7.i. GETAC Stroke Committee

Chair: Robin Novakavic-White, MD

Vice-Chair: Sean Savitz, MD



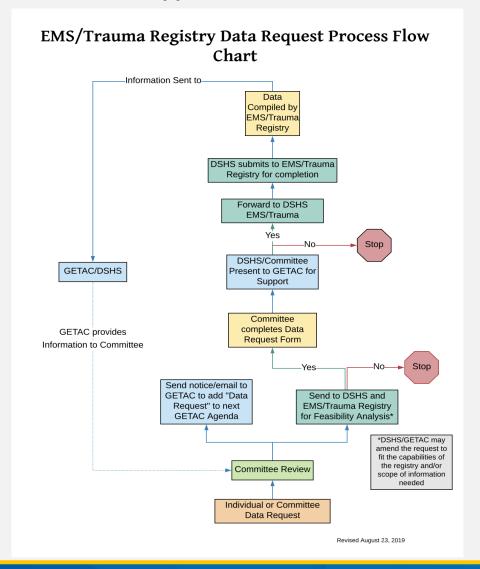
Priority Not Implemented

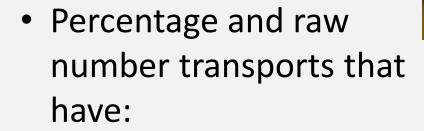
Priority Activities Recorded
Priorities Completed and being
Monitored

| Committee Priorities | Current Activities | Status |
|--|--|--------|
| GETAC Stroke Committee Purpose | Reviewed and approved Stroke Committee purpose 03/2024 | |
| Report and disseminate quarterly Texas Stroke Quality Performance Report | Review and disseminate Texas Stroke Quality report. Share with TCCVDS. Use the quality report to identify barriers to stroke care and opportunities for improvement. | |
| GETAC Stroke Committee Performance Measures | Approved: Median DTN, Median DIDO, Percentage Stroke Screening Tool Performed and Documented submitted Reviewed and Stroke Committee approved data request from NEMSIS. | |

Vote: NEMSIS Data Request

Stroke Committee Approved 06/12/2024





- Stroke screening tool performed/documented
- Stroke severity tool performed/documented
- Type of stroke severity tool used
- Prenotification for patients suspected stroke

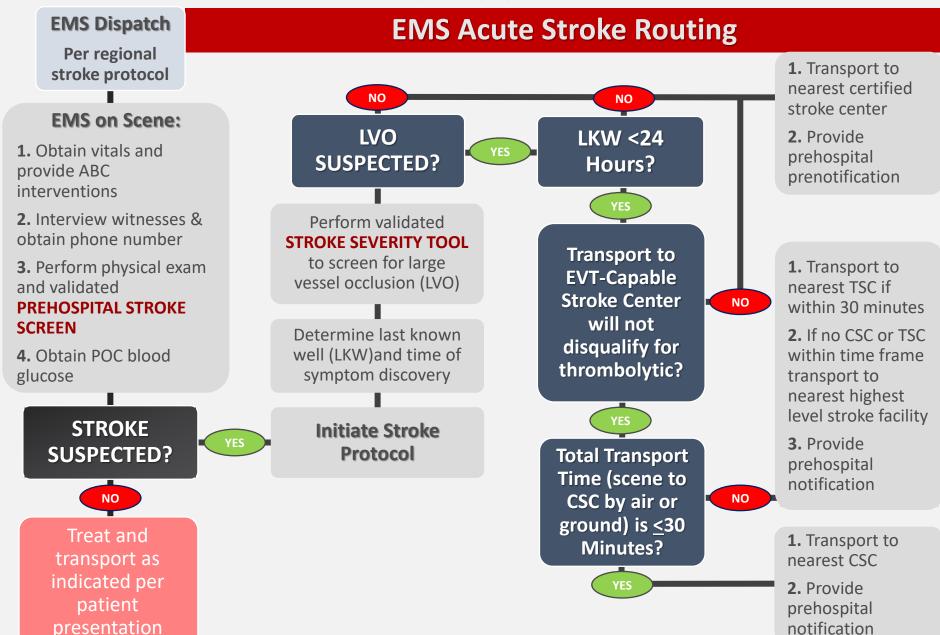


Priority Not Implemented
Priority Activities Recorded

Priorities Completed and being Monitored

| Committee Priorities | Current Activities | Status |
|--|--|--------|
| ASA Mission Lifeline Prehospital Stroke algorithm – Recommendation | Reviewed revisions and approved by Stroke Committee and Air Medical. Presented to EMS, EMS Medical Director, and RAC leadership. EMS Medical Directors deferred approval until 08/2024. EMS Committee reviewed and gave Donald Janes rights to approve revisions. | |
| Stroke facility infrastructure and requirements | The Stroke System of Care Work Group is outlining best practices and recommendations to present to the Stroke Committee. SSOC Work Group will review BAC guidelines and alternatives, make recommendation to the Stroke Committee 08/24. | |
| Pediatric Task Force | Reviewed and approved latest revisions to prehospital best practices for management, transport and interfacility transfers approved by stroke committee. Submitted to Pediatric Committee plan present 08/2024. Reviewed by Air Medical, request for revisions submitted to Task Force. Next steps, minimum capability recommendations for pediatric hospital to be recognized as capable of caring for pediatric stroke. | |

Revised



Stroke Urban Transport Recommendation LVO SUSPECTED? *If LVO suspected, consider air transport from scene response **Transport to Closest** Level I Within 30 **Stroke Center Minutes Transport by** Air or Ground? **Transport** Transport to Level II. **Stroke Centers** If None Available, to Closest Comprehensive (Level I) Level I **Transport to Closest** Thrombectomy Capable/Primary Plus (Level II) Level III or IV Primary (Level III)

Acute Stroke Ready (Level IV)

Stroke Suburban Transport Recommendation LVO SUSPECTED? *If LVO suspected, consider air transport from scene response **Transport to Closest Level I or II Within 45 Stroke Center Minutes Transport by** Air or Ground? **Stroke Centers Transport to Closest Transport to** Level I Unless >30 **Closest Level III** Comprehensive (Level I) **Minutes Additional** or IV Thrombectomy Capable/Primary Plus (Level II) **Transport Time Past** Primary (Level III) Level II. Acute Stroke Ready (Level IV)

Stroke Rural Transport Recommendation LVO SUSPECTED? *If LVO suspected, consider air transport from scene response **Transport to Closest** Level I or II Within 60 **Stroke Center Minutes Transport by** Air or Ground? **Transport to Closest Level III Stroke Centers Transport to Closest Unless >30 Minutes Additional** Level I Unless >30 Comprehensive (Level I) **Transport Time Past Level IV. Minutes Additional** Thrombectomy Capable/Primary Plus (Level II) If No Stroke Centers Within 60 Minutes, **Transport Time Past** Primary (Level III) **Consider Air Medical Transport per** Level II. Acute Stroke Ready (Level IV) **Regional Stroke Plan**

Healthcare Resources, Geography and Population Density

Urban

- RUCA code1
- Population densities
 (≥ 50,000 residents)
- And abundant healthcare resources, with access to one or more TSCs/CSCs within 30 minutes transport time by EMS ground

Suburban

- RUCA codes 2-3
- Large residential community adjacent to urban core
- Population density closer to the urban threshold
- May have access to both community hospitals and suburban or urban advanced stroke centers
- TSC, CSC with a 30-60 minutes transport time by EMS air or ground

Rural

- RUCA codes 4-10
- Population densities (<50,000 residents)
- Limited local general healthcare resources, few nearby ASRH or PSC
- Often no TSC/CSC within 60 minutes transport time by ground EMS, but may be one within 60 minutes by air

Priority Not Implemented

Priority Activities Recorded
Priorities Completed and being
Monitored

| Committee Priorities | Current Activities | Status |
|--|--|--------|
| ASA Mission Lifeline Prehospital Stroke algorithm – Recommendation | Reviewed revisions and approved by Stroke Committee and Air Medical. Presented to EMS, EMS Medical Director, and RAC leadership. EMS Medical Directors deferred approval until 08/2024. EMS Committee reviewed and gave Donald Janes rights to approve revisions. | |
| Stroke facility infrastructure and requirements | The Stroke System of Care Work Group is outlining best practices and recommendations to present to the Stroke Committee. SSOC Work Group will review BAC guidelines and alternatives, make recommendation to the Stroke Committee 08/24. | |
| Pediatric Task Force | Reviewed and approved latest revisions to prehospital best practices for management, transport and interfacility transfers approved by stroke committee. Submitted to Pediatric Committee plan present 08/2024. Reviewed by Air Medical, request for revisions submitted to Task Force. Next steps, minimum capability recommendations for pediatric hospital to be recognized as capable of caring for pediatric stroke. | |

Priority Not Implemented
Priority Activities Recorded
Priorities Completed and being

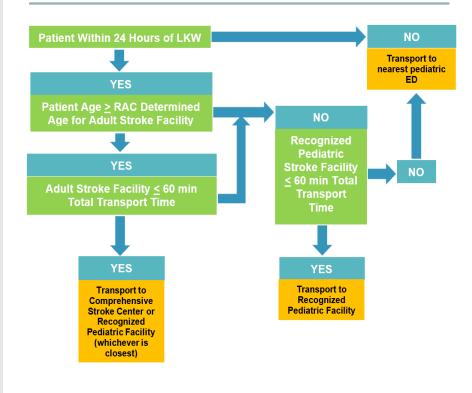
Monitored

| Committee Priorities | Current Activities | Status |
|--|--|--------|
| ASA Mission Lifeline Prehospital Stroke algorithm – Recommendation | Reviewed revisions and approved by Stroke Committee and Air Medical. Presented to EMS, EMS Medical Director, and RAC leadership. EMS Medical Directors deferred approval until 08/2024. EMS Committee reviewed and gave Donald Janes rights to approve revisions. | |
| Stroke facility infrastructure and requirements | The Stroke System of Care Work Group is outlining best practices and recommendations to present to the Stroke Committee. SSOC Work Group will review BAC guidelines and alternatives, make recommendation to the Stroke Committee 08/24. | |
| Pediatric Task Force | Reviewed and approved latest revisions to prehospital best practices for management, transport and interfacility transfers approved by stroke committee. Submitted to Pediatric Committee plan present 08/2024 if approved present to other committees. Reviewed by Air Medical, request for revisions submitted to Task Force. Next steps, minimum capability recommendations for pediatric hospital to be recognized as capable of caring for pediatric stroke. | |

EMS Pediatric Stroke Protocol

SUSPECT STROKE Stabilize - ABCDEs Pediatric Guidelines Sudden Onset/Wake from Airway - Ensure airway patency with suctioning and OPA or NPA, as Sleep: Numbness Breathing – goal O2 sat > 94% (may be lower in congenital heart disease) Weakness Circulation – Evaluate and treat for shock · Difficulty speaking or Disability - GCS, pupillary size/reactivity, blood glucose Exposure – evidence of traumatic injury understanding · Loss of vision/double Altered mental status · Loss of balance or **Pediatric Patient Stable** coordination New onset focal seizure · Severe headache without cause Exam: Transport to nearest Blood pressure pediatric ED Rate Rhythm Respiratory Rate Oxygen Saturation Assess for seizures Hypoglycemia Shock Management: · Position head of bed to 30 degrees History to Obtain: Continuous cardiac monitoring • LKW · Place two PIV's if possible • TSD Avoid Hypotension Seizure at onset SBP goal >50%-ile for age1 Head trauma Recent surgery · Possible drug ingestion SBP Parameters¹ Pre-existing disability Device/implant history Female Male Medical Problems with High Stroke Risk Heart Disease 50%-ile Age 50%-ile Age o Blood vessel problems in the brain (e.g., 1-4 years 90mmHg 1-4 years 90mmHg aneurysms, movamova) Stroke 5-10 years 96mmHg 5-10 years 96mmHg Sickle cell disease Cancer 11-17 years | 105mmHg | 11-17 years | 110mmHg o Blood clots

EMS Pediatric Stroke Protocol



Reference

 Rivkin MJ, Bernard TJ, Dowling MM, Amlie-Lefond C. Guidelines for Urgent Management of Stroke in Children. Pediatr Neurol. 2016 Mar;56:8-17. doi: 10.1016/j.pediatrneurol.2016.01.016. Epub 2016 Jan 21. Erratum in: Pediatr Neurol. 2016 Nov;64:105. PMID: 26969237.

Last Updated 6/6/2024

EMS Pediatric Stroke Triage Guidance

Pediatric Stroke is a rare disease that is, nevertheless, included among the top ten causes of **death** in pediatrics.¹ However, rapid recognition and appropriate treatment of pediatric stroke can profoundly improve outcomes for these children, sparing them from decades of disability.².³ This guidance document is designed to help EMS providers recognize and triage pediatric stroke patients quickly to facilitate improved outcomes throughout the state.

Goal:

To enhance EMS identification of strokes in the pediatric population (infants and children less than 18 years of age), as well as to increase rapid triage and transport to the nearest appropriate facility.

Purpose

In consultation with EMS, ER, stroke, pediatric neurology, and pediatric leaders from around the state and current American Heart Association recommendations, we have developed the below EMS guidelines for pediatric patients with a known or suspected stroke.^{4,5}

General Information on Pediatric Stroke

Pediatric stroke can present with focal neurologic signs, as well as non-specific signs like seizure or altered mental status. $^{6-10}$

Sudden onset of any of the following suggests the possibility of acute stroke:

Numbness or weakness of face, arm and/or leg (especially on one side of the body) Confusion

Trouble speaking or understanding language

Trouble seeing in one or both eyes or double vision

Altered Mental Status

Trouble walking

Dizziness

Loss of balance or coordination

Severe headache with no known cause (suggests hemorrhagic stroke), especially with altered mental status

Patients with any of the following are at higher risk for acute stroke:

Heart disease, history of blood vessel problems in the brain, history of stroke, sickle cell disease, cancer, history of blood clots

For patients with any of the above neurologic signs, especially with the listed conditions, consider triaging as an acute stroke.

Common pediatric stroke mimics: alcoholic intoxication, cerebral infections, drug overdose, hypoglycemia, hyperglycemia, genetic/metabolic disorders, atypical migraines, neuropathies (e.g. Bell's palsy), seizure, post-ictal state and tumors.

Prehospital Triage of Stroke Patients

Basic Level – in suspected stroke cases, as with all other pediatric patients, assess and treat ABCDEs per universal pediatric recommendations:

A (Airway): Airway support and ventilation assistance are recommended for patients with acute stroke who have decreased consciousness or who have compromised airway. Ensure airway patency with suctioning and OPA or NPA, as needed.

B (Breathing): Supplemental oxygen should be provided to maintain oxygen saturation > 94% (continuous monitoring).

NOTE: some patients with congenital heart disease have a different goal saturation level (80-90% in some cases). Confirm normal level with parents/caretakers if unsure.

C (Circulation): Evaluate and treat signs/symptoms of shock according to the Shock Clinical Practice Guidelines

D (Disability): Assess and document GCS, pupillary size and reactivity.

E (Exposure/Environmental): Assess for evidence of traumatic injury, especially head injury.

Stabilization/Initial Management:

If there is evidence of shock, treat according to the Shock clinical practice <u>guidelines</u>
If there is hypoglycemia (POC glucose < 60 mg/dL), treat according to Diabetic Emergencies clinical practice guidelines.

If there are Seizures, treat according to the Seizure clinical practice guidelines

Place the patient in a supine position, head of the bed elevated 30 degrees.

Cardiac monitoring during transport is recommended.

Assessment for Pediatric Stroke

There are no validated pre-hospital screening tools for pediatric stroke.

Weakness of face, arm and/or leg (especially on one side of the body)

Numbness on one side of the face or body

Confusion

Trouble speaking or understanding language

Trouble seeing in one or both eyes or double vision

Altered Mental Status

Trouble walking

Dizziness

Loss of balance or coordination

Severe headache with no known cause (suggests hemorrhagic stroke), especially with altered mental status

Seizure with post-ictal focal deficit (like weakness) that does not resolve quickly (~15 minutes)

Related medical conditions include: Heart disease, history of blood vessel problems in the brain, history of stroke, sickle cell disease, cancer, history of blood clots

History -

If you are concerned for stroke:

Interview patient, family members and other witnesses to determine symptoms, time of symptom discovery and last known well (LKW), or last time patient was without symptoms. Ask about seizure at onset, head trauma, history of recent surgeries, history of bleeding problems, and signs of possible brain hemorrhage (severe headache of sudden onset, nausea/vomiting with headache or loss of consciousness). Obtain mobile number of next of kin and witnesses.

NOTE: For "wake up strokes" the last known well time is the last time that they were witnessed to be at their baseline, which may be the night before. The time they are found is not the last known well time.

Additional history if possible: Past medical history, allergies (iodinated contrast).

Determine if patient has a pre-existing substantial disability (e.g. unable to walk independently).

Medications – obtain a list of all medications including antiplatelet agents such as Aspirin and blood thinners such as direct thrombin inhibitors, factor Xa inhibitors, low molecular weight heparin such as enoxaparin (Lovenox), unfractionated heparin, warfarin (Coumadin), rivaroxaban (Xarelto), dabigatran (Pradaxa), apixaban (Eliquis), edoxaban (Savaysa). If possible, record when last dose was taken.

Device/implant history ($\underline{i.e.}$ left ventricular assist device, pacemaker, valve replacement, VP shunt)

Examination

Record blood pressure, rate, rhythm, respiratory rate and oxygen saturation.

Management

EMS personnel should address ABCDEs per universal pediatric guidelines. Additional initial management steps include:

- Prevent aspiration, HOB > 30. Ensure airway patency with suctioning and OPA or NPA, as needed
- 2. Provide supplemental oxygen if needed to keep oxygen saturation > 94%.
 - a. (Adjust if the patient has known congenital heart disease with a different goal oxygen saturation)
- 3. Avoid hypotension. Maintain systolic blood pressure ≥50%ile for age

Systolic Blood Pressure Parameters¹¹:

| Female | | Male | | |
|-------------|---------|-------------|---------|--|
| Age | 50%ile | Age | 50%ile | |
| 1-4 years | 90mmHg | 1-4 years | 90mmHg | |
| 5-10 years | 96mmHg | 5-10 years | 96mmHg | |
| 11-17 years | 105mmHg | 11-17 years | 110mmHg | |

- 4. Consider online medical control for severe <u>hypertension</u>
- Hypoglycemia (blood glucose < 60 mg/dL) should be treated in patients suspected of acute ischemic stroke.
- To facilitate expedited stroke workup in the ED two peripheral IVs can be placed, however, this should not delay transport time.

System Triage

Goal for on scene time, 10-15 minutes or less. Encourage $\underline{\text{family}}$ to go directly to the ED if not transported with the patient.

<u>Destination decision-making for pediatric patients less than 18 years of age with possible stroke:</u>

Consult local RAC guidelines for age cut off for transport to comprehensive stroke center. If <u>patient's</u> age is greater than or equal to RAC determined age for comprehensive stroke center, transport patient to nearest comprehensive stroke center or pediatric tertiary care emergency department (whichever is closest).

If no comprehensive stroke center or

For patients less than RAC determined age for adult comprehensive stroke center:

- If last known well <24 hours, prioritize arrival to nearest tertiary care pediatric emergency department. Consider calling in to facility as emergent stroke patient
- If last known well >24 hours, prioritize arrival to nearest pediatric emergency department for evaluation.

For all ages, consider air medical if prolonged transport time.

Call stroke alert, pre-notify receiving facility that a suspected pediatric stroke patient is in route so that the appropriate resources may be mobilized before patient arrival.

Pre-notification should include: Age, last known well, current vital signs, stroke screening tool score (if done) and symptoms (weakness on one side, altered mental status, etc)

Goal: 120 seconds for EMS to ED triage nurse hand-off.

(Note – Plan is adapted from 2022 Pediatric Stroke North Central Texas Regional Stroke Plan)

References:

- National Center for Injury Prevention and Control, CDC. 10 leading causes of death by age group. [Internet]. 2018 [cited 2022 May 10]: <u>Available</u> from: https://www.cdc.gov/injury/wisqars/pdf/leading causes of death by age group 2015-a
- Bhatia KD, Briest R, Goetti R, et al. Incidence and Natural History of Pediatric Large Vessel Occlusion Stroke: A Population Study. JAMA Neurol 2022;79(5):488–97.
- Lauzier DC, Galardi MM, Guilliams KP, et al. Pediatric Thrombectomy. Stroke 2021;52(4):1511–9.
- Ferriero DM, Fullerton HJ, Bernard TJ, et al. AHA / ASA Scientific Statement Management of Stroke in Neonates and Children. 2019.
- 5. Jauch EC, Schwamm LH, Panagos PD, et al. Recommendations for Regional Stroke Destination Plans in Rural, Suburban, and Urban Communities From the Prehospital Stroke System of Care Consensus Conference: A Consensus Statement From the American Academy of Neurology, American Heart Association/American Stroke Association, American Society of Neuroradiology, National Association of EMS Physicians, National Association of State EMS Officials, Society of NeuroInterventional Surgery, and Society of Vascular and Interventional Neurology. Stroke 2021;52(5).
- Elbers J, Wainwright MS, Amlie-<u>Lefond</u> C. The Pediatric Stroke Code: Early Management of the Child with Stroke. J <u>Pediatr</u> 2015;167(1):19-24.e4.
- Phelps K, Silos C, De La Torre S, et al. Establishing a pediatric acute stroke protocol: experience of a new pediatric stroke program and predictors of acute stroke. Front Neurol 2023;14.
- 8. Harrar DB, Benedetti GM, Jayakar A, et al. Pediatric Acute Stroke Protocols in the United States and Canada. In: Journal of Pediatrics. Elsevier Inc.: 2022. p. 220-227.e7.
- Wharton JD, Barry MM, Lee CA, Massey K, Ladner TR, Jordan LC. Pediatric Acute Stroke Protocol Implementation and Utilization Over 7 Years. In: Journal of Pediatrics. Mosby Inc.; 2020. p. 214-220.e1.
- Harrar DB, Benedetti GM, Jayakar A, et al. Pediatric Acute Stroke Protocols in the United States and Canada. J Pediatr 2022;242:220-227.e7.
- Rivkin MJ, Bernard TJ, Dowling MM, Amlie-Lefond C. Guidelines for Urgent Management of Stroke in Children. <u>Pediatr</u> Neurol <u>2016;56:8</u>–17.

Priority Not Implemented
Priority Activities Recorded

Priorities Completed and being Monitored

| Committee Priorities | Current Activities | Status |
|---|--|--------|
| Interfacility Stroke Terminology | Reviewed and approved revisions by Stroke Committee and Air Medical. Presented to EMS, EMS Medical Director, and RAC leadership. EMS Medical Directors deferred approval until 08/2024. EMS Committee reviewed and gave Donald Janes rights to approve revisions. | |
| DIDO performance recommendations | Reviewed and approved revisions by Stroke Committee and Air Medical. Plan to present to EMS MD 08/2024. Long-term goal, collect the data to outline barriers for interfacility transfers and opportunities to facilitate faster DIDO | |
| Establish research opportunity in the state of Texas to help advance stroke care in the state | Working on Texas study evaluating if providing standardized stroke education improves performance. | |

New Proposal INTERFACILITY STROKE TERMINOLOGY

1

Level 1 Stroke = Patient with an ischemic or hemorrhagic stroke in need of an emergent intervention

2

Level 2 Stroke = Patient with an ischemic or hemorrhagic stroke in need of an urgent transfer for higher level of care but without emergent need of an intervention

3

Level 3 Stroke = Patient with an ischemic or hemorrhagic stroke in need of transfer but without emergent or urgent needs

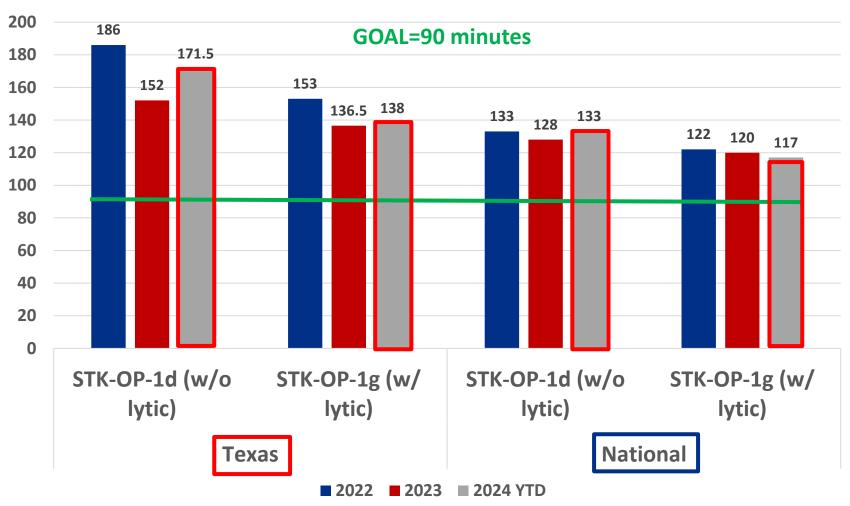
 Level 1 and 2 Stroke- time from agency notification to transportation arrival at the transferring hospital < 30 minutes.
 Level 1 Stroke- if ground transportation to transferring facility or transport time to receiving facility > 30 minutes consider air transport.

Priority Not Implemented
Priority Activities Recorded

Priorities Completed and being Monitored

| Committee Priorities | Current Activities | Status |
|---|--|--------|
| Interfacility Stroke Terminology | Reviewed and approved revisions by Stroke Committee and Air Medical. Presented to EMS, EMS Medical Director, and RAC leadership. EMS Medical Directors deferred approval until 08/2024. EMS Committee reviewed and gave Donald Janes rights to approve revisions. | |
| DIDO performance recommendations | Reviewed and approved revisions by Stroke Committee and Air Medical. Plan to present to EMS MD 08/2024. Long-term goal, collect the data to outline barriers for interfacility transfers and opportunities to facilitate faster DIDO | |
| Establish research opportunity in the state of Texas to help advance stroke care in the state | Working on Texas study evaluating if providing standardized stroke education improves performance. | |

Median DIDO for Thrombectomy Eligible Patients (Minutes)



New Proposal Breaking Down DIDO

DIDO Median Time Metrics for patients with LVO in need of thrombectomy Goal 90 minutes

| Transferring Facility Door to Notification of receiving facility and ground or air medical transport | 30 minutes or less (call as soon as possible) *Consider early activation if auto-accept with receiving facility is not in place. |
|--|--|
| Receiving Facility to Notification of acceptance or not | 15 minutes or less |
| EMS arrival | 50% at goal 30 minutes by air or ground urban/suburban and 45 minutes rural |
| EMS arrival to Door out | 15 minutes or less |

Priority Not Implemented
Priority Activities Recorded

Priorities Completed and being Monitored

| Committee Priorities | Current Activities | Status |
|---|--|--------|
| Interfacility Stroke Terminology | Reviewed and approved revisions by Stroke Committee and Air Medical. Presented to EMS, EMS Medical Director, and RAC leadership. EMS Medical Directors deferred approval until 08/2024. EMS Committee reviewed and gave Donald Janes rights to approve revisions. | |
| DIDO performance recommendations | Reviewed and approved revisions by Stroke Committee and Air Medical. Plan to present to EMS MD 08/2024. Long-term goal, collect the data to outline barriers for interfacility transfers and opportunities to facilitate faster DIDO | |
| Establish research opportunity in the state of Texas to help advance stroke care in the state | Working on Texas study evaluating if providing standardized stroke education improves performance. | |

Priority Not Implemented
Priority Activities Recorded

Priorities Completed and being Monitored

| Committee Priorities | Current Activities | Status |
|--|---|--------|
| Texas EMS Stroke Survey | Stroke Committee, EMS Medical Director and Air Medical approved. EMS and EMS Medical Directors helped with language. EMS Committee reviewed and gave Donald Janes rights to approve revisions. RAC leadership prelim approval | |
| Stroke Committee endorsed stroke education and certification courses | Ongoing effort identifying stroke educational opportunities for providers. | |
| Stroke Education Resource for stroke facilities | Working with DSHS/GETAC to find best way to provide a stroke education resource. Link to a facilities stroke education page current suggestion. | |
| Work with DSHS to outline recommendations for stroke rules for ASRH | • Ongoing | |

GETAC Stroke Committee Stroke Screening Survey

| GETAC Stroke Screening Survey | |
|---|--|
| Please complete the survey below. | In which Regional Advisory Council(s) (RAC) are you employed? (Select all that apply): |
| Thank you! | ☐ TSA-A Panhandle RAC ☐ TSA-B RAC (BRAC) ☐ TSA-C North Texas RAC ☐ TSA-D Big Country RAC |
| The following survey will be used to collect submissions regarding the current use of both Stroke severity screening tools and Stroke assessment tools among our organizations. The Stroke committee hopes to collect the data needed to analyze which tools are being utilized, and how we can improve the prompt mobilization of resources to the patients in our region. | ☐ TSA-E North Central Texas Trauma RAC ☐ TSA-F Northeast Texas RAC ☐ TSA-G Pliney Woods RAC ☐ TSA-H Deep East Texas RAC ☐ TSA-H Border RAC ☐ TSA-J Texas "j" RAC ☐ TSA-K Concho Valley RAC ☐ TSA-L Central Texas RAC ☐ TSA-L |
| If you have multiple agencies you assist, please label them all within the comment box for the first question. | ☐ TSA-N Brazos Valley RAC ☐ TSA-O Capital Area Trauma RAC ☐ TSA-P Southwest Texas RAC ☐ TSA-Q Southeast Texas RAC |
| Survey will remain open until COB April 1st, 2022. For administrative purposes only, please provide your first and last name: | ☐ TSA-R East Texas Gulf Coast RAC ☐ TSA-S Golden Crescent RAC c/o Citizens Medical Center ☐ TSA-T Seven Flags RAC ☐ TSA-U Coastal Bend RAC ☐ TSA-V Lower Rio Grande Valley RAC |
| What is your level of emergency medical provider? | |
| EMT | Does your EMS agency utilize electronic patient care reporting (ePCR)? Yes No Which electronic patient care record do you use? (Select all that apply): |
| Do you hold a leadership position? Yes No | ☐ ESO ☐ Zoll ☐ ImageTrend ☐ EMSCharts ☐ MedSvlewer ☐ Other |
| What position do you hold? (Select all that apply): | |
| ☐ EMS Leadership ☐ EMS Medical Director | Other electronic patient care record (please specify): |
| At which facilty or company are you employed? | <u> </u> |
| | Are you instructed to use a prehospital stroke screening tool to assess patients with suspected stroke? Yes No |
| | What stroke screening tool do you use to screen for stroke? (Select all that apply): Cincinnati Prehospital Stroke Scale Los Angeles Prehospital Stroke Screen |



Page 2

FAST (Face, Arm, Speech, Test) Other or uncertain of the name Other assessment tool (please specify)

GETAC Stroke Committee Stroke Screening Survey

| | | Pa |
|--|---------------------|---------------|
| From your most current year of operations, what percentage of EMS responses origi patients suffering from a suspected stroke who had a stroke assessment performed | | |
| ○ Never (0%) | | |
| O Less than 25% of the time | | |
| O Between 25% to less than 50% of the time | | |
| O Between 50% to less than 75% of the time | | |
| More than 75% of the time | | |
| How confident do you feel using your stroke screening tool? | | |
| Not confident at all, try to avoid | | |
| O Somewhat confident | | |
| ○ Confident | | |
| O Very confident | | |
| How often do you receive formal training on this tool at the agency where you are e | employed? | |
| O I have never received training | | |
| Only one time | | |
| O Every 2-5 years At least once every two years | | |
| Once a year | | |
| More than once a year | | |
| Are you instructed to use a prehospital stroke severity/large vessel occlusion (LVO) suspected of having a stroke? | screening tool to | assess patien |
| ○ Yes | | |
| ○ No | | |
| 0.110 | | |
| What LVO screening tool do you use to assess patients suspected of having a stroke | e? (Select all that | apply): |
| ○ Cincinnati Prehospital Stroke Severity Scale (CSTAT) | | |
| O Los Angeles Prehospital Stroke Screen | | |
| O Los Angeles Motor Scale (LAMS) | | |
| O RACE Scale | | |
| Field Assessment Stroke Triage for Emergency Destination (FAST-ED) | | |
| ○ Vision Aphasia Neglect (VAN) ○ Weakness, Inattention/neglect, Repetition, Eye deviation/vision loss (WIRE) | | |
| NIHSS | | |
| Other or uncertain of the name | | |
| Other (please specify): | | |
| | | |
| From the second control to the second contro | inote from a 011 - | on one for |
| From your most current year of operations, what percentage of EMS responses origi patients suffering from a suspected stroke who had a stroke severity (LVO) assessm response? | | |
| ○ Never (0%) | | |
| O Less than 25% of the time | | |
| O Between 25% to less than 50% of the time | | |
| O Between 50% to less than 75% of the time O More than 75% of the time | | |
| | | |
| | | |
| 03/06/2024 6:19am | projectredcap.org | REDC |

| Overy Confident How frequently do you receive official training on this tool at the company where you are primarily employed? I have never received training Only one time Every 2-5 years At least once every two years Once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., Stroke Alert)? Never (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 50% to less than 75% of the time More than 75% of the time They are not documented In the narrative In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented | How confident do you feel using your stroke so | varity (LVO) screening tool? |
|--|--|--|
| Osomewhat confident Overy Confident How frequently do you receive official training on this tool at the company where you are primarily employed? I have never received training Only one time Every 2-5 years At least once every two years Once a year More than once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., stroke Alert)? Never (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 25% to less than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented in the narrative in a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | | verity (LVO) screening tools |
| Confident Very Confident How frequently do you receive official training on this tool at the company where you are primarily employed? I have never received training Only one time Every 2-5 years At least once every two years Once a year More than once a year More than once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., stroke Alert)? Never (0%) Less than 25% of the time Between 55% to less than 50% of the time Between 55% to less than 55% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative One are not documented One the narrative One are not documented | | |
| How frequently do you receive official training on this tool at the company where you are primarily employed? Only one time Every 2-5 years At least once every two years Once a year More than once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., stroke Alert)? Never (0%) Less than 25% of the time Between 55% to less than 50% of the time Between 55% to less than 55% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative On the year end documented On the narrative On the year end documented On the narrative One of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented On the narrative One of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented On the narrative One of the chart | ○ Confident | |
| O I have never received training Only one time Every 2-5 years At least once every two years Once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., stroke Alert)? Never (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 50% to less than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented in the narrative in a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented in the narrative As a time-stamped procedure | O Very Confident | |
| Only one time Every 2-5 years At least once every two years Once a year More than once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., stroke Alert)? Never (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 25% to less than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented in the narrative in a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented in the narrative As a time-stamped procedure | How frequently do you receive official training o | on this tool at the company where you are primarily employed? |
| © Every 2-5 years Once a year Office a year More than once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., stroke Alert)? Onever (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 50% to less than 75% of the time More than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? Oney are not documented In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? Oney are not documented In the narrative Oney are not documented One than 25% of the time One than 25% | Only one time | |
| At least once every two years Once a year Once a year Once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., stroke Alert)? One ever (0%) One a year One a year One to the time One than 25% of the time One than 25% of the time One than 75% of the time | | |
| More than once a year Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., Stroke Alert)? Never (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 25% to less than 75% of the time More than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented in the narrative in a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented in the narrative On they are not documented On the narrative As a time-stamped procedure | At least once every two years | |
| Among patients suspected of having an acute stroke, in what proportion is a hospital pre-notification made (e.g., Stroke Alert)? Never (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 50% to less than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented in the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative On the narrative On the narrative On the narrative As a time-stamped procedure | | |
| Never (0%) Less than 25% of the time Between 25% to less than 50% of the time Between 50% to less than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | <u> </u> | |
| O Less than 25% to the time Between 25% to less than 50% of the time Between 50% to less than 50% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented in the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | Among patients suspected of having an acute s Stroke Alert)? | troke, in what proportion is a hospital pre-notification made (e.g., |
| ○ Between 25% to less than 50% of the time ○ Between 50% to less than 75% of the time ○ More than 75% of the time How are the results of stroke screens documented in your chart? ○ They are not documented ○ In the narrative ○ In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? ○ They are not documented ○ In the narrative ○ As a time-stamped procedure | O Never (0%) | |
| Between 50% to less than 75% of the time More than 75% of the time How are the results of stroke screens documented in your chart? They are not documented In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | C Less than 25% of the time Retween 25% to less than 50% of the time | |
| How are the results of stroke screens documented in your chart? They are not documented In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | O Between 50% to less than 75% of the time | |
| They are not documented In the narrative In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | More than 75% of the time | |
| ∫ In the narrative ∫ In a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? ◯ They are not documented ◯ In the narrative ◯ As a time-stamped procedure | How are the results of stroke screens document | ted in your chart? |
| in a discrete "pull down" section of the chart How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | O They are not documented | |
| How do you document hospital stroke pre-notification (e.g., Stroke Alert)? They are not documented In the narrative As a time-stamped procedure | ○ In the narrative ○ In a discrete "pull down" section of the chart | : |
| | They are not documented In the narrative | cation (e.g., Stroke Alert)? |
| | | el free to do so. Thank you. |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Priority Not Implemented
Priority Activities Recorded
Priorities Completed and being

Monitored

| Committee Priorities | Current Activities | Status |
|--|---|--------|
| Texas EMS Stroke Survey | Stroke Committee, EMS Medical Director and Air Medical approved. EMS and EMS Medical Directors helped with language. EMS Committee reviewed and gave Donald Janes rights to approve revisions. RAC leadership prelim approval | |
| Stroke Committee endorsed stroke education and certification courses | Ongoing effort identifying stroke educational opportunities for providers. | |
| Stroke Education Resource for stroke facilities | Working with DSHS/GETAC to find best way to provide a stroke education resource. Link to a facilities stroke education page current suggestion. | |
| Work with DSHS to outline recommendations for stroke rules for ASRH | • Ongoing | |

Priority Not Implemented
Priority Activities Recorded
Priorities Completed and being
Monitored

| Committee Priorities | Current Activities | Status |
|---|--|--------|
| Stroke Coordinator/Manager Survey on mentorship | Stroke Committee Education Work Group developing survey. Provided preview. | |
| Rural Stroke Work Group | Provider QR code for member participation | |

RURAL Stroke Work Group



GETAC Stroke Committee Item Request for Council March 2024

Robin Novakovic-White, MD Stroke Committee



- Committee items needing council guidance
 - 1. NEMSIS request for performance measures
 - 2. Prehospital EMS Survey
- Stakeholder items needing council guidance
 - 1. None at this time
- Items referred to GETAC for future action
 - 1. Near future will seek approval for the algorithm, pediatric stroke algorithm, terminology and DIDO performance measures best practice recommendation

Action Item Request and Purpose

- Currently, prehospital performance is reported from GWTG. Data in GWTG is entered with information gathered by stroke facilities. We seek to do a direct comparison between NEMSIS reported performance and GWTG performance for prehospital measures.
- Stroke Committee is seeking approval for the EMS prehospital stroke survey to better understand what is the current state of stroke education and utilization of stroke scales.

Benefit and Timeline

- The direct comparison between NEMSIS performance to GWTG, while not the exact same data, may still allow to was is the actual performance of these measures.
- The survey may highlight opportunities for improvement for EMS prehospital stroke education.
- Please provide the timeline or relevant deadlines for this request.
 - TBD