONSE NETWORK

New Data Requirements

LOUISIANA EMERGENCY RESPONSE NETWORK

New Data Requirements

- Since Q1 2024, all certified centers (PSCs, TSCs, CSCs) have collected unknown/wake up stroke data

- Board elected to begin collecting data from ASRHs
  - Start date: Q1 2026

New LERN Board Adopted Metrics/Process for Stroke System

1. Establish target Door to Transfer Request Time (DTTRT) <30 minutes. We previously did not have a target.

2. Effective Q1 2026, ASRH hospitals with median door in-to-transfer request time (DTTRT) exceeding 10 minutes greater than the median for the prior quarter will be required to submit an Action Plan detailing how the hospital will work to improve.
    - Previously, board required action plan if DTTRT exceeded upper end of IQR, which in Q2, 2025 was 82 minutes. Median for Q2, 2025 was 47 minutes. In this scenario, an action plan would be required if median for DTTRT exceeded 57 minutes.

3. Recognize Phase 2 DIDO of <75 minutes. No remediation, but allows recognition for hospitals meeting this target. **5 PSCs and 2 ASRHs**

4. Require ASRHs and Off Site Stroke Capable EDs to start submitting the unknown Time Symptoms Onset (TSO) data

5. Hospitals with 4 consecutive quarters in the green for DTN and all metrics have the individual stroke code metrics retired, unless they get into trouble with DTN again.

Data from Certified Centers

The National treatment rate among unknown TSO patients has not been established.

GEAUX Louisiana!

	Q1/Q2 2024	Q3/Q4 2024	Q1/Q2 2025
sample size	362	644	731
NIHSS recorded	351	621	705
NIHSS median [IQR]	6 (0-33) [2-16]	6 (0-37) [2-14]	5 (0-40) [2-15]
imaging used			
none	100	217	254
CT	135	207	229
CTP	66	93	83
MRI	61	129	165
IV lytic %	5.5	6.4	2.2
IV lytic % when CTP used	12.1	1.1	1.2
IV lytic % when MRI used	13.1	6.2	7.9
door-to-imaging	31 (2-238) [21-53]	34 (1-385) [20-54]	38 (3-372) [23-65]
door-to-imaging CT	23 (2-217) [16-37]	26 (1-353) [15-42]	32 (3-300) [19-51]
door-to-imaging CTP	39 (4-223) [28-52]	31 (2-356) [22-46]	30 (8-108) [22-46]
door-to-imaging MRI	64 (7-238) [36-85]	52 (7-144) [32-84]	57 (9-372) [35-104]
DTN	59 (31-153) [42-104]	47 (18-196) [35-74]	74 (43-127) [61-85]
DTN CT	41	44.5 (18-129)	95 (77-113)
DTN CTP	54.5	34	71
DTN MRI	97.5	106 (36-196)	71 (43-127)
imaging-to-needle	28 (7-82) [22-44]	22 (6-72) [16-30]	26 (0-110) [6-39]
imaging-to-needle CT	28	22	68
imaging-to-needle CTP	26	7	25
imaging-to-needle MRI	40.5	33	19

Data from Certified Centers

The National treatment rate among unknown TSO patients has not been established.

The reasons why advanced imaging was not pursued include –

- other standard contraindication (55.8%)
- established stroke on CT (10.0%)
- emergent LVO (8.5%)
- ICH (8.3%)
- no reason (6.6%)
- advanced imaging not available (5.2%)
- unable to treat within 4.5 hours of time symptoms noted (1.5%)
- refusal (1.2%)
- patient not eligible for MRI (0.8%)

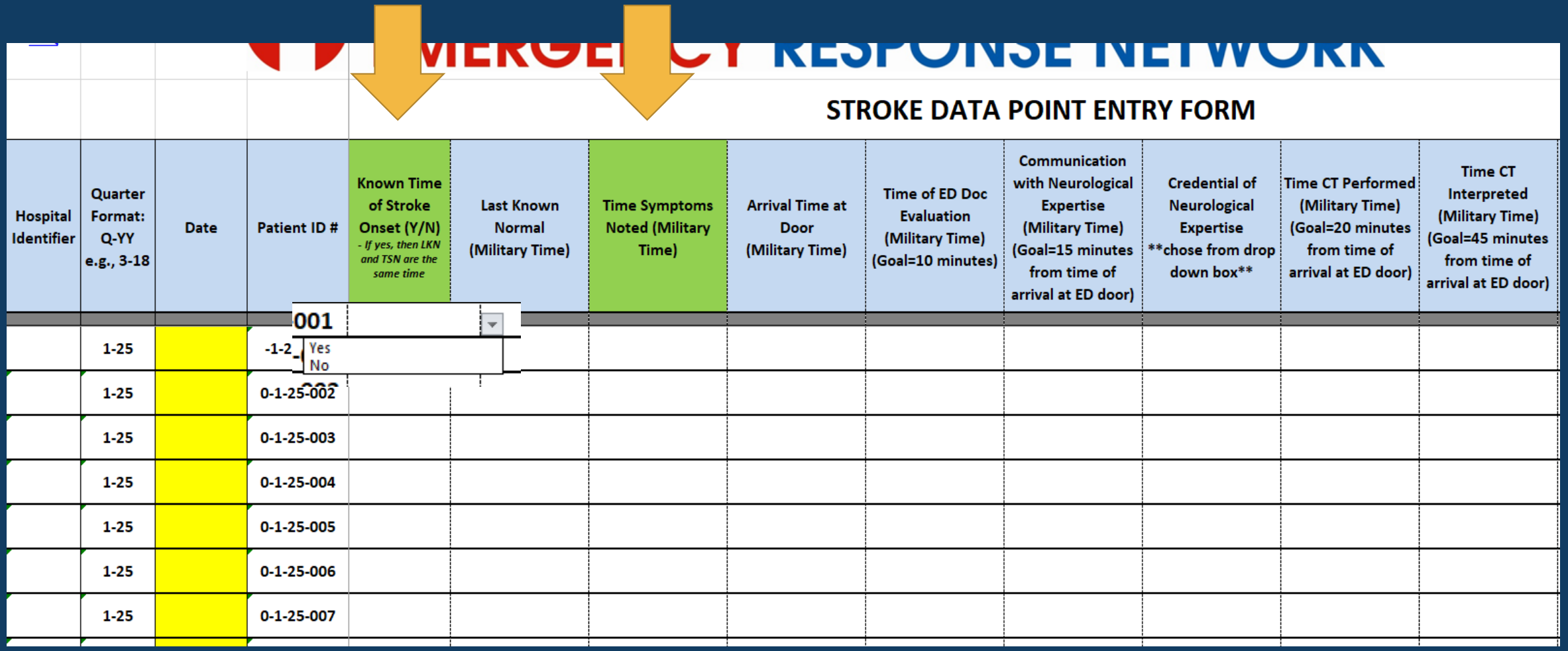
Data from Certified Centers

The National treatment rate among unknown TSO patients has not been established.

The reasons why a patient with CTP or MRI was not treated with IV lytic include –

- stroke mimic (43.4%)
- other standard contraindication (20.9%)
- MRI not favorable (13.2%)
- emergent LVO (9.4%)
- CTP not favorable (6.4%)
- no reason (4.3%)
- refusal (1.3%)
- ICH (0.9%)

Proposed Spreadsheet Changes



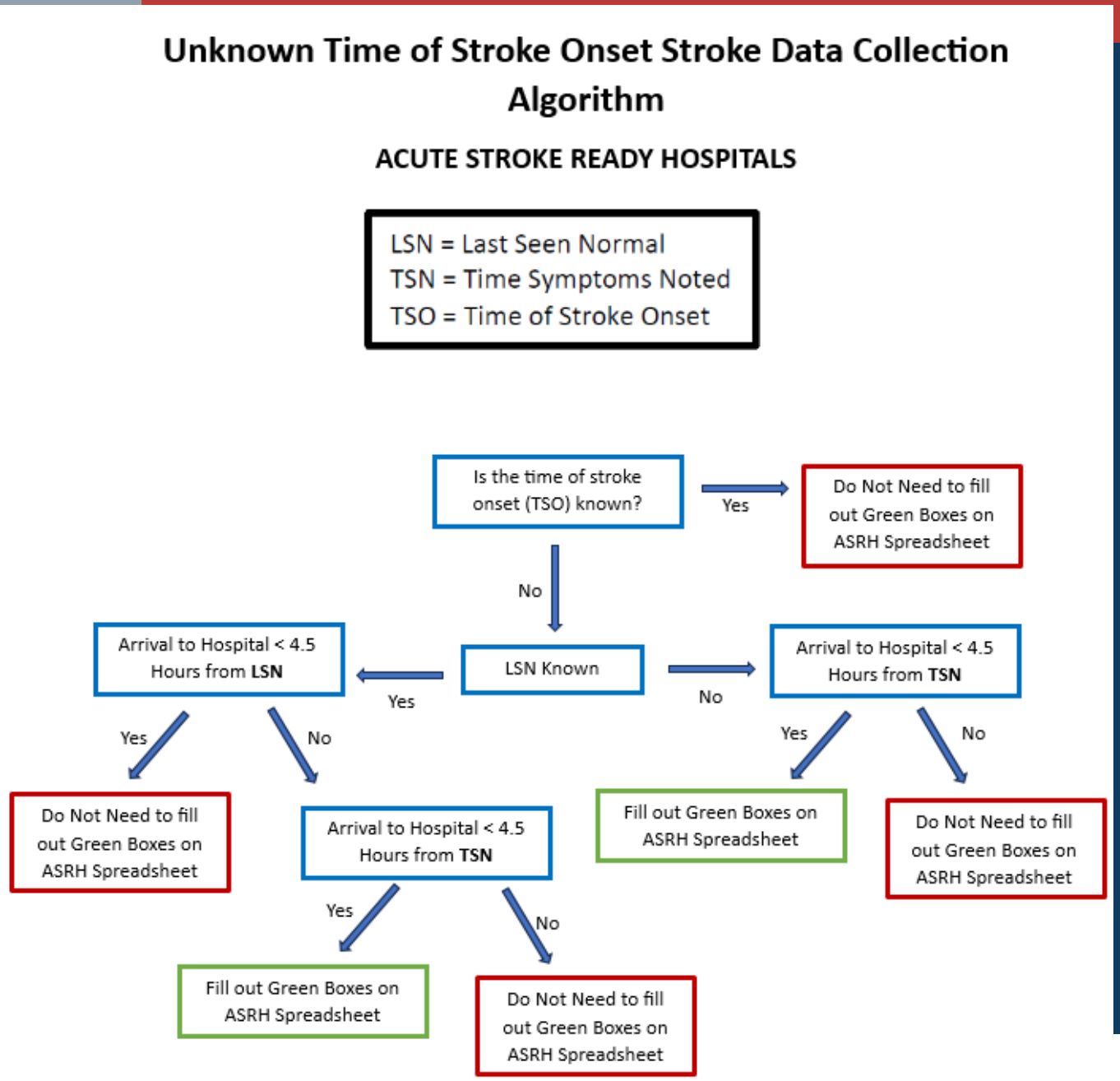
EMERGENCY RESPONSE NETWORK

STROKE DATA POINT ENTRY FORM

Hospital Identifier	Quarter Format: Q-YY e.g., 3-18	Date	Patient ID #	Known Time of Stroke Onset (Y/N) - If yes, then LKN and TSN are the same time	Last Known Normal (Military Time)	Time Symptoms Noted (Military Time)	Arrival Time at Door (Military Time)	Time of ED Doc Evaluation (Military Time) (Goal=10 minutes)	Communication with Neurological Expertise (Military Time) (Goal=15 minutes from time of arrival at ED door)	Credential of Neurological Expertise **chose from drop down box**	Time CT Performed (Military Time) (Goal=20 minutes from time of arrival at ED door)	Time CT Interpreted (Military Time) (Goal=45 minutes from time of arrival at ED door)
	1-25		-1-25-001	Yes / No								
	1-25		0-1-25-002									
	1-25		0-1-25-003									
	1-25		0-1-25-004									
	1-25		0-1-25-005									
	1-25		0-1-25-006									
	1-25		0-1-25-007									

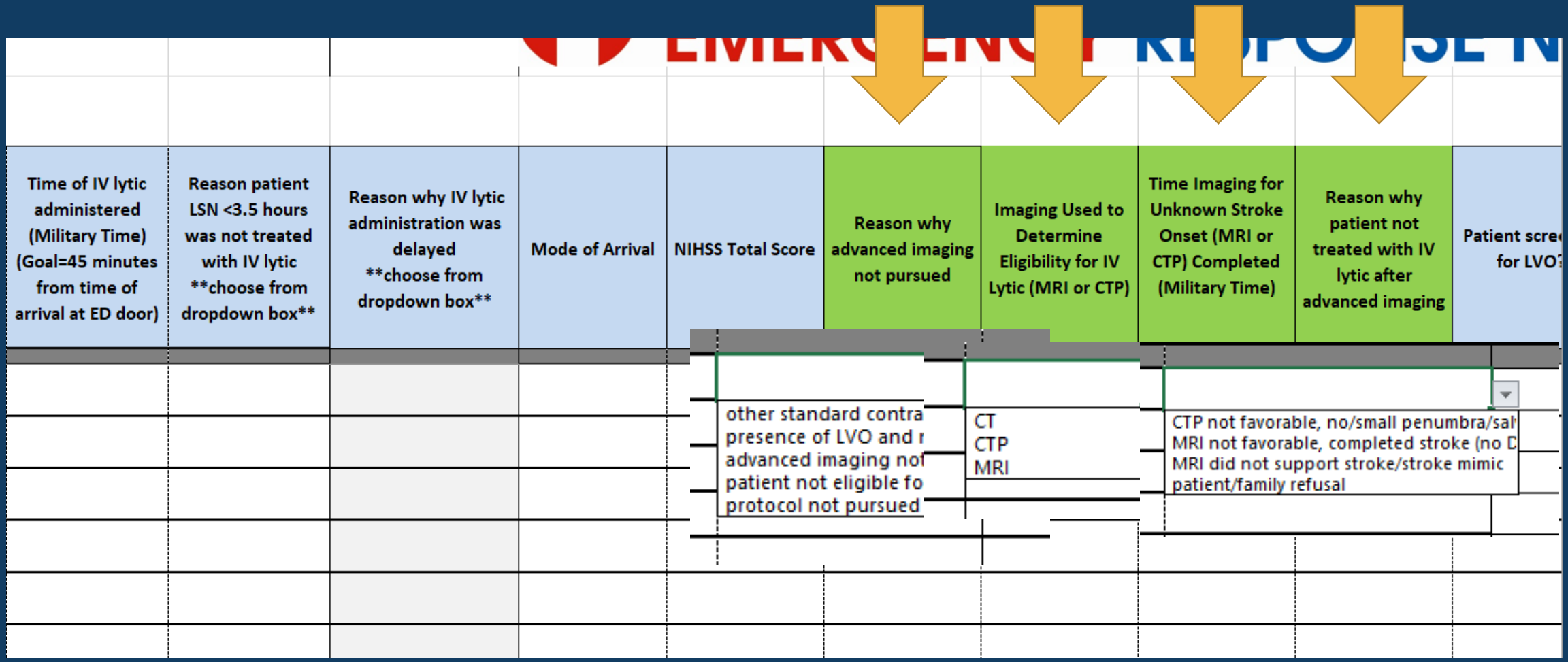
LOUISIANA EMERGENCY RESPONSE NETWORK

Which patients are included in the data?

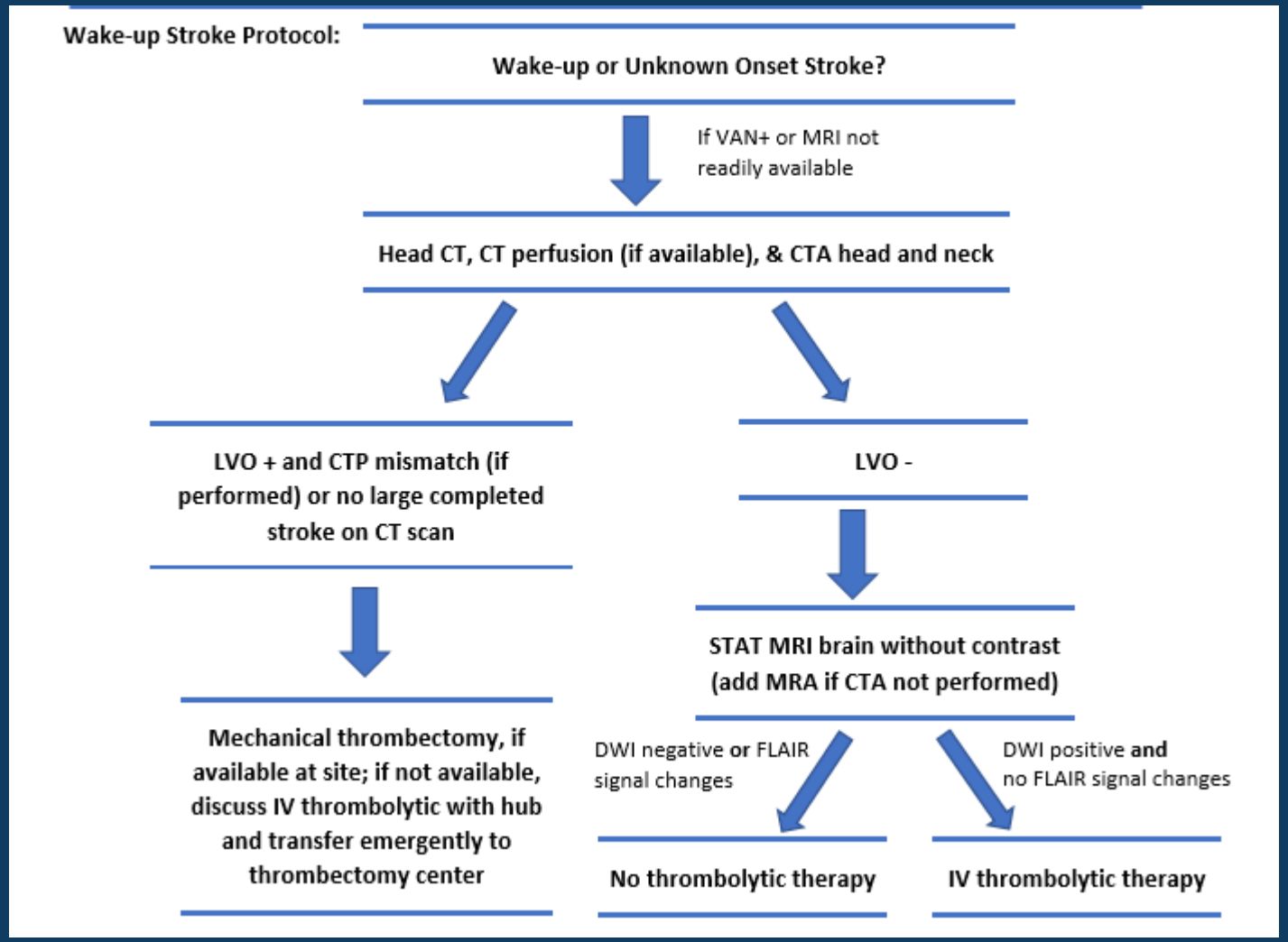


EMERGENCY RESPONSE NETWORK

New variables for ASRHs



Time of IV lytic administered (Military Time) (Goal=45 minutes from time of arrival at ED door)	Reason patient LSN <3.5 hours was not treated with IV lytic **choose from dropdown box**	Reason why IV lytic administration was delayed **choose from dropdown box**	Mode of Arrival	NIHSS Total Score	Reason why advanced imaging not pursued	Imaging Used to Determine Eligibility for IV Lytic (MRI or CTP)	Time Imaging for Unknown Stroke Onset (MRI or CTP) Completed (Military Time)	Reason why patient not treated with IV lytic after advanced imaging	Patient scre for LVO
					other standard contra presence of LVO and r advanced imaging not patient not eligible fo protocol not pursued	CT CTP MRI	CTP not favorable, no/small penumbra/sal MRI not favorable, completed stroke (no D MRI did not support stroke/stroke mimic patient/family refusal		



If the patient is VAN positive, but you don't have thrombectomy capability and you have emergent MRI, you should try to rule the patient in for IV lytic WHILE emergently trying to transfer the patient for thrombectomy.

Do NOT deprive a patient of one SOC you have for a SOC you hope the patient will be eligible for at thrombectomy center.

But, do NOT hold up the transfer, if EMS is on scene.

If your center does not have CT perfusion imaging and the patient has LVO, emergently transfer to a thrombectomy center.

If your center does not have emergent MRI capability and the patient does not have LVO, emergently transfer to closest hospital with MRI capability, if feasible within 4.5 hours of symptom detection.

If your center doesn't have options, but the patient might have options at another center, transfer emergently!

When no advanced imaging is available or patient ineligible -> emergently transfer

Patient screened for LVO?	If yes, what method?	Result of LVO? **if LVO Positive, fill out orange boxes. If VAN positive, but CTA negative, code LVO Negative	Decision Time (Transfer) (Military Time)	Transfer Request Time (Military Time)	Acceptance Time (Military Time)	EMS on Scene Time for Transfer (Military Time) (Remediation Only)	Transfer Time (Military Time)	Reason for Transfer Delay	Reason Patient Not Transferred	Details (Optional)

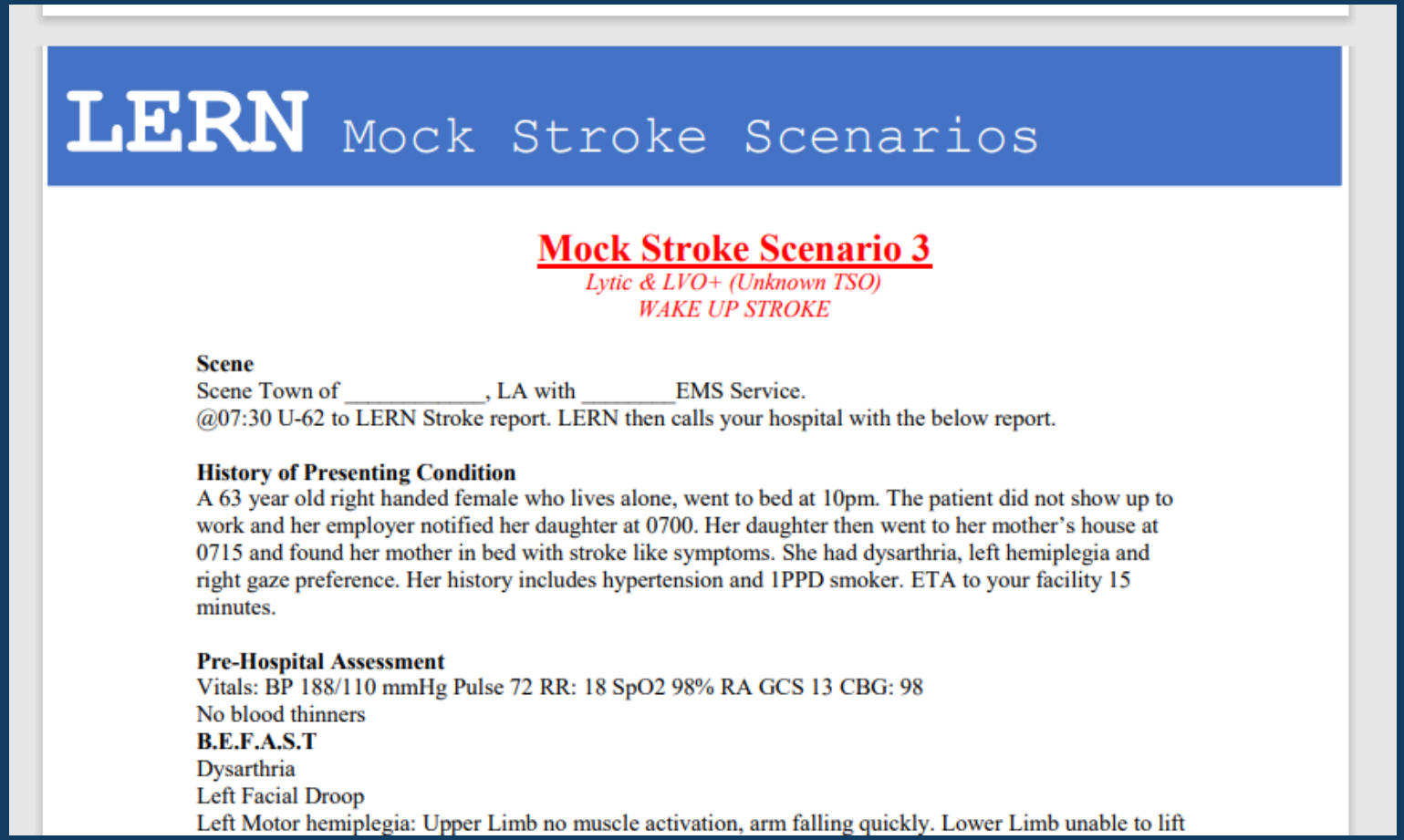
LOUISIANA EMERGENCY RESPONSE NETWORK

Why collect this data and what are the goals?

- Identify patients who are **POTENTIALLY** in the window for IV lytic
- Learn how patients in ASRH settings are being evaluated, treated and potentially transferred for treatment
- Strive for a 45 minute turn around for imaging, when available
- We are currently collecting data. There is no remediation for this population.

Mock Stroke Scenario to Practice with Staff

LERN-Updated-Mock-Stroke-Scenarios_20250710.pdf



LERN Mock Stroke Scenarios

Mock Stroke Scenario 3

Lytic & LVO+ (Unknown TSO)
WAKE UP STROKE

Scene
Scene Town of _____, LA with _____EMS Service.
@07:30 U-62 to LERN Stroke report. LERN then calls your hospital with the below report.

History of Presenting Condition
A 63 year old right handed female who lives alone, went to bed at 10pm. The patient did not show up to work and her employer notified her daughter at 0700. Her daughter then went to her mother's house at 0715 and found her mother in bed with stroke like symptoms. She had dysarthria, left hemiplegia and right gaze preference. Her history includes hypertension and 1PPD smoker. ETA to your facility 15 minutes.

Pre-Hospital Assessment
Vitals: BP 188/110 mmHg Pulse 72 RR: 18 SpO2 98% RA GCS 13 CBG: 98
No blood thinners
B.E.F.A.S.T
Dysarthria
Left Facial Droop
Left Motor hemiplegia: Upper Limb no muscle activation, arm falling quickly. Lower Limb unable to lift

LOUISIANA EMERGENCY RESPONSE NETWORK

- Available on LERN's Website
- Stroke-Assessment-Guide.pdf

LOUISIANA EMERGENCY RESPONSE NETWORK
Right Place. Right Time. Right Care.

Concept: Every patient falls into one of three categories for IV lytic and for thrombectomy

1. Known to be in the window for treatment
2. Known to be out of the window for treatment
3. Possibly in the window for treatment

Each time you see a patient with suspected stroke, determine which of these categories applies to the patient.

IV lytic eligibility	Time criteria	Imaging requirement	Notes
Known to be in the window for treatment	Known time of stroke onset Presents <4.5hrs from time of stroke onset	CT head without contrast to rule out hemorrhage or mimic	If potentially disabling deficits are noted and no standard contraindication to treatment, the patient should be offered IV lytic.*
Known to be out of the window for treatment	Presenting >4.5hrs from time stroke symptoms were noted	CT head without contrast to rule out hemorrhage or mimic	A small subset of these patients may still benefit from treatment with IV lytic using advanced imaging and under the direction of a stroke specialist
Possibly in the window for treatment	Unknown time of stroke onset AND presenting <4.5hrs from time stroke symptoms were noted	CT head without contrast to rule out hemorrhage or mimic; MRI brain with DWI+/FLAIR- OR CTP with functionally relevant penumbra	Reasonable to skip CT head, if MRI is immediately available, but do not delay detection of ICH

*The risks, benefits and alternatives should be reviewed with the patient or surrogate, if

ETWORK

- Available on LERN's Website
- Stroke-Assessment-Guide.pdf

LOUISIANA EMERGENCY RESPONSE NETWORK
Right Place. Right Time. Right Care.

Thrombectomy eligibility*	Time criteria	Imaging requirement	Notes
Known to be in the window for treatment	Known time of stroke onset Presents <6hrs from time of stroke onset	CT head without contrast CTA head and neck (if available at site)	Should initiate emergent transfer for all VAN+ patients in this window; can cancel, if CTA does not support target LVO
Known to be out of the window for treatment	Presents >24hrs from time stroke symptoms were noted	CT head without contrast CTA head and neck (if available at site)	A small subset of these patients may still benefit from thrombectomy using advanced imaging and under the direction of a stroke specialist
Possibly in the window for treatment	Presents 6-24hrs from time stroke symptoms were noted	CT head without contrast CTP (if available at site) CTA head and neck (if available at site) OR MRI/MRA (if available at site and suspected posterior circulation LVO)	Should initiate emergent transfer for all VAN+ patients in this window; can cancel, if CTA does not support target LVO or CTP or MRI shows a completed stroke

*All patients who are VAN + and/or have depressed LOC without a clear cause should be considered thrombectomy candidates until proven otherwise.

Questions?

LOUISIANA EMERGENCY RESPONSE NETWORK

- Stroke Field Trip- Rapides Medical Center February 11,2025
- Proposing State Stroke Workgroup to launch 2-4x per year
  - Goals- LERN data updates/review
  - Discussion – any Joint Commission updates/survey
  - Discussion – best practices in stroke care
  - Case Studies
- Stroke Champion meeting 2x per year