

# Get With The Guidelines<sup>®</sup>-Stroke Overview

## Stroke Systems of Care Collaborative

April 1<sup>st</sup>, 2021

Susan Abelt, MS

Quality Improvement Manager

American Heart Association



American Heart Association<sup>®</sup>

Get with the Guidelines<sup>®</sup>

Stroke



# TODAY'S AGENDA

- AHA Quality Improvement Focus
- Stroke Statistics
- Stroke Systems Of Care (SSOC)
- What Is Get With The Guidelines® (GWTG)-Stroke
- Collecting Data Along The Continuum Of Care: Pre-Arrival, Hospitalization, Post Discharge
- GWTG®-Stroke Data Review
- Resources

# AHA MISSION

To Be A Relentless Force For A World  
Of Longer, Healthier Lives



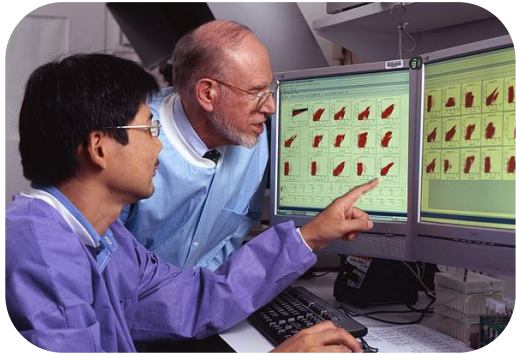
# AHA-Quality, Outcomes Research & Analytics (QORA)

# “QUALITY IMPROVEMENT”

- In Health Care: Quality and Systems Improvement (QSI) is the framework we use to systematically improve the ways care is delivered to patients
- Processes have characteristics that can be measured, analyzed and improved



# WHAT DOES THIS HAVE TO DO WITH GWTG?



Researchers have made enormous progress in discovering what works best in treating patients with cardiovascular disease and stroke.



Unfortunately, often their findings haven't been well communicated or well implemented



The American Heart Association is working to change that by helping hospitals and health professionals know and follow proven protocols for treating cardiac and stroke patients

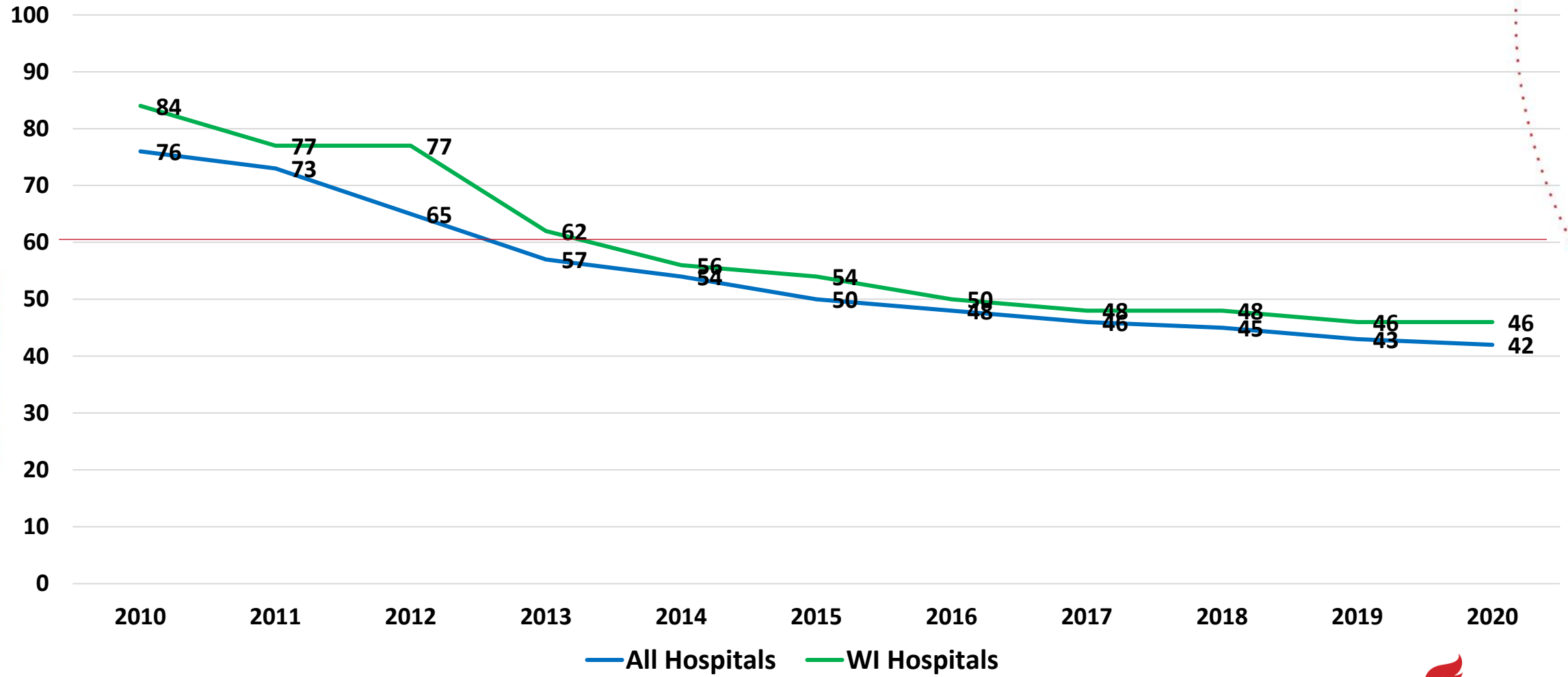


This work occurs in the Pre-Hospital, In-Hospital and Outpatient settings

# EXAMPLE: IMPROVING DOOR TO NEEDLE TIMES

- The benefits of IV Alteplase in patients with Acute Ischemic Stroke are time-dependent, and *guidelines recommend a door-to-needle time of 60 minutes* or less. However, studies have found that less than 30 percent of U.S. patients were treated within this window
- **Target: Stroke**, launched by the American Heart Association/American Stroke Association in 2010, is a national Quality Improvement initiative focused on improving Acute Ischemic Stroke care by reducing door-to-needle times for eligible patients being treated with IV Alteplase
- All Get With The Guidelines<sup>®</sup>-Stroke hospitals were encouraged to participate in Target: Stroke. **Each hospital received a detailed toolkit**, including the 11 key strategies, protocols, stroke screening tools, order sets, algorithms, time trackers, patient education materials and other tools, AHA QSI support.

# DOOR TO NEEDLE DATA (GOAL $\leq$ 60 MINUTES)



Min.



# WHAT DOES THIS MEAN?

- The typical patient loses 1.9 million neurons each minute in which stroke is untreated
- In Wisconsin over the past 10 Years there has been a reduction in Door to Needle times of 38 minutes!
- That is an unbelievable number of neurons saved!
- This is the difference of patients living with decreased residual stroke symptoms (i.e., being able to walk vs. bedridden)





# Focus On Quality

Patient outcomes improve when medical professionals follow the most up-to-date evidence-based treatment guidelines.

**Learn more at [www.heart.org/quality](http://www.heart.org/quality)**





Get With The Guidelines® is the American Heart Association/American Stroke Association's hospital-based Quality Improvement program that provides hospitals with tools and resources to increase adherence to the latest research-based guidelines

Developed with the goal of saving lives and hastening recovery, Get With The Guidelines® has touched the lives of more than 9 million patients since 2001

## GWTG<sup>®</sup>-Stroke Coverage\*

United States	Wisconsin
3,470 Hospitals	70 Hospitals
7,105,506 Patient Records	135,143 Patient Records

# Stroke Statistics

# WHY STROKE?

## PATIENTS

- Stroke Is The **No. 5** Cause Of Death And A Leading Cause Of Disability In The United States
- **1 in every 6** Deaths from CVD is due to Stroke
- There is a stroke in the US every **40 seconds**
- Every 4 minutes someone dies of a stroke
- **>795,000** people in the United States have a stroke each year
- **610,000** of these are new strokes
- **185,000** strokes—**nearly 1 of 4**—are in people who have had a *previous* stroke

<https://www.ahajournals.org/doi/pdf/10.1161/STR.0b013e31829734f2>  
<https://www.cdc.gov/stroke/facts.htm>

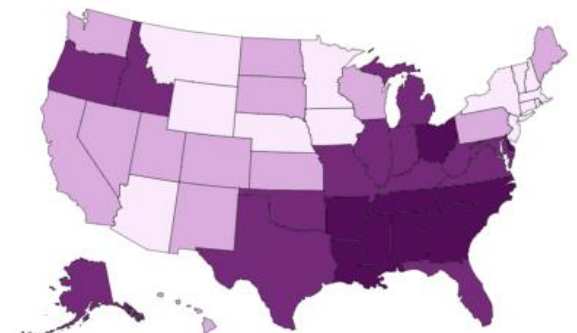
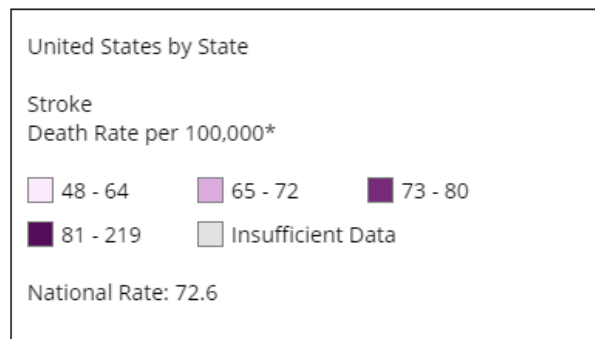
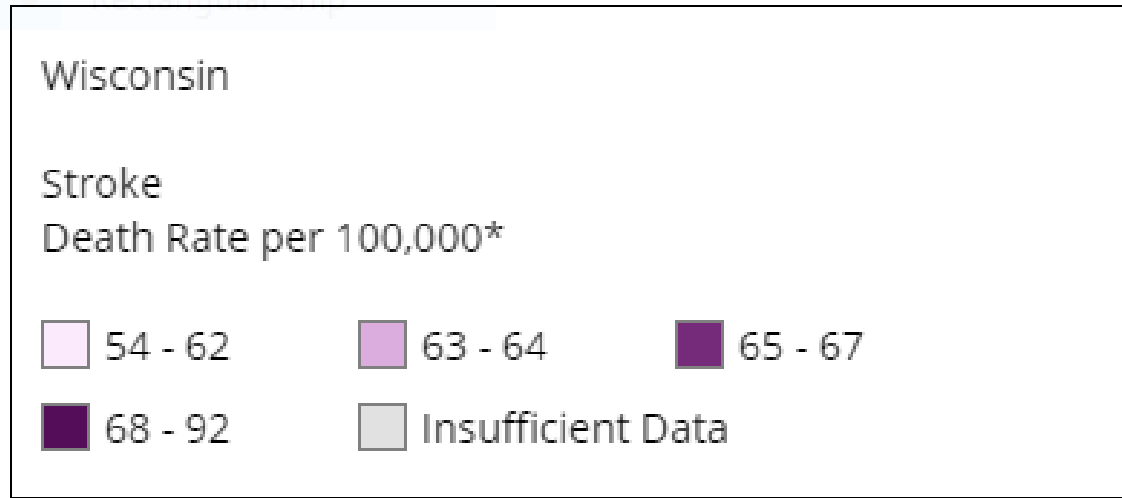
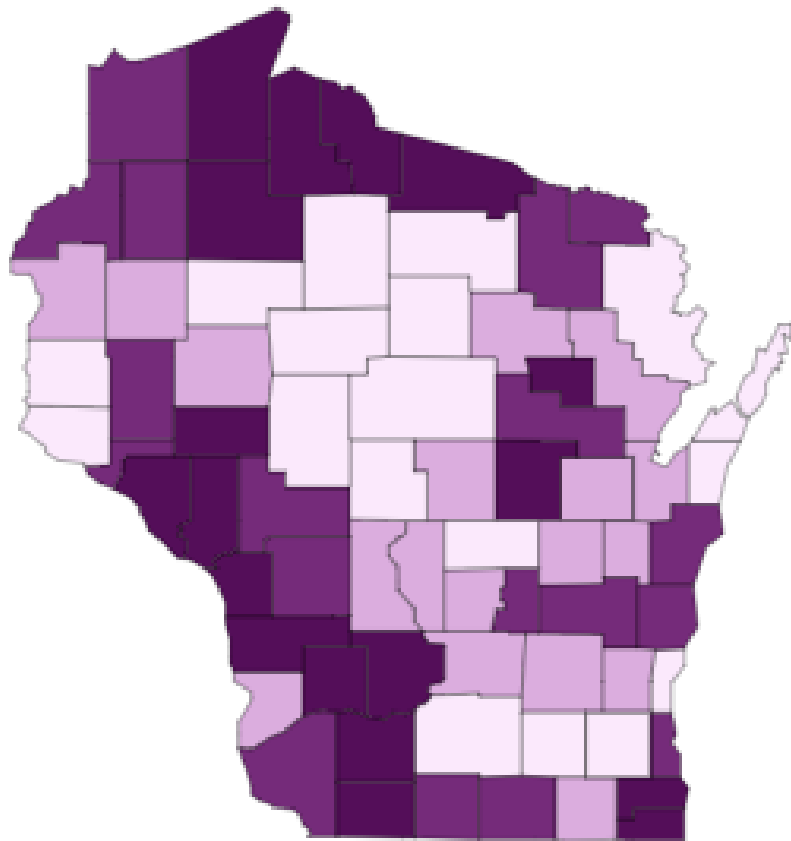
## HEALTH CARE

- In 2015 health care costs related to stroke were ~**\$46 billion** in the United States.
- This total included the cost of health care services, medicines to treat stroke, and missed days of work.
- Projected total annual cost of stroke care by 2030 will be: **240 billion**

**Direct cost** = 184 billion

**Indirect cost** (*d/t lost productivity*) = 56 billion

# STROKE DEATHS (2016-2018)



# STROKE SYSTEMS OF CARE (SSOC)



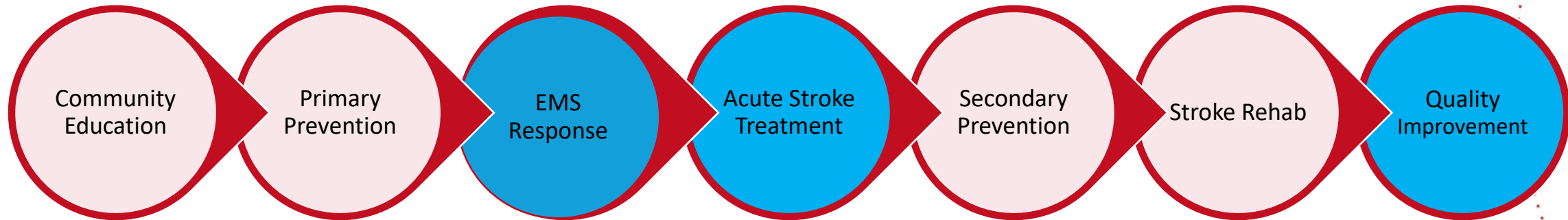


Mission: Lifeline Stroke works to reduce barriers and delays in care by improving efficiencies in each system: Community, EMS, Emergency Department, Radiology, Laboratory, Endovascular lab, Critical Care Unit and Rehabilitation.

One of the cornerstones of the program is focusing on the “System” rather than each individual entity so that feedback can be gathered to improve quality of care for stroke victims.

# MISSION: LIFELINE STROKE SYSTEMS OF CARE





**ASA Policy Statement**

**Recommendations for the Establishment of Stroke Systems of Care: A 2019 Update**  
**A Policy Statement From the American Stroke Association**

Opeolu Adeoye, MD, MS, FAHA, Chair; Karin V. Nyström, RN, MSN, FAHA; Dileep R. Yavagal, MD; Jean Luciano, CRNP; Raul G. Nogueira, MD; Richard D. Zorowitz, MD; Alexander A. Khalessi, MD, MS, FAHA; Cheryl Bushnell, MD, MHS, FAHA; William G. Barsani, MD; Peter Panagos, MD; Mark J. Albers, MD, FAHA; A. Colby Tiner, MA; Loe H. Schwamm, MD, FAHA; Edward C. Jauch, MD, MS, FAHA

**Abstract**—In 2005, the American Stroke Association published recommendations for the establishment of stroke systems of care and in 2013 expanded on them with a statement on interactions within stroke systems of care. The aim of this policy statement is to provide a comprehensive review of the scientific evidence evaluating stroke systems of care to date and to update the American Stroke Association recommendations on the basis of improvements in stroke systems of care. Over the past decade, stroke systems of care have seen vast improvements in endovascular therapy, neurocritical care, and stroke center certification, in addition to the advent of innovations, such as telestroke and mobile stroke units, in the context of significant changes in the organization of healthcare policy in the United States. This statement provides an update to prior publications to help guide policymakers and public healthcare agencies in continually updating their stroke systems of care in light of these changes. This statement and its recommendations span primordial and primary prevention, acute stroke recognition and activation of emergency medical services, triage to appropriate facilities, designation of and treatment at stroke centers, secondary prevention at hospital discharge, and rehabilitation and recovery. (*Stroke*. 2019;50:00-00. DOI: 10.1161/STR.000000000000173.)

**Key Words:** AHA Scientific Statements ■ brain ■ neurology ■ primary prevention ■ secondary prevention

To translate advances in scientific knowledge and innovations in clinical care into improvements in patient outcomes, systems must be in place to facilitate optimal healthcare delivery. In acute stroke, scientific knowledge and clinical care have improved in the past 2 decades. In light of these improvements, the American Stroke Association (ASA) first issued policy recommendations for the development of stroke systems of care in 2005.<sup>1</sup> A subsequent statement in 2013 issued recommendations on the interactions within stroke systems of care.<sup>2</sup> Several other American Heart Association (AHA) and ASA publications continue to provide guidance on improving stroke care.<sup>3-8</sup> The past

10 years have witnessed additional gains in knowledge and methods to improve stroke outcomes (eg, extension of intravenous alteplase to 3.4.5 hours, hemicraniectomy, endovascular thrombectomy, telestroke, stroke center certification, mobile stroke units [MSUs], neurocritical care) in the context of significant changes in the organization of healthcare policy in the United States. This statement provides an update to prior publications to help guide policymakers and public healthcare agencies in continually updating their stroke systems of care in light of these changes. This statement and its recommendations span primordial and primary prevention, acute stroke recognition and activation

*Adeoye O, et al. Stroke. 2019.*

The American Heart Association makes every effort to avoid any actual or potential conflicts of interest that may arise as a result of an outside relationship or a personal, professional, or business interest of a member of the writing panel. Specifically, all members of the writing group are required to complete and submit a Disclosure Questionnaire showing any such relationships that might be perceived as real or potential conflicts of interest. This policy statement was approved by the American Heart Association Advocacy Coordinating Committee on April 26, 2019, and the American Heart Association Executive Committee on May 14, 2019. A copy of the document is available at <http://professional.heart.org/statements> by using either "Search for Guidelines & Statements" or the "Browse by Topic" area. To purchase additional reprints, call 847-216-2533 or e-mail [kelle.ramsey@wharton.upenn.edu](mailto:kelle.ramsey@wharton.upenn.edu). The American Heart Association requests that this document be cited as follows: Adeoye O, Nyström KV, Yavagal DR, Luciano J, Nogueira RG, Zorowitz RD, Khalessi AA, Bushnell C, Barsani WG, Panagos P, Albers MJ, Tiner AC, Schwamm LH, Jauch EC. Recommendations for the establishment of stroke systems of care: a 2019 update: a policy statement from the American Stroke Association. *Stroke*. 2019;50:00-00. doi:10.1161/STR.000000000000173. The expert peer review of AHA-coordinated documents (eg, scientific statements, clinical practice guidelines, systematic reviews) is conducted by the AHA Office of Science Operations. For more on AHA statements and guidelines development, visit <http://professional.heart.org/statements>. Contact the "Guidelines & Statements" development team. See also "Publication Development." Permissions: Multiple copies, modification, alteration, enhancement, and/or distribution of this document are not permitted without the express permission of the American Heart Association. Instructions for obtaining permission are located at <http://www.heart.org/permissions>. A link to the "Copyright Permissions Request Form" appears in the second paragraph (<http://www.heart.org/permissions> and <http://www.heart.org/permissions>). © 2019 American Heart Association, Inc. Stroke is available at <https://www.ahajournals.org/journal/str> DOI: 10.1161/STR.000000000000173



# HOT OFF THE PRESS FROM ISC!

<https://www.ahajournals.org/doi/10.1161/STROKEAHA.120.033228>

## SPECIAL REPORT

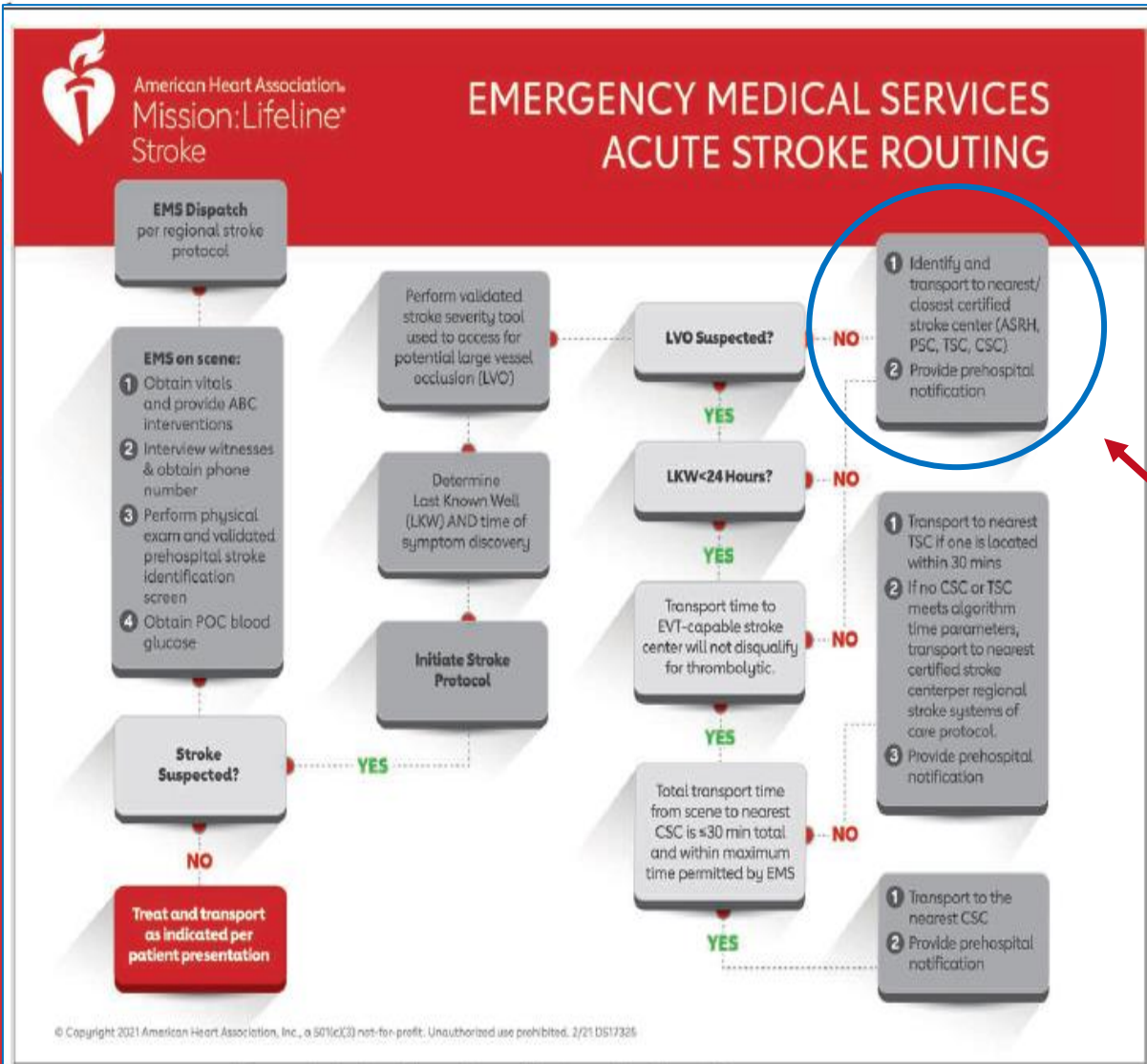
---

# 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: Endorsed by the Neurocritical Care Society

Edward C. Jauch<sup>1</sup>, MD; Lee H. Schwamm<sup>2</sup>, MD; Peter D. Panagos, MD; Jolene Barbazzeni<sup>3</sup>, RN; Robert Dickson, MD; Robert Dunne, MD; Jenevra Foley, MSL, RHIA, CCP; Justin F. Fraser, MD; Geoffrey Lassers, PMD, AAS; Christian Martin-Gill, MD; Suzanne O'Brien, MSN, BSN, RN; Mark Pinchalk, MS; Shyam Prabhakaran<sup>4</sup>, MD; Christopher T. Richards<sup>5</sup>, MD; Peter Taillac, MD; Albert W. Tsai, PhD; Anil Yallapragada, MD; on behalf of the Prehospital Stroke System of Care Consensus Conference

# MISSION: LIFELINE STROKE EMERGENCY MEDICAL SERVICES (EMS) ACUTE STROKE ROUTING ALGORITHM



“The roles of an ASRH are to stabilize the patient, provide specific acute stroke care therapies including IV thrombolysis, and arrange timely transportation of patients to the nearest stroke center as determined by the patient’s clinical status and further treatment indications”

# Acute Stroke Ready Hospital Certification

Acute Stroke Ready Hospital Certification is offered in collaboration with the AHA/ASA and is based on the Brain Attack Coalition's Recommendations for the Establishment of Acute Stroke Ready Hospitals. Acute Stroke Ready Hospital certification fulfills a community need within a stroke system of care.

## Certification Development

Joint Commission Advanced Certifications for CSC, TSC, PSC and ASRH are offered in collaboration with the American Heart Association/American Stroke Association.



## ASRH GUIDELINES

### Key Requirements

- Acute stroke team available 24/7
- Neurologist accessible 24/7 via in person or telemedicine
- Diagnostic services
- Telemedicine within 20 minutes of it being necessary
- Ability to provide IV thrombolytics
- Tracking, monitoring, and reporting of performance measures

### Standards & Guidelines

- Uses advanced Disease-Specific Care standards and additional expectations for transition of care
- Organization chooses and implements clinical practice guidelines

# Four Levels of Stroke Care (US)

## ACUTE STROKE READY HOSPITAL (ASRH)

### TYPICAL PHASES OF CARE FOR ASRH

#### 01 PREHOSPITAL/EMS

- Check patient's airway, breathing & circulation (ABC)
- Perform physical exam, stroke recognition, and vital assessment
- Get history (LHM), medications, etc.
- Record blood pressure, heart rate, oxygen saturation
- Transport patient to the appropriate stroke center in the applicable regional stroke routing policy
- Perform pre-arrival notification to the receiving hospital

#### 02 IN THE ED

- Team is prepared for patient arrival via EMS from an inter-facility transfer
- Re-check ABCs
- Establish stroke diagnosis & discuss treatment with patient/family if indicated
- Perform additional imaging as indicated to assess eligibility for thrombolysis

#### 03 DISPOSITION

- ADMIT TO HIGHER LEVEL OF CARE IF THE PATIENT
- Revised ABC and reassess stroke and vital
- Isolation considered for a thrombolysis
- Assess general need for higher level of care

Learn more at [www.heart.org/certification](http://www.heart.org/certification)

## PRIMARY STROKE CENTER (TSC)

WHEN A STROKE HAPPENS, EMERGENCY MEDICAL SERVICES CAN MEAN THE DIFFERENCE BETWEEN LIFE AND DEATH.

### TYPICAL PHASES OF CARE FOR TSC

#### 01 PREHOSPITAL/EMS

- Check patient's airway, breathing & circulation (ABC)
- Perform physical exam, stroke recognition, and vital assessment
- Get history (LHM), medications, etc.
- Record blood pressure, heart rate, oxygen saturation and glucose
- Transport patient to the appropriate stroke center per the applicable regional stroke routing policy
- Perform pre-arrival notification to the receiving hospital

#### 02 IN THE ED

- Team is prepared for patient arrival via EMS from scene or inter-facility transfer
- Re-check ABCs
- Establish stroke diagnosis & discuss treatment with patient/family if indicated
- Perform additional imaging as indicated to assess eligibility for thrombolysis
- Offer tPA to all eligible patients ASAP
- Perform additional imaging as indicated to assess eligibility for thrombolysis
- Offer tPA to all eligible patients ASAP and/or tPA
- Offer tPA to all eligible patients ASAP and/or tPA

#### 03 DISPOSITION

- STROKE UNIT
- Some tPA and/or other intravenous stroke care
- Relevant services ongoing monitoring and vital
- Coordinate monitoring for progression and vital
- Calculate stroke evaluation and follow-up
- Initial safety assessment for rehabilitation
- TRANSFER TO HIGHER LEVEL OF CARE IF THE PATIENT
- Revised ABC and reassess stroke and vital
- Isolation considered for a thrombolysis
- Assess general need for higher level of care

#### 04 DISCHARGE TO:

- HOME / LTAC / REHAB / SNF / HOSPITAL

Learn more at [www.heart.org/certification](http://www.heart.org/certification)

## THROMBECTOMY-CAPABLE STROKE CENTER (TSC)

### TYPICAL PHASES OF CARE FOR TSC

#### 01 PREHOSPITAL/EMS

- Check patient's airway, breathing & circulation (ABC)
- Perform physical exam, stroke recognition, and vital assessment
- Get history (LHM), medications, etc.
- Record blood pressure, heart rate, oxygen saturation and glucose
- Transport patient to the appropriate stroke center per the applicable regional stroke routing policy
- Perform pre-arrival notification to the receiving hospital

#### 02 IN THE ED

- Team is prepared for patient arrival via EMS from scene or inter-facility transfer
- Re-check ABCs
- Establish stroke diagnosis & discuss treatment with patient/family if indicated
- Perform additional imaging as indicated to assess eligibility for thrombolysis
- Offer tPA to all eligible patients ASAP
- Perform additional imaging as indicated to assess eligibility for thrombolysis
- Offer tPA to all eligible patients ASAP and/or tPA
- Offer tPA to all eligible patients ASAP and/or tPA

#### 03 DISPOSITION

- ADMIT TO HIGHER LEVEL OF CARE IF THE PATIENT
- Revised ABC and reassess stroke and vital
- Isolation considered for a thrombolysis
- Assess general need for higher level of care

Learn more at [www.heart.org/certification](http://www.heart.org/certification)

## COMPREHENSIVE STROKE CENTER (CSC)

### TYPICAL PHASES OF CARE FOR CSC

#### 01 PREHOSPITAL/EMS

- Check patient's airway, breathing & circulation (ABC)
- Perform physical exam, stroke recognition, and vital assessment
- Get history (LHM), medications, etc.
- Record blood pressure, heart rate, oxygen saturation and glucose
- Transport patient to the appropriate stroke center per the applicable regional stroke routing policy
- Perform pre-arrival notification to the receiving hospital

#### 02 IN THE ED

- Team is prepared for patient arrival via EMS from scene or inter-facility transfer
- Re-check ABCs
- Establish stroke diagnosis & discuss treatment with patient/family if indicated
- Perform additional imaging as indicated to assess eligibility for thrombolysis
- Offer tPA to all eligible patients ASAP
- Perform additional imaging as indicated to assess eligibility for thrombolysis
- Offer tPA to all eligible patients ASAP and/or tPA
- Offer tPA to all eligible patients ASAP and/or tPA

#### 03 DISPOSITION

- ADMIT TO HIGHER LEVEL OF CARE IF THE PATIENT
- Revised ABC and reassess stroke and vital
- Isolation considered for a thrombolysis
- Assess general need for higher level of care

#### 04 DISCHARGE TO:

- HOME / LTAC / REHAB / SNF / HOSPITAL

Learn more at [www.heart.org/certification](http://www.heart.org/certification)

WHEN A STROKE HAPPENS, TIME IS CRITICAL. ONCE 911 HAS BEEN CALLED AND EMERGENCY MEDICAL SERVICES (EMS) DISPATCHED, A SEAMLESS SYSTEM OF CARE CAN MEAN THE DIFFERENCE BETWEEN LIFE AND DEATH.

## 4 LEVELS OF STROKE CARE

THERE ARE FOUR LEVELS OF HOSPITAL CERTIFICATION FOR STROKE CARE:

Learn more at [www.heart.org/certification](http://www.heart.org/certification)



Rectangular

# Each Level Has Different Capabilities

**Table 1. Levels and Capabilities of Hospital Stroke Designation**

	ASRH	PSC	TSC	CSC
Location	Likely rural	Likely urban/suburban	Likely urban	Likely urban
Stroke team accessible/available 24 h/d, 7 d/wk	Yes	Yes	Yes	Yes
Noncontrast CT available 24 h/d, 7 d/wk	Yes	Yes	Yes	Yes
Advanced imaging (CTA/CTP/MRI/MRA/MRP) available 24 h/d, 7 d/wk	No	Yes	Yes	Yes
Intravenous alteplase capable	Yes	Yes	Yes	Yes
Thrombectomy capable	No	Possibly	Yes	Yes
Diagnoses stroke pathogenesis/manage poststroke complications	Unlikely	Yes	Yes	Yes
Admits hemorrhagic stroke	No	Possibly	Possibly	Yes
Clips/coils ruptured aneurysms	No	Possibly	Possibly	Yes
Dedicated stroke unit	No	Yes	Yes	Yes
Dedicated neurocritical care unit/ICU	No	Possibly	Possibly	Yes

ASRH indicates acute stroke-ready hospital; CSC, comprehensive stroke center; CT, computed tomography; CTA, computed tomography angiography; CTP, computed tomography perfusion; ICU, intensive care unit; MRA, magnetic resonance angiography; MRI, magnetic resonance imaging; MRP, magnetic resonance perfusion; PSC, primary stroke center; and TSC, thrombectomy-capable stroke center.



# **GWTG<sup>®</sup>-STROKE OVERVIEW**

# GWTG<sup>®</sup>-STROKE OVERVIEW

- Guideline Driven
- Entry Criteria
- Coding Instructions
- Collecting Relevant Hospital Data

Arrival Mode/Medical Hx/ LKW/IV Alteplase/Transfer Etc.

- Special Initiatives: EMS Pre Arrival Data
- Post Discharge
- Reports

EMS Feedback/LKW/IV Alteplase/CT Times/DIDO etc.

# GUIDELINES & STATEMENTS

SEARCH GUIDELINES & STATEMENTS

## ABOUT GUIDELINES & STATEMENTS

### CLASS (STRENGTH) OF RECOMMENDATION

#### CLASS I (STRONG) Benefit >>> Risk

Suggested phrases for writing recommendations:

- Is recommended
- Is indicated/useful/effective/beneficial
- Should be performed/administered/other
- Comparative-Effectiveness Phrases†:
  - Treatment/strategy A is recommended/indicated in preference to treatment B
  - Treatment A should be chosen over treatment B

#### CLASS IIa (MODERATE) Benefit >> Risk

Suggested phrases for writing recommendations:

- Is reasonable
- Can be useful/effective/beneficial
- Comparative-Effectiveness Phrases†:
  - Treatment/strategy A is probably recommended/indicated in preference to treatment B
  - It is reasonable to choose treatment A over treatment B

#### CLASS IIb (WEAK) Benefit ≥ Risk

Suggested phrases for writing recommendations:

- May/might be reasonable
- May/might be considered
- Usefulness/effectiveness is unknown/unclear/uncertain or not well established

#### CLASS III: No Benefit (MODERATE) Benefit = Risk (Generally, LOE A or B use only)

Suggested phrases for writing recommendations:

- Is not recommended
- Is not indicated/useful/effective/beneficial
- Should not be performed/administered/other

#### CLASS III: Harm (STRONG) Risk > Benefit

Suggested phrases for writing recommendations:

- Potentially harmful
- Causes harm
- Associated with excess morbidity/mortality
- Should not be performed/administered/other

### LEVEL (QUALITY) OF EVIDENCE‡

#### LEVEL A

- High-quality evidence‡ from more than 1 RCT
- Meta-analyses of high-quality RCTs
- One or more RCTs corroborated by high-quality registry studies

#### LEVEL B-R (Randomized)

- Moderate-quality evidence‡ from 1 or more RCTs
- Meta-analyses of moderate-quality RCTs

#### LEVEL B-NR (Nonrandomized)

- Moderate-quality evidence‡ from 1 or more well-designed, well-executed nonrandomized studies, observational studies, or registry studies
- Meta-analyses of such studies

#### LEVEL C-LD (Limited Data)

- Randomized or nonrandomized observational or registry studies with limitations of design or execution
- Meta-analyses of such studies
- Physiological or mechanistic studies in human subjects

#### LEVEL C-EO (Expert Opinion)

Consensus of expert opinion based on clinical experience

COR and LOE are determined independently (any COR may be paired with any LOE).

A recommendation with LOE C does not imply that the recommendation is weak. Many important clinical questions addressed in guidelines do not lend themselves to clinical trials. Although RCTs are unavailable, there may be a very clear clinical consensus that a particular test or therapy is useful or effective.

\* The outcome or result of the intervention should be specified (as improved clinical outcome or increased diagnostic accuracy or incremental prognostic information).

† For comparative-effectiveness recommendations (COR I and IIa; LOE A and B only), studies that support the use of comparator verbs should involve direct comparisons of the treatments or strategies being evaluated.

‡ The method of assessing quality is evolving, including the application of standardized, widely used, and preferably validated evidence grading tools; and for systematic reviews, the incorporation of an Evidence Review Committee.

COR indicates Class of Recommendation; EO, expert opinion; LD, limited data; LOE, Level of Evidence; NR, nonrandomized; R, randomized; and RCT, randomized controlled trial.

# COMMUNITY PAGE

## Recent Communications from Quintiles and the AHA

11/21/2016	Holiday Closure - Thanksgiving Weekend
10/28/2016	Get With The Guidelines-HF Program Update Scheduled for Saturday, October 29, 2016
10/28/2016	Get With The Guidelines-Stroke Program Update Scheduled for Saturday, October 29, 2016

## Resources

- ACTION Registry-GWTG
- GWTG General: AHA Interactive Workbooks
- GWTG General: Best Practices Center
- GWTG General: Focus on Quality eNewsletters
- GWTG General: Learn about other GWTG programs
- GWTG General: Scientific Publications and Program Results



GET WITH THE GUIDELINES. Community Page  
Current User: Michelle Scham

Get Started!

AtrialFib				
Heart Failure				
Resuscitation				
Stroke				

New patient

Patient grid

Reports

Resources

# PATIENT MANAGEMENT TOOL (PMT) RESOURCES

**Get Started!**

AtrialFib				
Heart Failure				
Resuscitation				
Stroke				

[PMT Resources](#)

Detailed  
descriptions of  
measures

Dynamic PMT Resources - Google Chrome

[https://qi.outcome.com/resourcesGWTG.html?study\\_id=](https://qi.outcome.com/resourcesGWTG.html?study_id=)

- FAQ
- Print Blank Forms
- Coding Instructions
- 30 Day Follow Up Form Coding Instructions
- Measure Descriptions - Achievement
- Measure Descriptions - Quality
- Measure Descriptions - Descriptive and Data Quality
- Measure Descriptions - Reporting
- Measure Descriptions - PSC
- Measure Descriptions - PSC Optional Measures
- Measure Descriptions - Inpatient Stroke
- Measure Descriptions - Observation Status Only
- Measure Descriptions - Comprehensive
- Measure Descriptions - Historic
- Deletion Request Form
- Patient ID Change Request Form
- Stroke Measure Logic and Rationale
- TPA Education (Benefits and Risk figure)
- Stroke Core Measures

# CODING INSTRUCTIONS

- Click to add text

Abstraction Guidelines Updated **March 2018**

Print Content

Legend

Yellow Highlighted Text = Updated since last version of document

• The Joint Commission Data Element

• Get with the Guidelines® (GWTG) Stroke data Element

The Joint Commission (TJC) PDC/Case Measure definition for the element listed (definition from the TJC manual)

The Joint Commission (TJC) Comprehensive Stroke Center (CSTK) definition for the element listed

Inverted text definition

Green Highlighted Text = TJC/CMS updates from the Specifications Manual for National Hospital Inpatient Quality Measures since last version of document

Suggested Sources for Abstraction

Table of Contents

- [Entry Criteria](#)
- [Special Initiatives \(Prehospital Care Tab\)](#)
- [Admin Tab](#)
- [Clinical Codes](#)
- [Admission Tab](#)
- [Hospitalization Tab](#)
- [Measurements](#)
- [Advanced Stroke Care Tab](#)
- [Discharge Tab](#)

## Table of Contents

- [Entry Criteria](#)
- [Special Initiatives \(Prehospital Care Tab\)](#)
- [Admin Tab](#)
- [Clinical Codes](#)
- [Admission Tab](#)
  - [Discharge Diagnoses](#)
  - [Arrival and Admission Information](#)
  - [Telestroke](#)
  - [Demographics](#)
  - [Medical History](#)
  - [Diagnosis and Evaluation](#)
  - [Medications Prior to Admission](#)
- [Hospitalization Tab](#)
  - [Symptom Timeline](#)
  - [Brain Imaging](#)
  - [Additional Time Tracker](#)
  - [IV Thrombolytic Therapy](#)
  - [Endovascular Therapy](#)
  - [Complications of Thrombolytic Therapy](#)
  - [Other In-Hospital Treatment and Screening](#)
- [Measurements \(first measurement upon presentation to your hospital\)](#)
- [Advanced Stroke Care Tab](#)
  - [Endovascular Stroke Treatment](#)
  - [Complications](#)
  - [Hemorrhagic Stroke Treatment \[only for CSTK users\]](#)
- [Discharge Tab](#)
  - [Discharge Information](#)
  - [Discharge Treatments](#)
  - [Other Lifestyle Interventions](#)
  - [Stroke Education](#)
  - [Stroke Rehabilitation](#)
  - [Stroke Diagnostic Tests and Interventions](#)

# ENTRY CRITERIA

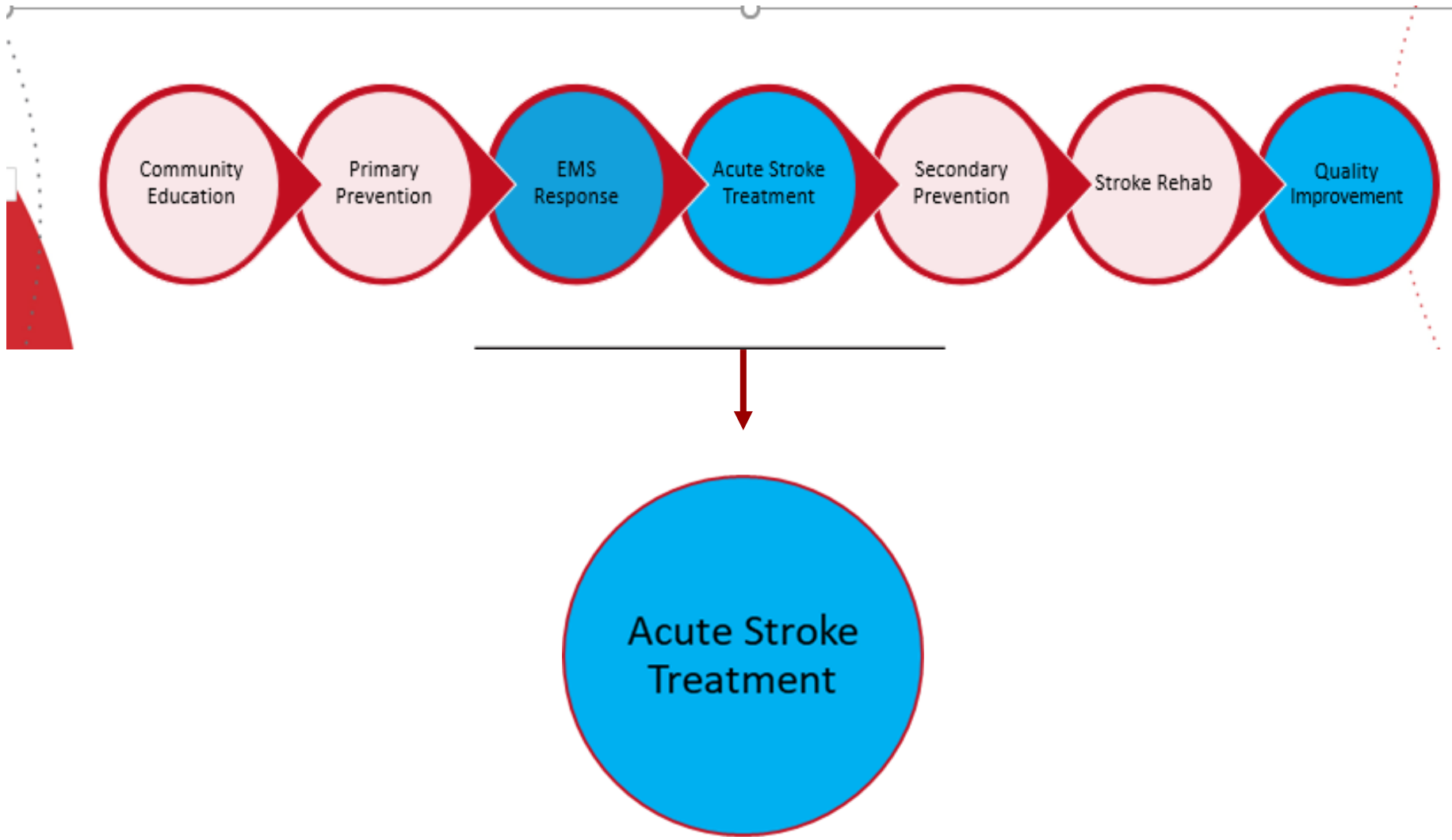
Patients with a final/discharge diagnosis of stroke or transient ischemic attack can be included into the GWTG-Stroke<sup>®</sup> registry. This includes cases with:

- Cerebral Infarction
- Intracerebral Hemorrhage (non-traumatic)
- Ischemic Stroke
- Subarachnoid Hemorrhage (non-traumatic)
- Transient Ischemic Attack (TIA)

## Optional:

- Patients who have an In-hospital stroke.
- Patients who present with stroke-like symptoms but who do not end up being diagnosed with a stroke or TIA (stroke mimics).
- Patients evaluated, treated, and discharged from the ed (with no inpatient admission) to home or another location that is not an acute care hospital.
- Patients discharged from observation status with no inpatient admission.

# SSOC







Discharge Date/Time:

Documented reason for delay in transfer to referral facility?  Yes  No/ND

- Social/religious
- Initial refusal
- Care team unable to determine eligibility
- Management of concomitant emergent/acute conditions such as cardiopulmonary arrest, respiratory failure
- Investigational or experimental protocol for reperfusion

Specific reason for delay documented in transfer patient (check all that apply):

- Delay in stroke diagnosis \*
- In-hospital time delay \*
- Equipment-related delay \*
- Need for additional imaging \*
- Catheter lab not available \*
- Other \*

What was the patient's discharge disposition on the day of discharge?

Patient location when stroke symptoms discovered:

How patient arrived at your hospital  EMS from home/scene  Mobile Stroke Unit  Private transport/taxi/other from home/scene  ND or Unknown

Referring hospital discharge date/time

If transfer from another hospital, specify hospital name

- Hospital Not On The List
- Hospital Not Documented

Referring hospital arrival date/time

- Evaluation for IV alteplase up to 4.5 hours
- Post Management of IV alteplase (e.g. Drip and Ship)
- Evaluation for Endovascular thrombectomy
- Advanced stroke care (e.g., Neurocritical care, surgical or other time critical therapy)
- Patient/family request
- Other advanced care (not stroke related)
- Not documented

Was the patient an ED patient at the facility?  Yes  No

Where patient first received care at your hospital:  Emergency Department/Urgent Care  Direct Admit, not through ED  Imaging suite  ND or Cannot be determined

Advanced notification by EMS or MSU?  Yes  No/ND

- Neurology  Medicine
- Neurosurgery  Surgery
- Neurocritical care  Other

Initial admitting service:

- Neuro/Neurosurgery ICU  General care floor

In which settings were care delivered? Select all that apply

- Other ICU  Observation
- Stroke unit (non-ICU)  Other

If the patient was not cared for in a dedicated stroke unit, was a formal inpatient consultation from a stroke expert obtained?  Yes  No  ND

Physician/Provider NPI

- BERSHAD, ERIC - 1235109083
- GOEN, PAUL - 1730144718
- GOOD, ROBERT - 1922112770
- HANKE, JUSTIN - 1538458393
- HILL, JEFFREY - 1073826962

Initial NIH Stroke scale  Yes  No/ND

If yes:  Actual  Estimated from record  ND

Total Score

NIH Stroke Scale [SHOW](#)

# TELESTROKE MEASURES

## TELESTROKE

Was telestroke consultation performed?

Yes, the patient received telestroke consultation from my hospital staff when the patient was located at another hospital

Yes, the patient received telestroke consultation from someone other than my staff when the patient was located at another hospital

Yes, the patient received telestroke consultation from a remotely located expert when the patient was located at my hospital

No telestroke consult performed

Not Documented

If Yes, telestroke consult performed, select all applicable delivery methods.

Interactive Video

Teleradiology

Telephone Call

ND

What was the type of Telestroke provider?

Hospital Based (In-State)  Hospital Based (Out-of-State)  Private Provider (Independent)

Who provided Telestroke Service?

Did the Telestroke consultant recommend transfer?

Yes  No  ND

Patient transfer status after Telestroke consult (TJC or equivalent):

Not Transferred  Transferred to PSC  Transferred to TSC  Transferred to CSC

Transferred to Unknown

Which option best describes the destination facility for transferred patient:

Hospital where the telestroke consultant primarily practices  Hospital unrelated to the telestroke consultant and outside of my health system  Hospital unrelated to the telestroke consultant but within my health system  Unable to determine from medical record

Did Telestroke consultation result in thrombolytic administration at the referring site?

Yes  No  ND

## TELESTROKE TIME TRACKER

Date/Time of first Telestroke consultation request:

Date/Time Telestroke Response:

Date/Time start of Telestroke video session:

Date/Time Decision to Administer Thrombolytic (By Telestroke):

Additional Comments:

# PATIENT MEDICAL HISTORY

**Medical History**

None

Atrial Fib/Flutter

Current pregnancy (up to 6 weeks post partum)

Depression

**Previously known medical hx of (Select all that apply):**

Dyslipidemia

Family History of Stroke

HX of Emerging Infectious Disease

MERS

SARS-COV-1

SARS-COV-2 (COVID-19)

Other infectious respiratory pathogen

Obesity/Overweight

CAD/prior MI

DVT/PE

Diabetes Mellitus

Type I

Type II

ND

**C**

<5 years

5 - <10 years

10 - <20 years

>=20 years

Unknown

**C**

E-Cigarette Use (Vaping)

HF

Hypertension

Previous Stroke

Ischemic stroke

ICH

SAH

Not Specified

Carotid Stenosis

Dementia

Drugs/Alcohol Abuse

Familial hypercholesterolemia

HRT

Migraine

Previous TIA



# IV THROMBOLYTIC THERAPY

**IV Thrombolytic Therapy**

IV thrombolytic initiated at this hospital?  Yes  No

What was the time of initiation for IV thrombolytic?  
 MM/DD/YYYY HH:MI  
/ / : :

Thrombolytic used:  
 Alteplase (Class 1 evidence)  Tenecteplase (Class 2b evidence)  
 Alteplase, total dose:  (mg) Tenecteplase, total dose:  (mg)   
 Alteplase dose ND  Tenecteplase dose ND

Reason for selecting tenecteplase instead of alteplase:  
 Large Vessel Occlusion (LVO) with potential thrombectomy  
 Mild Stroke   
 Other

If IV thrombolytic administered beyond 4.5-hour, was imaging used to identify eligibility?  
 Yes, Diffusion-FLAIR mismatch  
 Yes, Core-Perfusion mismatch   
 None  
 Other

Documented exclusions or relative exclusions (contraindications or warnings) for not initiating IV thrombolytic in the 0-3 hr treatment window?  Yes  No

Documented exclusions or relative exclusions (contraindications or warnings) for not initiating IV thrombolytic in the 3-4.5 hr treatment window?  Yes  No

[Show All](#)

Exclusion Criteria (contraindications) 0-3 hr treatment window. Select all that apply:

- C1: Elevated blood pressure (systolic > 185 mm Hg or diastolic > 110 mm Hg) despite treatment
- C2: Recent intracranial or spinal surgery or significant head trauma, or prior stroke in previous 3 months
- C3: History of previous intracranial hemorrhage, intracranial neoplasm, arteriovenous malformation, or aneurysm
- C4: Active internal bleeding
- C5: Acute bleeding diathesis (low platelet count, increased PTT, INR >= 1.7 or use of NOAC)
- C6: Symptoms suggest subarachnoid hemorrhage
- C7: CT demonstrates multilobar infarction (hypodensity >1/3 cerebral hemisphere)
- C8: Arterial puncture at noncompressible site in previous 7 days
- C9: Blood glucose concentration <50 mg/dL (2.7 mmol/L)

---

Relative Exclusion Criteria (Warnings) 0-3 hr treatment window. Select all that apply:

- W1: Care-team unable to determine eligibility
- W2: IV or IA thrombolysis/thrombectomy at an outside hospital prior to arrival
- W3: Life expectancy < 1 year or severe co-morbid illness or CMO on admission
- W4: Pregnancy
- W5: Patient/family refusal
- W7: Stroke severity too mild (non-disabling)
- W8: Recent acute myocardial infarction (within previous 3 months)
- W9: Seizure at onset with postictal residual neurological impairments
- W10: Major surgery or serious trauma within previous 14 days
- W11: Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days)

If IV thrombolytic was initiated greater than 60 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay:  Yes  No

If IV thrombolytic was initiated greater than 45 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay:  Yes  No

If IV thrombolytic was initiated greater than 30 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay:  Yes  No

# IMPORTANT “GRANULAR” DATA

**Additional Time Tracker**

Set all active Date/Time fields

Date/Time Stroke Team Activated:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>	Date/Time Stroke Team Arrived	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>
N/A	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Date/Time of ED Physician Assessment:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>	Date/Time Neurosurgical Services Consulted:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>
N/A	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Date/Time Brain Imaging Ordered:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>	Date/Time Brain Imaging Interpreted:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>
N/A	<input type="checkbox"/>		
Date/Time IV alteplase Ordered:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>		
N/A	<input type="checkbox"/>		
Date/Time Lab Tests Ordered:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>	Date/Time Lab Tests Completed:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>
N/A	<input type="checkbox"/>		
Date/Time ECG Ordered:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>	Date/Time ECG Completed:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>
N/A	<input type="checkbox"/>		
Date/Time Chest X-ray Ordered:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>	Date/Time Chest X-ray Completed:	<input type="text" value="MM/DD/YYYY HH:MI"/> <input type="checkbox"/>

# DYSPHAGIA SCREEN

## Other In-hospital Treatments and Screening

### Dysphagia Screening

Patient NPO throughout the entire hospital stay?

Yes  No/ND  C

Was patient screened for dysphagia prior to any oral intake including water or medications?

Yes  No/ND  NC  C

If yes, Dysphagia screening results:

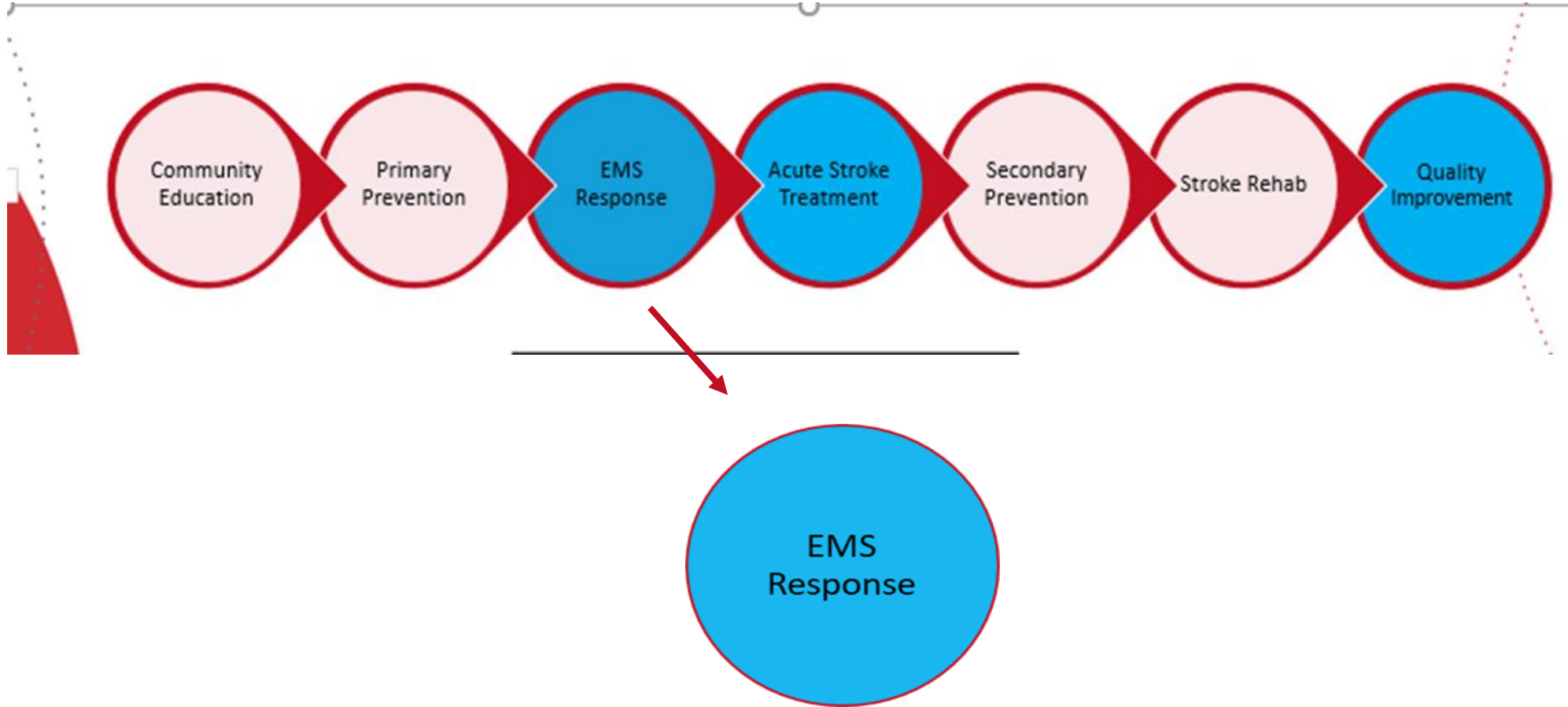
Pass  Fail  ND  C

Treatment for Hospital-Acquired Pneumonia:

Yes  No  NC  C



# SSOC



# SPECIAL INITIATIVES: PREHOSPITAL DATA

## Prehospital Stroke Care (EMS)



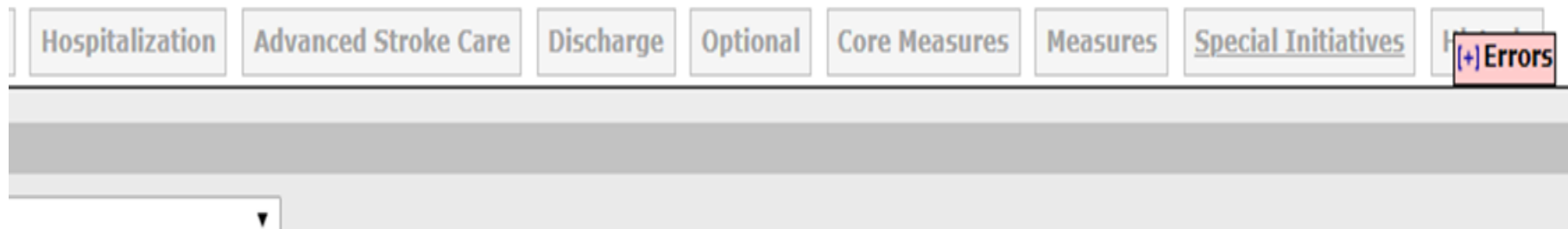
### It Takes EMS Systems to Save Lives

- Timely, acute management of illness improves morbidity & mortality
- It takes an **EMS System** to impact morbidity & mortality
- However, EMS remains **unrecognized & an underdeveloped area**
- System starts in the community, leading to Emergency Service coordination with the hospital
- Existing EMS guidelines are more applicable for developed EMS systems. There are **no guidelines for developing EMS systems** in areas with limited resources

# SPECIAL INITIATIVES TAB: PREHOSPITAL DATA

Pre-Hospital Data Elements, *such as*:

- EMS agency name or number
  - Run/Sequence Number
  - Date/Time Call received by EMS agency
  - Blood Glucose level (mg/dL)
  - Pre-hospital stroke screen performed – Yes/No/Not documented
  - Etc.
- Instructions to Enable: Contact IQVIA Help Desk to request “Special Initiatives Tab” (888) 526-6700 or [InfosarioOutcomeSupport@quintiles.com](mailto:InfosarioOutcomeSupport@quintiles.com)
  - Once Enabled, accessible from Patient Management Tool:



# SPECIAL INITIATIVES TAB: PREHOSPITAL DATA

- Admin
- Clinical Codes
- Admission
- Hospitalization
- Advanced Stroke Care
- Discharge
- Optional
- Core Measures
- Measures
- Special Initiatives

Patient care record available at time of patient arrival?  Yes  No/ND

Patient care record available at a later time during hospitalization?  Yes  No/ND

EMS agency name or number   Unknown

Run/Sequence number   Unknown

Date/Time call received by responding EMS agency:  /  /  :  :

Dispatched as suspected stroke?  Yes  No  Not Documented

Arrival at scene by EMS responding agency, Date/Time:  /  /  :  :

Scene Departure:  /  /  :  :

Blood Glucose level (mg/dL):   Not Documented  Too High  Too Low  Glucometer Not Available

Date/Time patient last known to be well as documented by EMS:  /  /  :  :

Date/Time of discovery of stroke symptoms as documented by EMS:  /  /  :  :

**Blood Glucose level (mg/dL):**   Too Low

Initial Blood Pressure by EMS:  /  mmHg  ND

**Suspected stroke?**  Yes  No  Not documented

**Indicate the stroke screen tool used:**

Stroke Screen Outcome:

Indicate the severity scale used?

Positive for LVO?

If severity scale assessment completed, enter total score:

Not Documented

Directed to designated stroke center by protocol

Directed to nearest facility by protocol

Patient/Family choice

Online Medical Direction

Closest facility

Other

Unknown/Not Documented

If Other, Specify:

How was destination decision made?

Was a Thrombolytic Checklist used?  Yes  No/ND

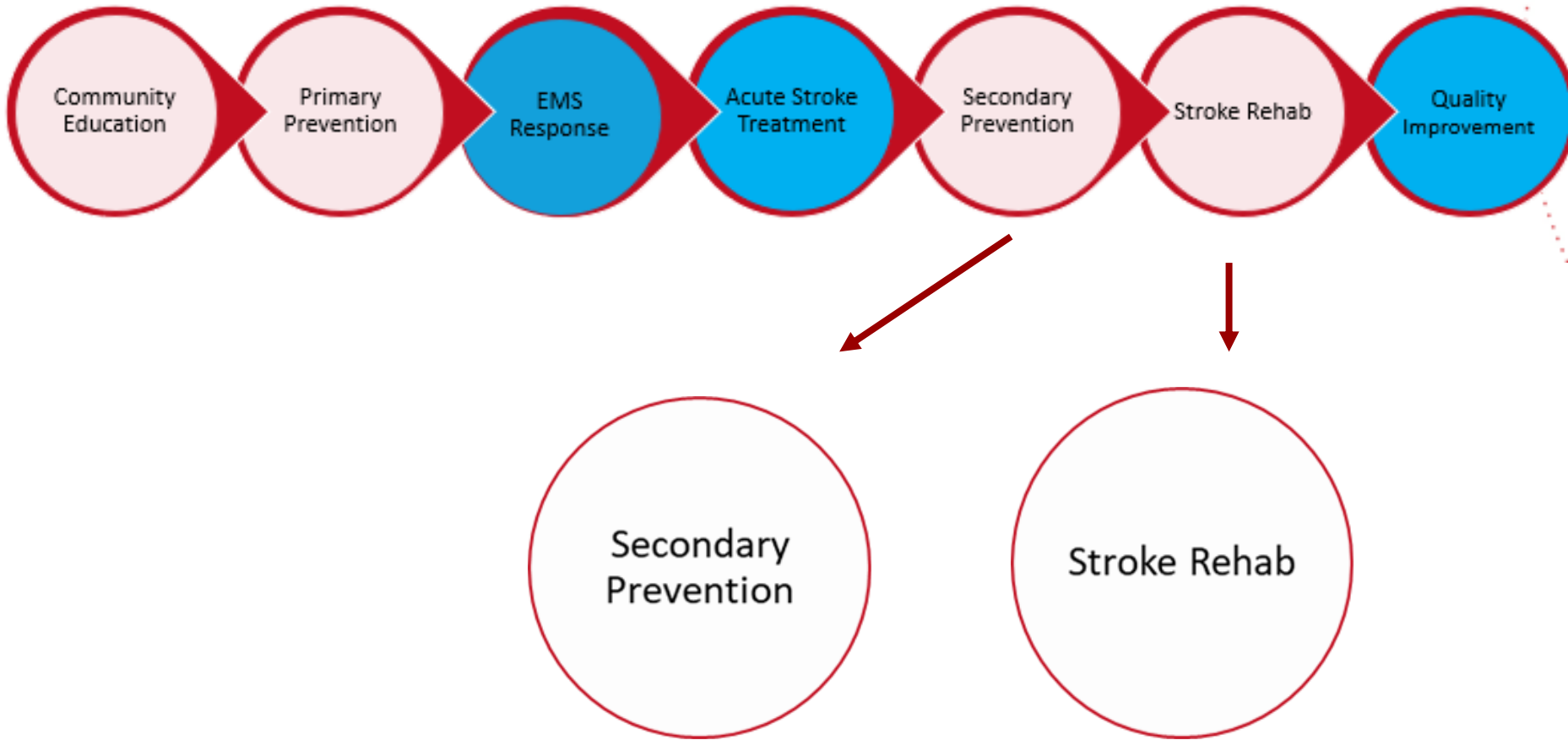
# SPECIAL INITIATIVES: PREHOSPITAL MEASURES

## Prehospital Care Measure Set

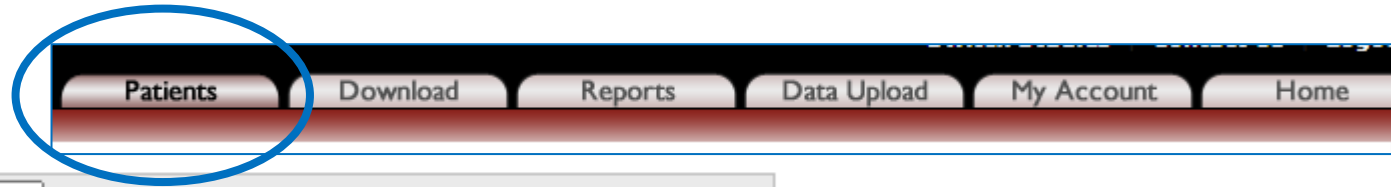
### Contents

<b>Identification of Suspected Strokes</b> .....	<b>1</b>
<b>Documentation of Time Last Known Well or Time of Discovery of Stroke Symptoms</b> .....	<b>2</b>
<b>Evaluation of Blood Glucose</b> .....	<b>3</b>
<b>Stroke Screen Performed and Reported</b> .....	<b>4</b>
<b>Stroke Severity Screen Performed and Reported</b> .....	<b>5</b>
<b>Advanced Notification with Triage Findings [Coverdell only]</b> .....	<b>6</b>
<b>On-Scene Times for Suspected Stroke</b> .....	<b>7</b>
<b>Door-in-Door-Out Times at First Hospital Prior to Transfer for Acute Therapy</b> .....	<b>8</b>
<b>Times from First Medical Contact to Thrombectomy for Acute Ischemic Stroke</b> .....	<b>10</b>
<b>Use of Thrombolytic Checklist [Coverdell Only]</b> .....	<b>12</b>

# SSOC



# STROKE POST DISCHARGE FOLLOW UP



Search By Patient ID

Form to Search

Completeness

Date Restriction Earliest  Latest

Date Range

Patients Per Page

Sort Field and Order

[\[-\] Hide Advanced Search](#)

Displaying patients 1-10 of 10.

## Enter New Patient

Patient	Patient Management Tool	Stroke Post Discharge Follow-Up
1212123	01/15/2020 Next Admission	Create
xyz123	01/15/2020 Next Admission	Create
unknown2020	01/26/2020 Next Admission	Create

# STROKE POST DISCHARGE FOLLOW UP

**Post Discharge Mortality & Readmission** Comprehensive/Advanced Stroke Care Follow Up Historic

Date of Hospital Admission: 01/10/2020  
Date of Hospital Discharge: 01/15/2020

Date Follow-Up Completed: MM/DD/YYYY

Done Delete Entry  
Create Next Entry

**PATIENT LOGISTICS**

Select Period:

- Within 30 days post discharge
- Within 60 days post discharge
- Within 90 days post discharge

Method used for Patient follow-up:

- Chart review
- Health facility
- Patient's current residence
- Phone call
- Unable to reach
- Other

**PATIENT STATUS**

Select Period:

- Within 30 days post discharge
- Within 60 days post discharge
- Within 90 days post discharge

Is patient deceased?

- Yes
- No

Date of Death: MM/DD/YYYY

Cause of Death:

- DVT/PE
- Heart Failure
- Intracranial Hemorrhage (SAH, ICH, SDH, etc)
- Myocardial infarction
- New Ischemic Stroke
- Other Cardiovascular
- Pneumonia/respiratory failure
- Sepsis/Infection
- Severe Disability
- Sudden Death
- Unknown/ND

Specific Cause of Death:



# STROKE POST DISCHARGE FOLLOW UP

Date Post Discharge Modified Rankin Scale Performed  /  /

Modified Rankin Scale - Total Score

### STROKE REHABILITATION

Patient received rehabilitation services during hospitalization

Patient transferred to rehabilitation facility

**Patient assessed for rehabilitation at time of discharge?**

Patient referred to rehabilitation services following discharge

Patient ordered rehab, but patient declined services

Patient ineligible to receive rehabilitation services because symptoms resolved

Patient ineligible to receive rehabilitation services due to impairment (i.e. poor prognosis, patient unable to tolerate rehabilitation therapeutic regimen)

Patient not assessed for rehabilitation during their previous inpatient visit

Occupational therapy

Type of rehab ordered:

Physical therapy

Speech therapy

**Select Period:**

Within 30 days post discharge

Within 60 days post discharge

Within 90 days post discharge

Home Therapy

Home with outpatient therapy

**Current Therapy Status:**

Home with no therapy

### FALLS

**Select Period:**

Within 30 days post discharge

Within 60 days post discharge

Within 90 days post discharge

**Occurrence of Falls:**

Number of falls:

Falls reported to healthcare provider:

### APPOINTMENTS

**Was an appointment made prior to discharge to follow-up with a healthcare provider?**

Yes

No

Unknown/ND

**For 1<sup>st</sup> post-discharge appointment scheduled, what was the outcome?**

Primary Care Physician

Cardiologist

Neurologist

Endocrinologist

Other

**Who did patient see or will see within 30 days of discharge? (check all that apply)**

Primary Care Physician

Cardiologist

Neurologist

Endocrinologist

Other

Date of 1<sup>st</sup> post-Discharge Physician Office Visit:  /  /

### MEDICATIONS

Medications prescribed at discharge:

- Antihypertensive
- Statin
- Antidiabetic
- Aspirin or other platelet
- Anticoagulant

Did patient recall staff review their medication(s) prior to discharge?

Current Patient Medication(s):

- Same as prescribed at discharge
- Antihypertensive
- Statin
- Anti-hyperglycemic
- Aspirin or other platelet
- Anticoagulant
- Antidepressant

Post Discharge Medication(s)

Select Period:

- Within 30 days post discharge
- Within 60 days post discharge
- Within 90 days post discharge

### ED VISITS

Has patient been seen in the ED since discharge?

- Yes
- No
- Unknown
- 

Select Period:

- Within 30 days post discharge
- Within 60 days post discharge
- Within 90 days post discharge
- 

Total Number of ED Visits:

Date of 1<sup>st</sup> ED visit:

Date of Additional ED Visit since last follow-up:

Reason for ED visit:

- Falls
- Transient ischemic attack
- Recurrent Stroke
- Pneumonia
- Urinary tract infection
- DVT/PE/Blood Clot
- Acute Myocardial Infarction

### READMISSIONS

Has patient been readmitted to a hospital since discharge:

- Yes, Within 30 days post discharge
- Yes, Within 60 days post discharge
- Yes, Within 90 days post discharge
- No readmissions
- Unknown/ND
- 

Select Period:

Total number of readmissions since discharge:

Date of Readmission:

Reason for Readmission:

- Acute Myocardial Infarction
- Atrial Fibrillation/Flutter
- Carotid Intervention (endarterectomy/stent)
- Deep vein thrombosis/pulmonary embolism/blood clot
- Fall
- Heart Failure
- Infection/Sepsis
- Other Cardiac event
- Other Cardiac Surgery
- Other Surgical Procedure (i.e. amputation/diabetes)
- Peripheral Intervention



## WELLNESS METRICS

### Tobacco Use and Cessation

Note: Tobacco use includes: cigarettes, cigars/cigarillo, little cigars. Pipes, smokeless tobacco (chew, dip, snuff, snus), hookah/water pipe and electronic vapor products (e-cigarettes, e-hookah, vape pens).

Patient identified as a tobacco user at time of stroke?

Was the patient provided tobacco cessation counseling or referred to a cessation program?

Use of tobacco since discharge?

Patient's frequency of tobacco use:

Use of medication(s) to stop tobacco use?

Has the patient EVER stopped tobacco use because they were trying to quit?  Number of times attempted:

## BLOOD PRESSURE MANAGEMENT

Has the patient been monitoring their blood pressure at home or in the community?

Most Recent Blood pressure:

/ mmHg (systolic/diastolic)

Typical blood pressure reading for patient:

- Yes  
 No  
 Unknown/ND

Has patient reported their blood pressure to their health care provider since discharge?

- Yes  
 No  
 Unknown/ND

## MENTAL HEALTH

Note: Questions to be answered by the patient.

Over the past 2 weeks, how often has the patient been bothered by any of the following problems:

1. Little interest or pleasure in doing things

2. Feeling down, depressed, or hopeless

3. Trouble falling asleep, staying asleep or sleeping too much

4. Feeling tired or having little energy

5. Poor appetite or overeating

6. Feeling bad about self or that he/she is a failure or has let self or family down

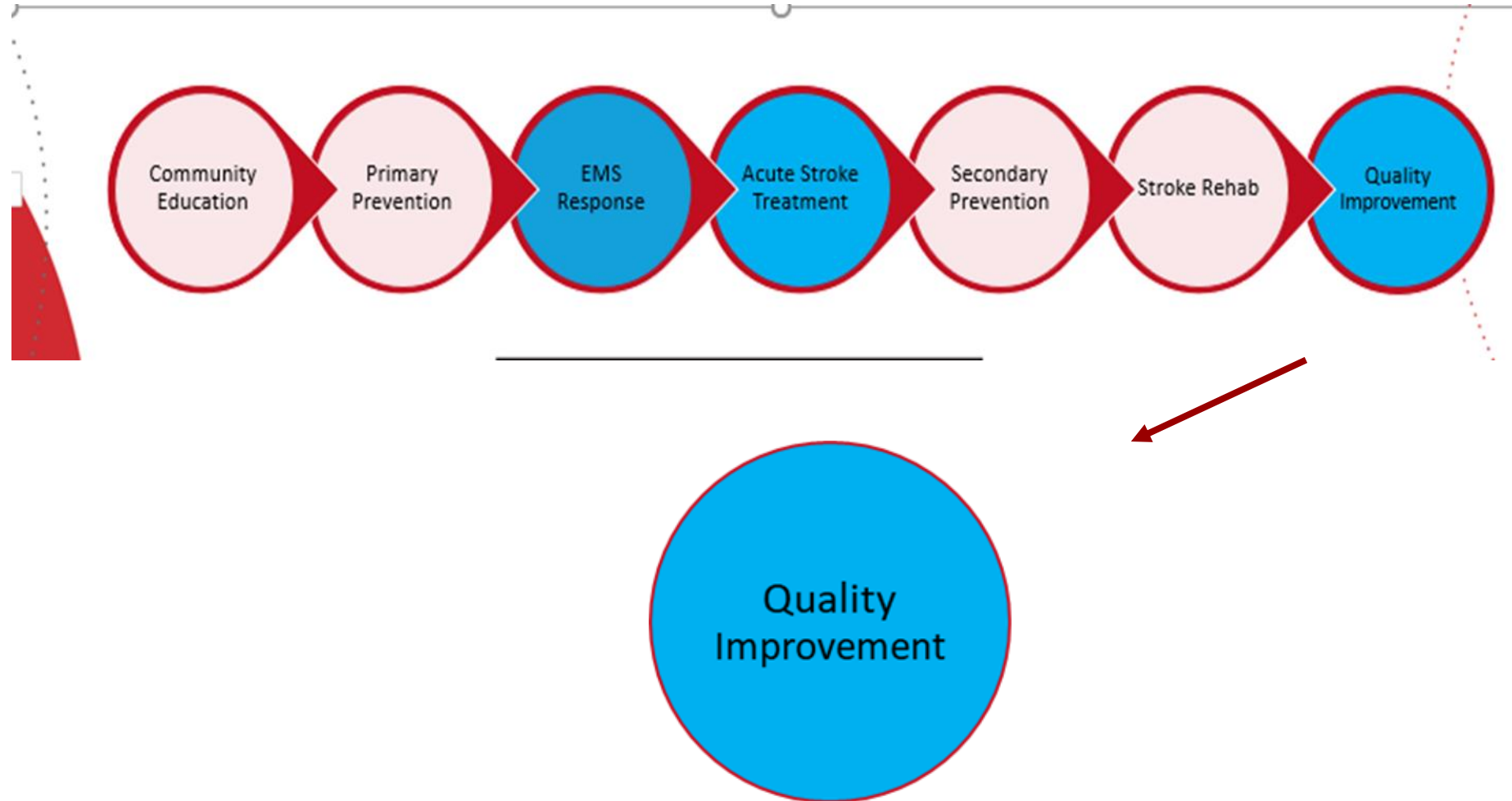
7. Trouble concentrating on things, such as reading the newspaper or watching television

8. Moving or speaking so slowly that others could have noticed. Or, the opposite, being so fidgety or restless that you have been moving around more than usual

9. Thoughts that he/she would be better off dead or of hurting yourself in some way

# REPORTS

# SSOC



# DATA IS COLLECTED-NOW WHAT?



# SPECIAL INITIATIVES PREHOSPITAL DATA: EMS FEEDBACK FORM

## Get Started!

**AtrialFib**   
**Heart Failure** N/A   
**Resuscitation**   
**Stroke**

01 / 01 / 2019   
 MM DD YYYY  
 To  
 10 / 01 / 2020   
 MM DD YYYY

**Configurable Measure Reports**  
Build your own Quality Measure Report

**Pre-Defined Measure Reports**  
Select from the Most Common Measure Report types previously saved report types.

**PMT Patient List**  
Provides a list of patient records entered for the study.

**Comprehensive Stroke: List of Patients for Follow-Up**  
Provides a listing of CSTK patients that have been entered.

**Stroke (STK) Initial Patient Population Report**  
STK Initial Patient Population and Sample Count Report

**Patient Time Tracker Report**  
Provides time tracking for patient records entered for this study.

Due to the size of this report, unfortunately, our Print to PDF feature is not well supported for this report at this time. In order to print this report more effectively, please use the "Export to Excel" feature in the top right hand corner of the report and print from Excel.

**Stroke InSights Data Quality Report**

**Stroke Mortality Report**

**EMS Feedback Log**  
Provides the feedback details of the patients entered for the study

**EMS Feedback Log**  
Provides the feedback details of the patient entered for the study.


Show filters This report shows all records. 16 of 16

ID	Form Dates		Form Information				Form Status	Print PDF
	Admit Date	Discharge Date	Diagnosis	Discharge Disposition	EMS Agency name	Referring Hospital		
xyz123	n/a	n/a	Stroke not otherwise specified	4 Acute Care Facility			Incomplete	Feedback Log Export
unknown2020	01/21/2020	01/26/2020	Ischemic Stroke	1 Home			Incomplete	Feedback Log Export
test5462	04/01/2019	04/04/2019	Ischemic Stroke	1 Home			Incomplete	Feedback Log Export

# EMS FEEDBACK FORM

[Print PDF](#)

[Feedback Log Export](#)

Mission: Lifeline Stroke Feedback Form			
			
Hospital: AHA Staff Demo- GWTG Standard		How Patient Arrived at your hospital: EMS from home/scene	
If transfer from another hospital, specify hospital name:		Suspected stroke?	Blood Glucose Level:
Advanced notification by EMS/Mobile Stroke Unit? (Traditional Responder or Mobile Stroke Unit): Yes		Additional Information provided as part of pre-notification?	
Stroke screen tool used:	Stroke Screen Outcome:	Severity scale used?	EMS score Positive for LVO?
EMS Agency Name or Number:		EMS Run/Sequence number:	Patient location when stroke symptoms discovered: Not in a healthcare setting
Arrival Date/Time: 01/21/2020 15:00	Age: 77	Gender: Female	Initial Blood Pressure by EMS:
How was destination decision made?		If severity scale used, did result alter hospital destination (e.g. CSC vs. PSC)?	
IV alteplase initiated at this hospital? No		IV alteplase at an outside hospital or Mobile Stroke Unit? No	Endovascular attempted: No
ICD-10-CM Principal Diagnosis Code: I6309 - Cerebral infarction due to thrombosis of precerebral artery		ICD-10-PCS Principal Procedure Code: 3E03317 - Introduction of Other Thrombolytic into Peripheral Vein, Percutaneous Approach	ICD-10-CM Discharge Diagnosis Related to Stroke:
Physician/Provider NPI: LOYA,RENE-1912956319			
Data Elements	Date/Time	System Metrics	Time
Date/Time of discovery of stroke symptoms?	01/21/2020 14:15	Last Known Well to Arrival @ Hospital:	45 Minutes
Discovery of Stroke Symptoms by EMS:		Last Known Well to IV Alteplase:	0 Minutes
Date/Time patient last known to be well?	01/21/2020 14:15	Last Known Well to first pass of a clot retrieval device:	0 Minutes
Last Known Well as Documented by EMS:		First Medical Contact to IV Alteplase:	0 Minutes
EMS Unit Notified by Dispatch:		First Medical Contact to first pass of a clot retrieval device:	0 Minutes
EMS Unit Arrived on Scene:		First Medical Contact to Brain Imaging Initiated:	0 Minutes
EMS Arrived at Patient:		First Medical Contact to Stroke Team Activation:	0 Minutes
EMS Unit Left Scene:		<b>EMS</b>	<b>Time</b>
Arrival Date Time:	01/21/2020 15:00	EMS Unit Notified by Dispatch to Arrival at Scene:	0 Minutes
Date/Time Prenotification Provided to Hospital:		EMS At Patient Side to Date/Time Pre-Notification provided to Hospital:	0 Minutes
Date/Time Brain Imaging Initiated:	01/21/2020 15:05	EMS Unit Arrived on Scene to EMS Unit Left Scene:	0 Minutes
Date/Time IV alteplase initiated:		EMS Depart Scene to Hospital Arrival:	0 Minutes
What is the date and time of the first pass of a clot retrieval device at this hospital?		EMS At Patient Side to Brain Imaging initiated By MSU:	0 Minutes
		EMS At Patient Side to Date Time IV alteplase initiated by MSU:	0 Minutes
Date/Time Stroke Team Activated:		<b>Stroke Center</b>	<b>Time</b>
Date/Time Stroke Team Arrived:		EMS Pre-Notification to Stroke Team Activated:	0 Minutes



[Back to Report List](#)

### Configurable Measure Reports

Generate Report

#### TIME PERIOD

Interval

From

#### REPORT 1

GWTG Standard Measures:

GWTG Enhanced Version & Special Initiative Measures:

GWTG Additional Patient Population Measures:

Historic Measures:

Format:

Compare to:  
(ctrl-click to select multiple)

- Weight Recommendation - Observation Status Only
- Pre-hospital Care Measures**
- Hospital Pre-Notification with Triage Findings**
- Hospital Pre-Notification with Triage Findings - Distribution
- Door-in-Door-Out Times Prior to Transfer for Acute Therapy for Patients Transported to First Hospital by EMS
- Documentation of Time LKW
- Documentation of Time of Discovery of Stroke Symptoms
- EMS First Medical Contact to ED Arrival
- Evaluation of Blood Glucose
- Identification of Suspected Strokes - Rate Based
- On-Scene Times for Suspected Stroke
- On-Scene Times <=15 minutes for Suspected Stroke
- Stroke Screen Performed and Reported
- Stroke Screen Performed and Reported Distributed
- Stroke Severity Screen Performed and Reported - Rate Based
- Stroke Severity Screen Performed and Reported - Distribution
- Times from FMC to EVT
- Time from First Medical Contact to IV alteplase for Acute Ischemic Stroke
- Use of Thrombolytic Checklist

Documentation of Time LKW

Select Measure

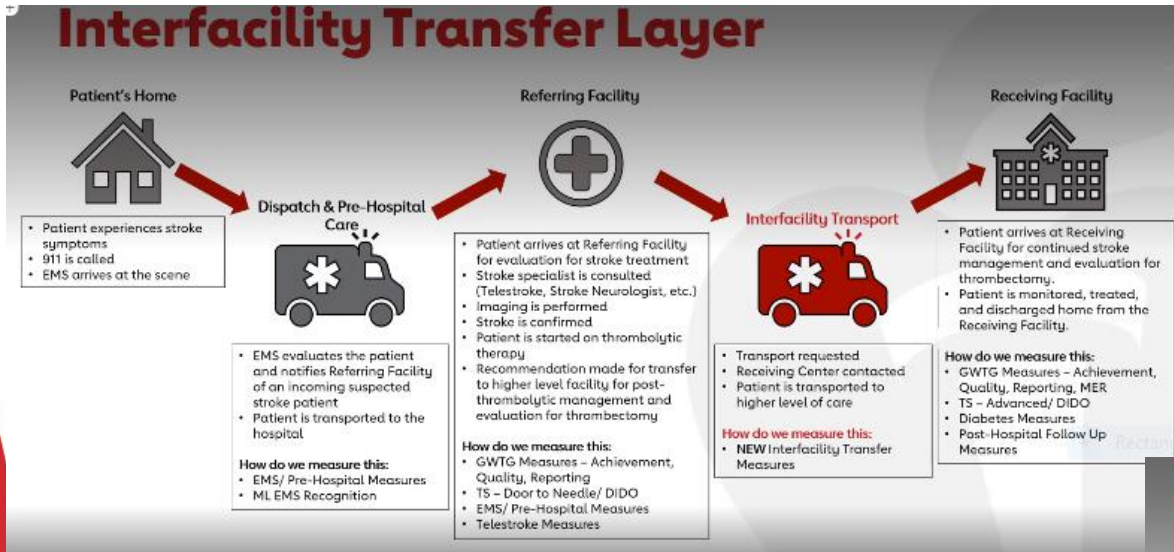
Bar Chart

- My Hospital
- 0 - 99 Bed Hospital
- 301+ Discharges Hospital
- Academic Hospitals
- All CSTK Hospitals
- All Hospitals
- All STK Hospitals
- All TX Hospitals
- Critical Access Hospital - No South Region Hospitals
- Telestroke Provider
- West South Central Hospitals

ation of Time Last  
ll : Percentage of  
stroke patients  
d to your hospital by  
Emergency for whom a time  
"Last Known Well" (LKW) of  
Stroke Symptoms was  
documented.

- Measure Descriptions - Achievement
- Measure Descriptions - Quality
- Measure Descriptions - Reporting
- Measure Descriptions - Descriptive and Data Quality
- Measure Descriptions - Comprehensive Stroke (GWTG-specific)
- Measure Descriptions - Observation Status Only
- Measure Descriptions - Inpatient Stroke
- Measure Descriptions - Historic
- Stroke Measure Logic and Rationale
- Stroke Core Measures
- Measure Descriptions - PSC
- Measure Descriptions - PSC Optional Measures
- Measure Descriptions - CSTK
- Measure Descriptions - Stroke MER
- Measure Descriptions - EMS/ML
- Measure Descriptions - Post Hospital Care Follow-up Measures
- Target: Type 2 Diabetes measure Descriptions

# COMING SOON!



### Interfacility Transfer Data Collection

#### Transfer Time Tracker

Set all Transfer dates to the Transport Requested Date

Date/Time Transport Requested: MM/DD/YYYY HH:MM

Date/Time Transport Arrived: MM/DD/YYYY HH:MM

Date/Time Transfer Requested by Referring Hospital: MM/DD/YYYY HH:MM

Date/Time Transfer Accepted by Receiving Hospital: MM/DD/YYYY HH:MM

## Interfacility Transfer Measures

Measures that can be reported for Referring Facilities:

- Door-In-Door-Out Times at First Hospital Prior to Transfer for Acute Therapy (Referring Hospital)
- Arrival to Transport Requested
- Transport Arrived to Transfer Out at Referring Hospital
- Arrival to Transfer Requested

Measures that can be reported for Receiving Facilities:

- Door-In-Door-Out Times at First Hospital Prior to Transfer for Acute Therapy (Receiving Hospital)
- Time from Arrival at Referring Hospital to EVT for Acute Ischemic Stroke
- Discharge from Referring Hospital to Arrival at Receiving Hospital

Measures that can be reported for both Referring and Receiving Facilities:

- Transport Requested to Transport Arrived
- Transfer Requested by Referring Hospital to Transfer Accepted by Receiving Hospital

## Interfacility Transfer Measures

REPORT 1

GWTG Standard Measures: Select Measure

GWTG Enhanced Version & Special Initiative Measures: Select Measure

GWTG Additional Patient Population Measures: STK and PSC Measures

Historic Measures: Maryland Community Health in Action (CHIA) Measures

Format: Health-Related Social Needs Assessment

Identified Areas of Unmet Social Needs

Compare to: (ctrl-click to select multiple)

**Patient Transfer**

- Arrival to Transfer Requested
- Arrival to Transport Requested
- Discharge from referring hospital to arrival at receiving hospital
- Door-in-Door-Out Times at First Hospital Prior to Transfer for Acute Therapy (Referring hospital)
- Door-in-Door-Out Times at First Hospital Prior to Transfer for Acute Therapy (Receiving hospital)
- Time from Arrival at Referring Hospital to EVT for Acute Ischemic Stroke
- Transport Requested to Transport Arrived
- Transport Arrived to Transfer Out at Referring Hospital
- West region stroke 90-Day Follow-up

### Facility Level Filters

Hospital Transferred From: 6740500-Baylor University Medical Center\_Dallas\_TX, 6370330-Bon Secours St. Francis Health System\_Greenville\_SC, 6370323-GHS Greenville Memorial Hospital\_Greenville\_SC, 6370034-Peihon Medical Center\_Greer\_SC

selections

Compare

Hospital Transferred To: 6740500-Baylor University Medical Center\_Dallas\_TX, 6370330-Bon Secours St. Francis Health System\_Greenville\_SC, 6370323-GHS Greenville Memorial Hospital\_Greenville\_SC, 6370034-Peihon Medical Center\_Greer\_SC

selections

Compare

# TELEHEALTH LAYER

- What was the type of Telestroke provider?
- Custom list element for site to record who provided Telestroke service
- Did the Telestroke consultant recommend transfer?
- Patient transfer status after Telestroke consult.
- Which option best described the destination facility for transferred patient?
- Did Telestroke consultation result in thrombolytic administration at the referring site?

# TELESTROKE REPORTS

## Telestroke Measure Bundle Added

- The **\*\*Telestroke Measure Bundle\*\*** has been added in Configurable Measure Reports under *GWTC Additional Patient Population Measures*.

REPORT 1	
GWTC Standard Measures:	Select Measure <span>▼</span>
GWTC Enhanced Version & Special Initiative Measures:	Select Measure <span>▼</span>
GWTC Additional Patient Population Measures:	Select Measure <span>▼</span>
Historic Measures:	
Format:	
Compare to: (ctrl-click to select multiple)	
	Antithrombotics for Patients with Diabetes Cardioprotective Anti-hyperglycemic Medication Diabetes Treatment Early Antithrombotics for Patients with Diabetes IV Alteplase Arrive by 2 Hour, Treat by 3 Hour (Patients with Diabetes) Overall Diabetes Cardiovascular Initiative Composite Score Smoking Cessation for Patients with Diabetes Statin Prescribed at Discharge for Patients with Diabetes Therapeutic Lifestyle Recommendation for Patients with Diabetes VTE Prophylaxis for Patients with Diabetes
	<b>Telestroke</b>
	<b>**Telestroke Measure Bundle**</b>
	Door to Telestroke Consultation Request Door to Telestroke Provider (start of video session) Reasons for Transfer to Higher Level of Care (Referring Center) Reasons for Transfer to This Facility (Receiving Center) Telestroke Consultation and Thrombolytic Therapy Received Telestroke Consultation Done Time from Decision to Treat to Thrombolytic Administration Transfer Status after Telestroke Consult
<b>FILTER OPTIONS</b> <a href="#">SHOW</a>	
<b>DISPLAY OPTIONS</b> <a href="#">SHOW</a>	

# TIME TRACKER REPORT

## Reports User Manual

### Data Management

#### Audit Reports

Provides an audit trail for all form data.

### Site-Level Reports

#### Configurable Measure Reports

Build your own Quality Measure Reports

#### Pre-Defined Measure Reports

Select from the Most Common Measure Reports or run your previously saved report types.

#### PMT Patient List

Provides a list of patient records entered for this study.

#### Patient Time Tracker Report

Provides time tracking for patient records for this study.



Time Tracker	
Patient ID	Total Score (NIHSS)
Discharge Date/Time	Had stroke symptoms resolved at time of presentation?
Final Clinical Diagnosis Related to Stroke	Brain imaging completed at your hospital for this episode of care?
Principal Diagnosis Code	Date/Time Brain Imaging Initiated
Discharge Disposition	Door to Brain Image Initiated Time (min)
Gender	Date/Time Brain Imaging Interpreted
Age	Door to Brain Image Interpreted Time (Min)
How patient arrived at your hospital	IV t-PA initiated at this hospital?
Advanced notification by EMS?	Date/Time IV t-PA Ordered
Date/Time Last Known Well	Date/Time IV t-PA Initiated
Arrival Date/Time	Door to Needle Time (min)
Time from LKW to Arrival (min)	Date/Time Lab Tests Ordered
Date/Time Stroke Team Activated	Date/Time Lab Tests Completed
Date/Time Stroke Team Arrived	Arrival to Lab Tests Completed Times (min)
Door to Stroke Team Arrival Time (min)	Date/Time ECG Ordered
Date/Time of ED Physician Assessment	Date/Time ECG Completed
Arrival to ED Physician Assessment Time (min)	Arrival to ECG Completed Times (min)
Date/Time Neurosurgical Services	Date/Time Chest X-Ray Ordered
Door to Neurosurgical Services Consult Time (min)	Date/Time Chest X-Ray Completed
Initial NIH Stroke Scale	Arrival to Chest X-Ray Completed Times (min)

Print | Export to Excel | Export to .csv | Back to Report List

Please enter a Date Range. The 'From' date is the start date for your report. If it is left blank the report is run for the past 30 days. The 'To' date for the report is the end date of your report. If it is left blank the report is run to the current date.

From

01 / 01 / 2018

MM DD YYYY

To

04 / 17 / 2018

MM DD YYYY

### PMT Time Tracker Report

Show filters This report shows all records. 3 of 3

Patient ID	Discharge Date/Time	Final Clinical Diagnosis Related to Stroke	Principal Diagnosis Code	Discharge Disposition	Gender	Age	How patient arrived at your hospital	Advanced notification by EMS?	Date/Time Last Known Well	Arrival Date/Time	Time from LKW to Arrival (min)	Date/Time Stroke Team Arrived



# TIME TRACKER REPORT

Print | **Export to Excel** | Export to .csv | Back to Report List

Please enter a Date Range. The 'From' date is the start date for your report. If it is left blank the report is run for the past 30 days. The 'To' date for the report is the end date of your report. If it is left blank the report is run to the current date.

From

01 / 01 / 2018

To

02 / 30 / 2020

Submit

## PMT Time Tracker Report

How filters This report shows all records. 25 of 25

Patient ID	Discharge Date/Time	Final Clinical Diagnosis Related to Stroke	Principal Diagnosis Code	Discharge Disposition	Gender	Age	How patient arrived at your hospital	Advanced notification by EMS?	Date/Time Last Known Well	Arrival Date/Time	Time from LKW to Arrival (min)	Date/Time Stroke Team Activated	Date/Time Stroke Team Arrived	Door to Stroke Team Arrival Time (min)	Date/Time of ED Physician Assessment	Arrival to ED Physician Assessment Time (min)
------------	---------------------	--	--------------------------	-----------------------	--------	-----	--------------------------------------	-------------------------------	---------------------------	-------------------	--------------------------------	---------------------------------	-------------------------------	--	--------------------------------------	---

16300

AL	AM	AN
Date/Time Lab Tests Ordered	Date/Time Lab Tests Completed	Arrival to Lab Tests Completed Times (min)
Unknown	02/01/2019 14:24	21

# ACUTE STROKE READY MEASURE REPORTS

- ASR-IP-1 Thrombolytic Therapy (IV alteplase initiated in the ED followed by inpatient admission to the ASRH)
- ASR-IP-2 Antithrombotic Therapy Administered By End of Hospital Day 2
- ASR-IP-3 Discharged on Antithrombotic Therapy
- ASR-OP-1 Thrombolytic Therapy (Drip and Ship)
- ASR-OP-2 Door to Transfer to Another Hospital
  - 2b Hemorrhagic Stroke
  - 2c Ischemic Stroke; drip and ship
  - 2d Ischemic Stroke; no IV alteplase prior to transfer

Rectangular Snip

Configurable Measure Reports

Generate Report

**TIME PERIOD**

Interval: Monthly  Aggregate

From: 2018 Jul

To: 2018 Sep

**REPORT 1**

GWTC Standard Measures: Select Measure

GWTC Enhanced Version & Special Initiative Measures: **Select Measure**

GWTC Additional Patient Population Measures:

Historic Measures:

Format:

Compare to: (ctrl-click to select multiple)

All TX Hospitals  
South Region Hospitals  
West South Central Hospitals

Acute Stroke Ready (ASR)  
ASR-IP-1  
ASR-IP-2  
ASR-IP-3  
ASR-OP-1  
ASR-OP-2a  
ASR-OP-2b  
ASR-OP-2c  
ASR-OP-2d

Add Another Report

# STROKE POST DISCHARGE REPORTS

Configurable Measure Reports

heart.irp.iqvia.com/measure.html?study\_id=1388&physician\_id=359670&study\_rev\_id=882

Switch Studies Contact Us Logout

Patients Download Reports Data Upload My Account Home

Current Study: Stroke PMT Current User: Susan Abelt Site: AHA Staff Demo- GWTG Standard Site ID: 88253

Back to Report List

**Configurable Measure Reports**

Generate Report

**TIME PERIOD**

Interval

From

To

**REPORT 1**

GWTG Standard Measures:

GWTG Enhanced Version & Special Initiative Measures:

GWTG Additional Patient Population Measures:

Historic Measures:

Format:

Compare to: (ctrl-click to select multiple)

- Door to Start of Device (DTD) within 60 minutes for patients transferred from an outside hospital OR within 90 minutes for patients presenting directly (24-hour treatment window).
- Door to Start of Revascularization (DTR) within 120 minutes
- Mechanical Endovascular Reperfusion Therapy for Eligible Patients with Ischemic Stroke
- Picture to Puncture (PTP) Time within 60 minutes
- Picture to Puncture (PTP) Times (Graphical Display of Distribution)
- Puncture to Recanalization/Reperfusion (PTRp) Times (Graphical Display of Distribution)
- Puncture to Start of Revascularization (PTR) times (Graphical Display of Distribution)
- Rate of Substantial Reperfusion
- Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grades for Successful Mechanical Endovascular Reperfusion Therapy (Graphical Display of Distribution)
- Coverdell Post - Discharge
- Appointment Scheduled
- Appointment Scheduled - Outcomes
- Blood Pressure Monitoring
- ED Visits
- Falls Reported
- Medication Stoppage
- Tobacco Use
- Maryland Community Health in Action (CHIA) Measures
- Health-Related Social Needs Assessment
- Identified Areas of Unmet Social Needs

Select Measure

Select Measure

Select Measure

My Hospital

- 0 - 99 Bed Hospital
- 301+ Discharges Hospital
- Academic Hospitals
- All CSTK Hospitals
- All Hospitals
- All STK Hospitals
- All TX Hospitals
- Critical Access Hospital - No
- South Region Hospitals
- Telestroke Provider
- West South Central Hospitals

Measure Descriptions - PSC

Measure Descriptions - PSC Optional Measures

Measure Descriptions - CSTK

Measure Descriptions - Stroke MER

Measure Descriptions - EMS/ML

Measure Descriptions - Post Hospital Care Follow-up Measures

Target: Type 2 Diabetes measure Descriptions

64

Inbox - Susa... 1 Reminder(s) Statin meas... GWTG Strok... 22January\_R... Configurabl...

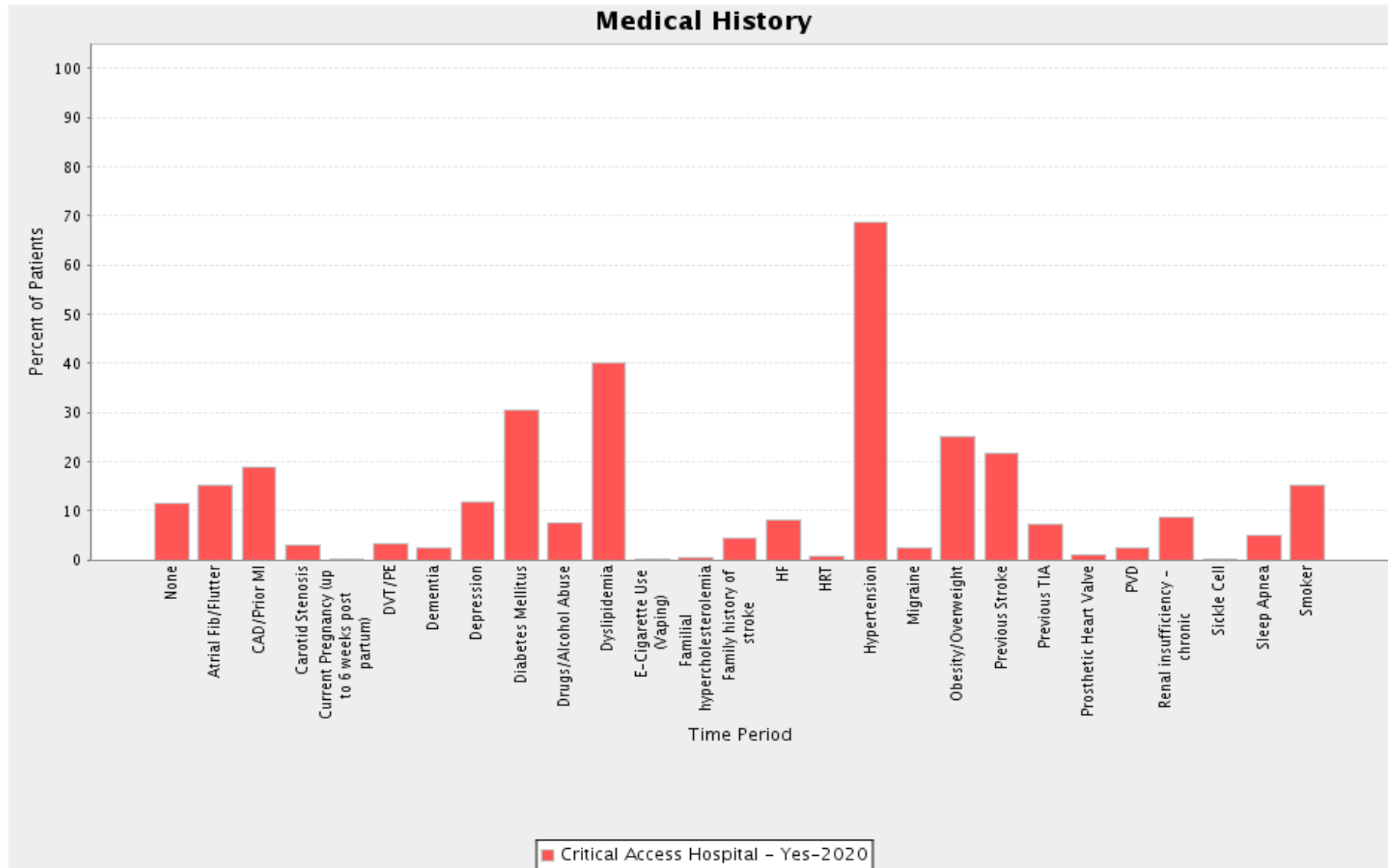
1:55 PM 3/31/2021

merican art ociation.

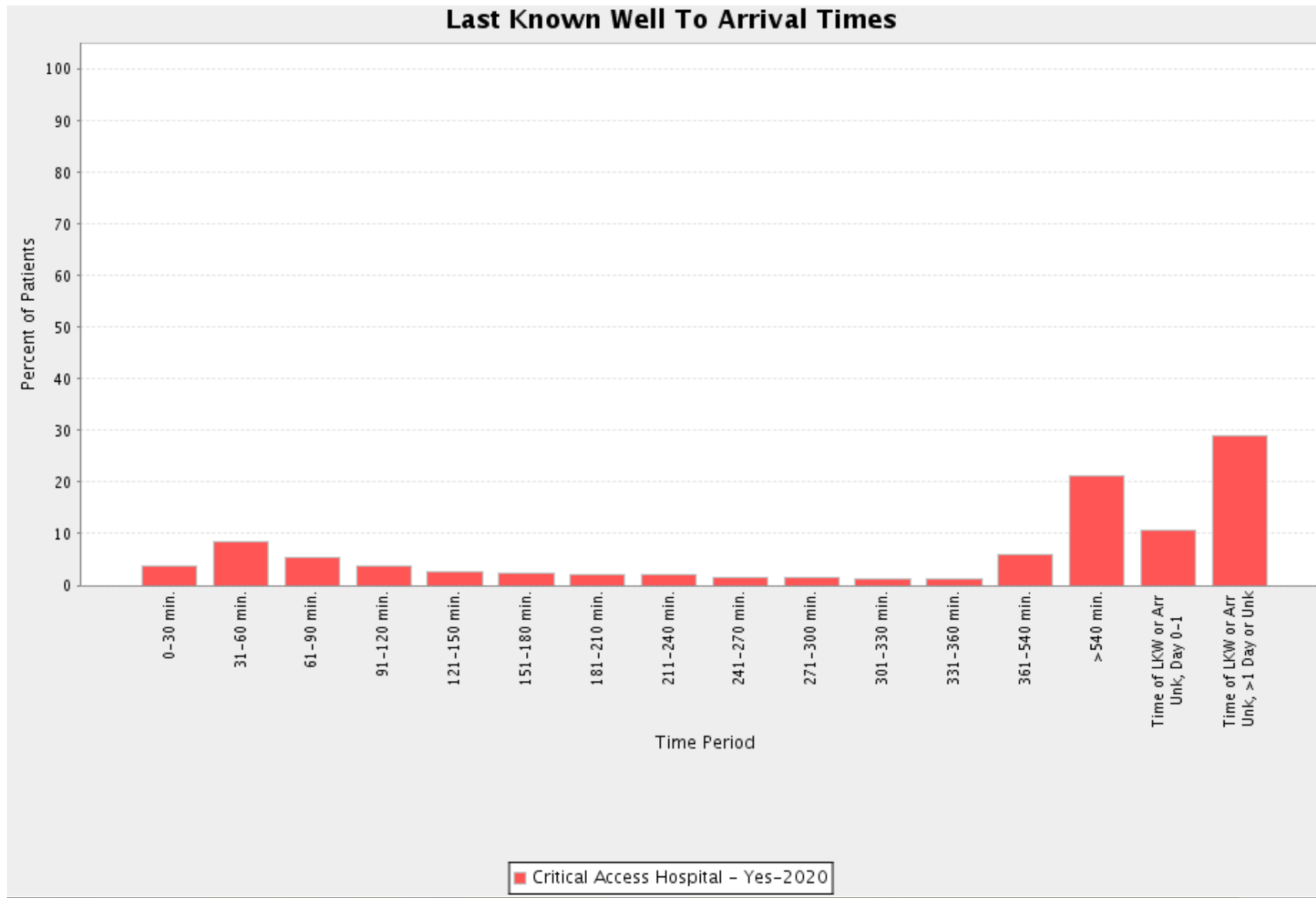


# GWTG<sup>®</sup>-STROKE DATA

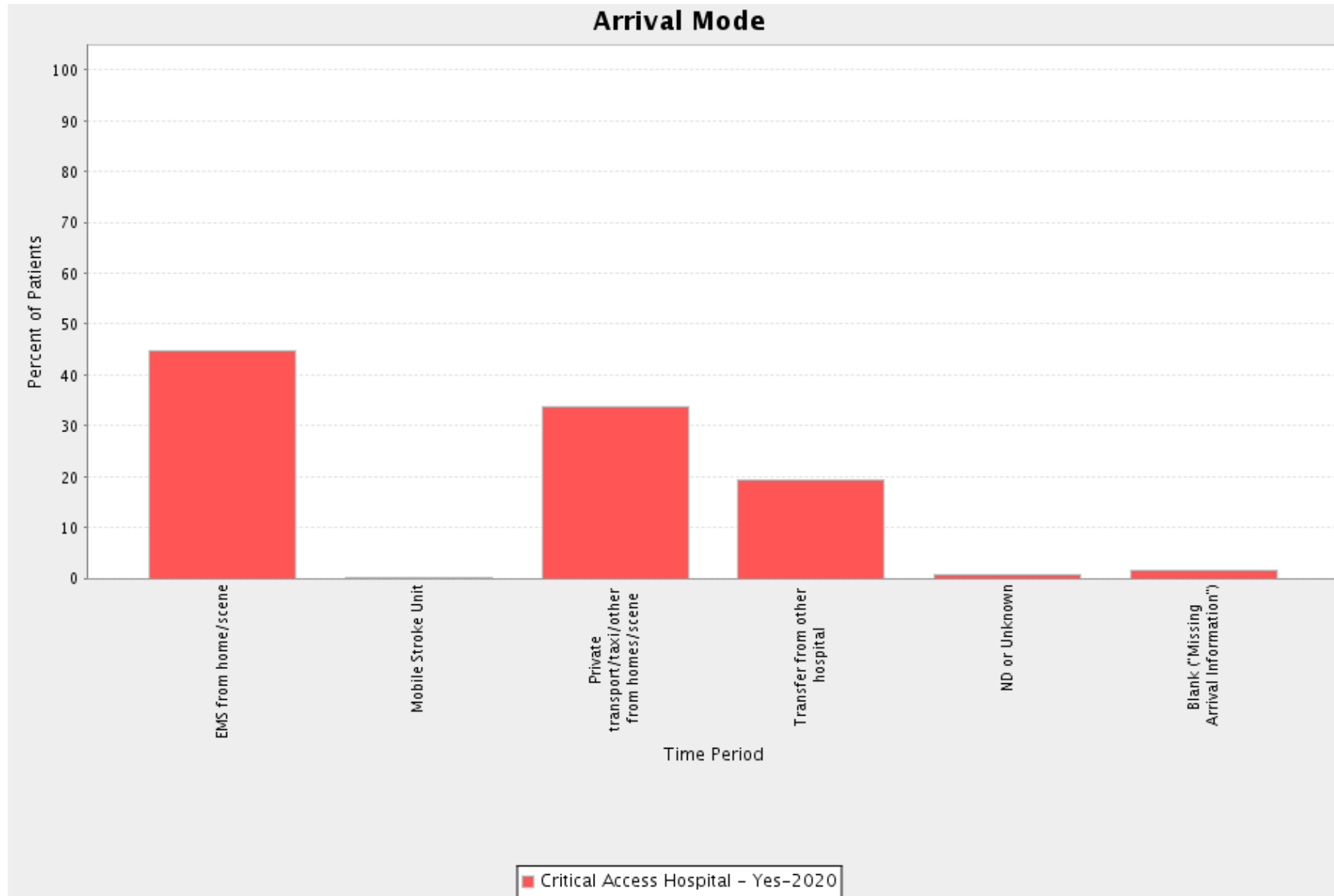
# MEDICAL HISTORY HISTOGRAM



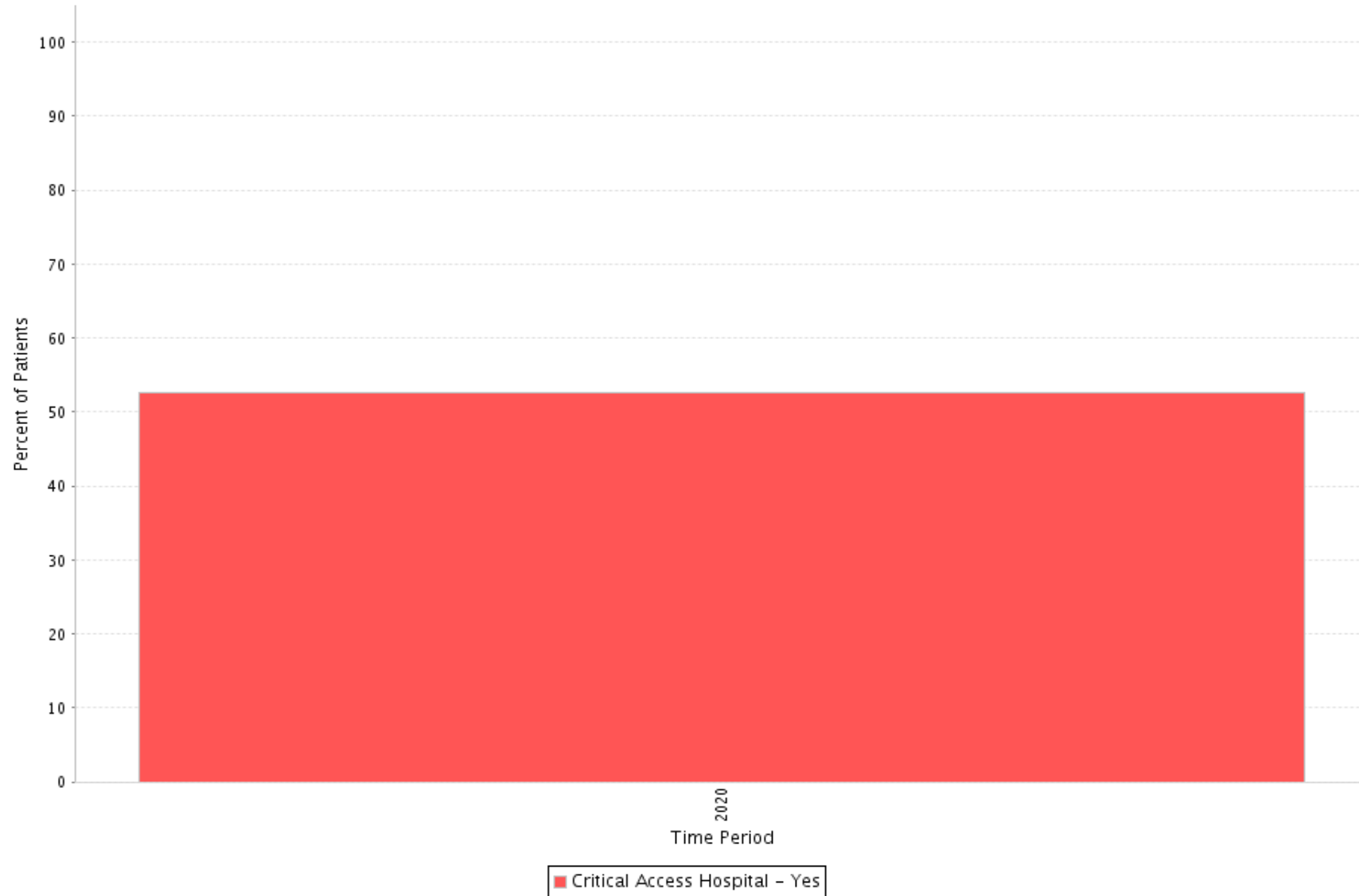
# LAST KNOWN WELL TO ARRIVAL



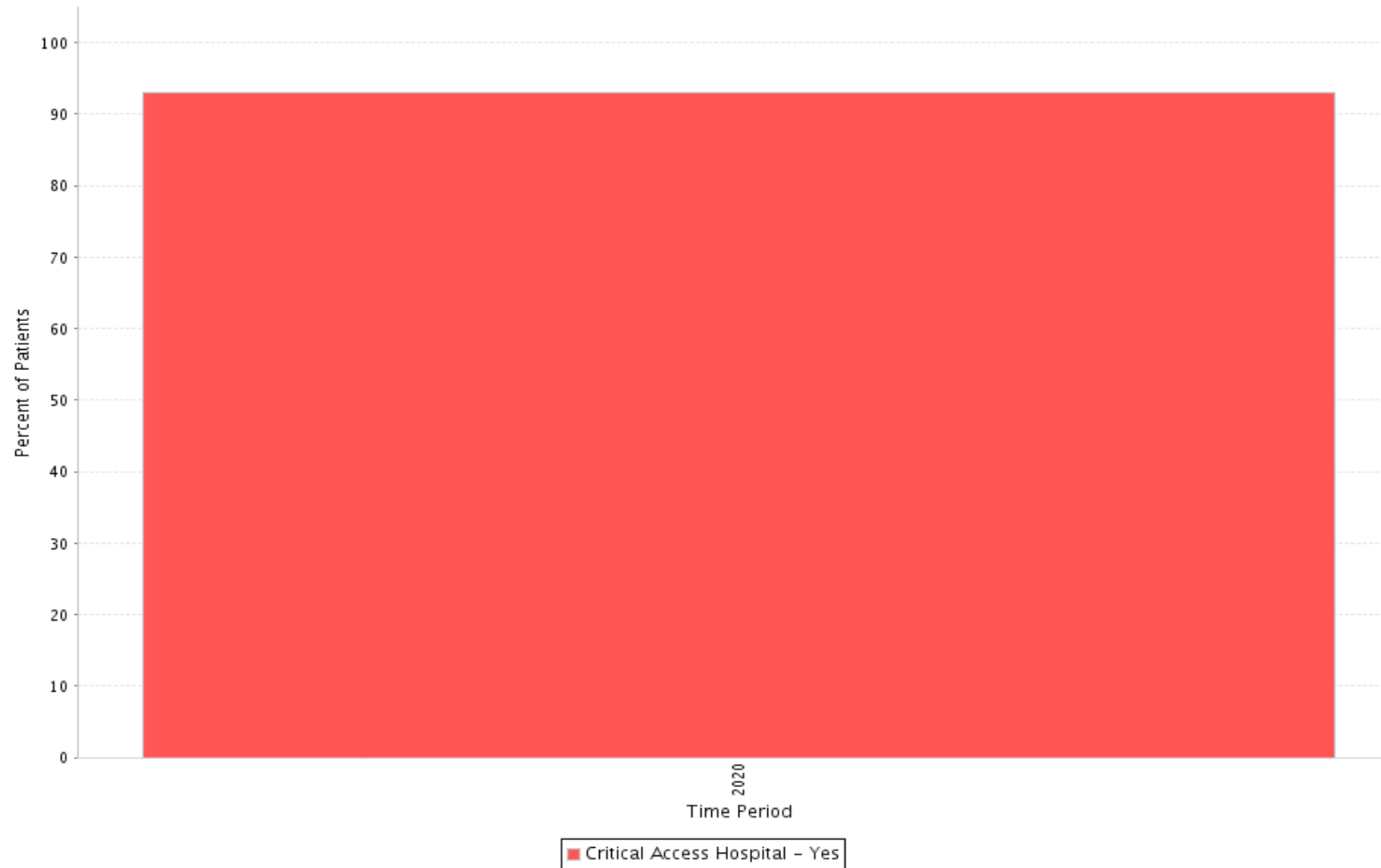
# ARRIVAL MODE



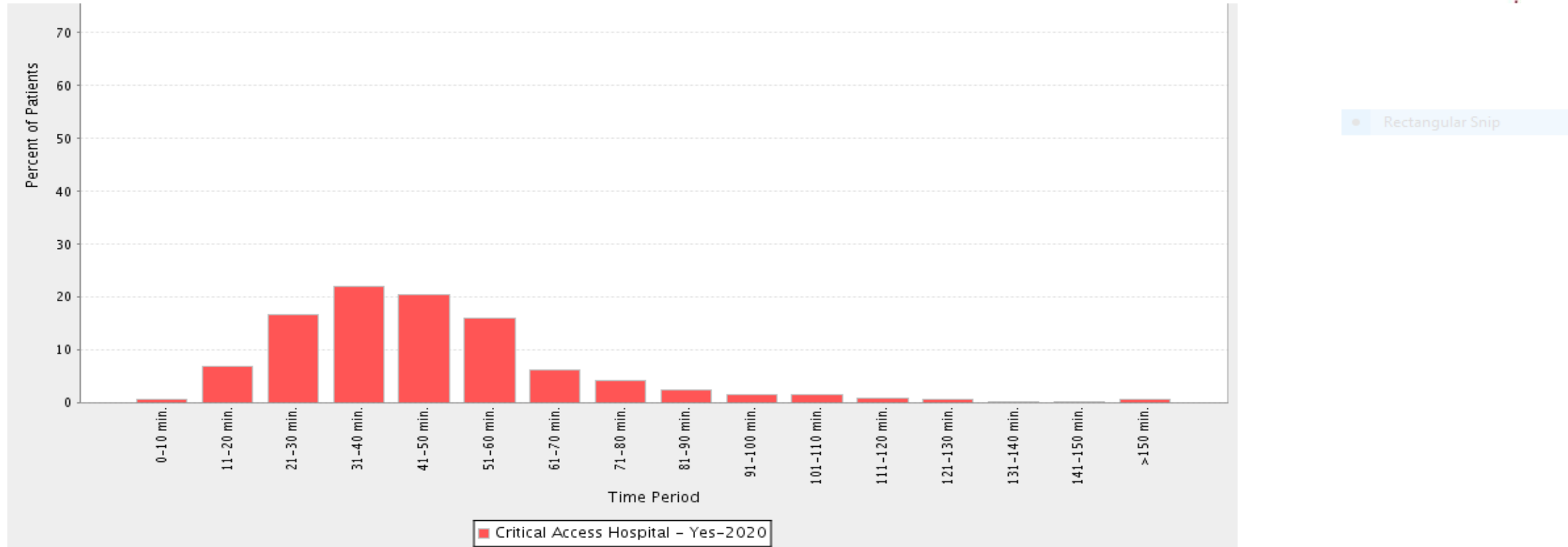
# % DOOR TO CT IN 25 MINUTES



# NIHSS REPORTED



# DOOR TO NEEDLE

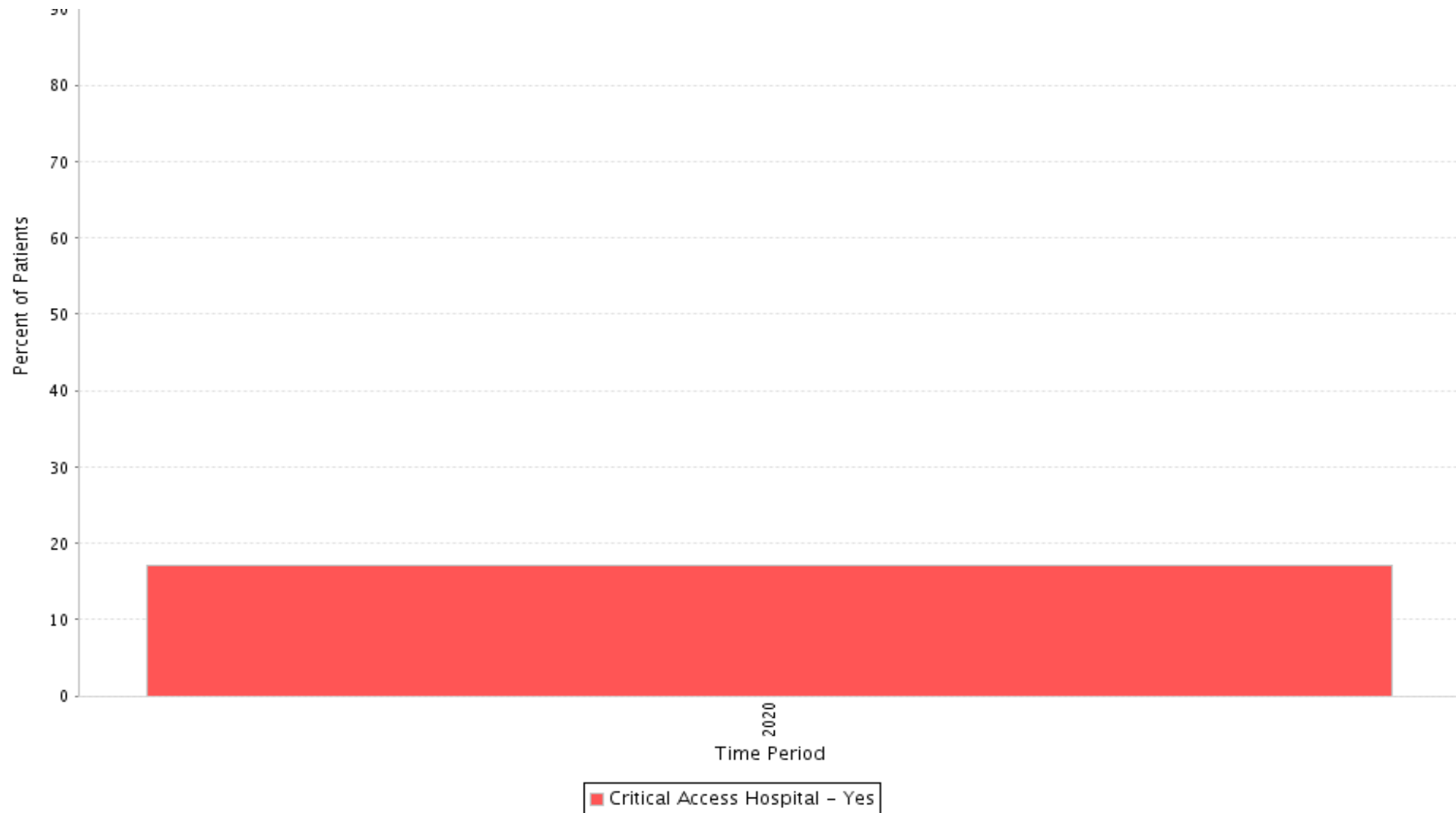


## Time to Intravenous Thrombolytic Therapy Times

Note: Time periods/Categories at the end of the graph and data table have been omitted because there were no patient records during that time.

Benchmark Group	Time Period	0-10 min.	11-20 min.	21-30 min.	31-40 min.	41-50 min.	51-60 min.	61-70 min.	71-80 min.	81-90 min.	91-100 min.	101-110 min.	111-120 min.	121-130 min.	131-140 min.	141-150 min.	>150 min.	Total	Mean	Standard Deviation	Median	Range
Critical Access Hospital - Yes	2020	15 (0.7%)	157 (6.9%)	379 (16.6%)	499 (21.9%)	466 (20.4%)	361 (15.8%)	140 (6.1%)	96 (4.2%)	53 (2.3%)	31 (1.4%)	31 (1.4%)	16 (0.7%)	14 (0.6%)	5 (0.2%)	3 (0.1%)	13 (0.6%)	227	46.2	23.5	42	0 - 216

# DIDO TIME @ 1<sup>ST</sup> HOSPITAL PRIOR TO TRANSFER FOR ACUTE THERAPY





# RESOURCES

# PREHOSPITAL TRANSPORT RESOURCES

- **Stroke Rural Transport Recommendations**

[HTTPS://WWW.STROKE.ORG/-/MEDIA/STROKE-FILES/EMS-RESOURCES/STROKE-DESTINATION-CHANGE-032021/DS17297\\_ASA-STROKE-TRANSPORT-GRAPHICS\\_RURAL-FINAL.PDF?LA=EN](https://www.stroke.org/-/media/stroke-files/ems-resources/stroke-destination-change-032021/ds17297_asa-stroke-transport-graphics_rural-final.pdf?la=en)

- **Stroke Suburban Transport Recommendations**

[HTTPS://WWW.STROKE.ORG/-/MEDIA/STROKE-FILES/EMS-RESOURCES/STROKE-DESTINATION-CHANGE-032021/DS17297\\_ASA-STROKE-TRANSPORT-GRAPHICS\\_SUBURBAN-FINAL.PDF?LA=EN](https://www.stroke.org/-/media/stroke-files/ems-resources/stroke-destination-change-032021/ds17297_asa-stroke-transport-graphics_suburban-final.pdf?la=en)

- **Stroke Urban Transport Recommendations**

[HTTPS://WWW.STROKE.ORG/-/MEDIA/STROKE-FILES/EMS-RESOURCES/STROKE-DESTINATION-CHANGE-032021/DS17297\\_ASA-STROKE-TRANSPORT-GRAPHICS\\_URBAN-FINAL.PDF?LA=EN](https://www.stroke.org/-/media/stroke-files/ems-resources/stroke-destination-change-032021/ds17297_asa-stroke-transport-graphics_urban-final.pdf?la=en)





## Stroke In Rural Areas And Small Communities

<https://pubmed.ncbi.nlm.nih.gov/18420955/>

This article reviews the need for developing and implementing best-practice stroke care in rural settings

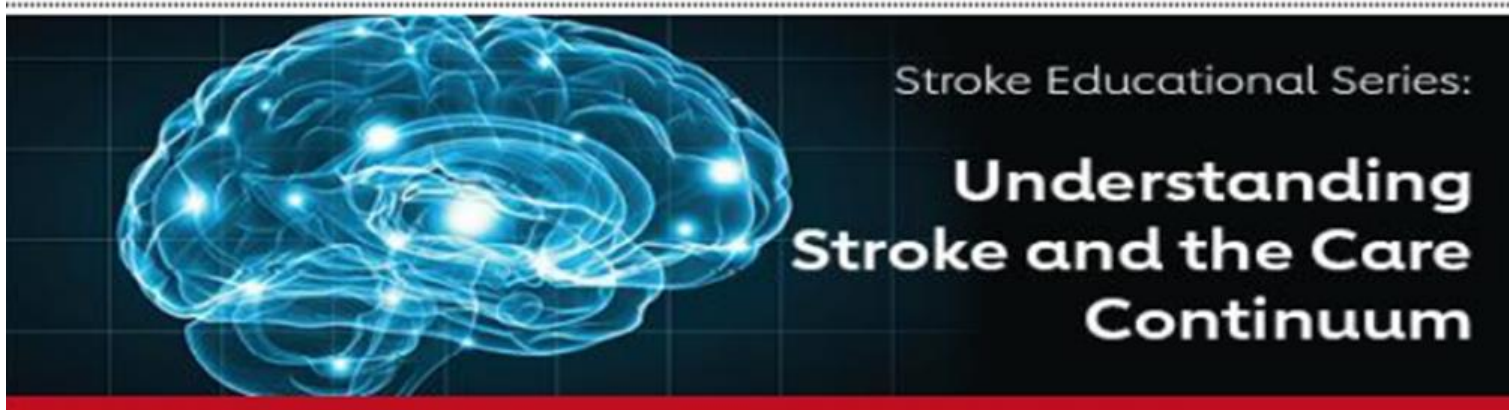
# PREHOSPITAL TRANSPORT RESOURCES *(CONT.)*

## Recommendations for Regional Stroke Destination Plans in Rural, Suburban, and Urban Communities

from the Prehospital Stroke System  
of Care Consensus Conference:

[https://www.stroke.org/-/media/stroke-files/ems-resources/stroke-destination-chang032021/ds17296\\_prehospital-ssoc-statement-summary\\_final.pdf?la=en](https://www.stroke.org/-/media/stroke-files/ems-resources/stroke-destination-chang032021/ds17296_prehospital-ssoc-statement-summary_final.pdf?la=en)

<https://www.ahajournals.org/doi/10.1161/STROKEAHA.120.033228>



[https://d2zsryopbdog7m.cloudfront.net/event-files/FNd3HwSSwucLsXsn5Lbg\\_Stroke%20Series%20Summary%20Sheet%20\(with%20post%20stroke\).pdf](https://d2zsryopbdog7m.cloudfront.net/event-files/FNd3HwSSwucLsXsn5Lbg_Stroke%20Series%20Summary%20Sheet%20(with%20post%20stroke).pdf)

# STROKE RESOURCE LIBRARY

All the tools you need, in one place

It's more than a library, its a toolbox. Patient and professional focused resources for prevention, pre-hospital treatment, in hospital protocols and post-stroke care. Help yourself-help your patients



Prevention Resources



Pre-Hospital/EMS



Acute Treatment



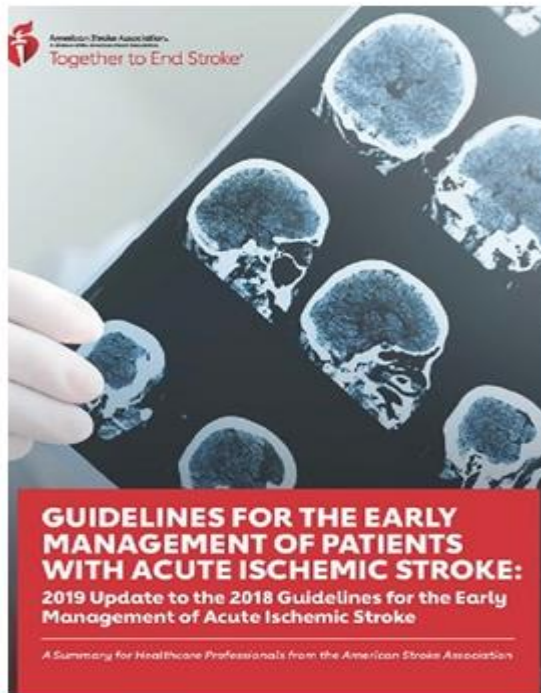
Post-Stroke Care

<https://www.stroke.org/en/professionals/stroke-resource-library>

# PROFESSIONAL RESOURCES

- **ACUTE ISCHEMIC STROKE HEALTHCARE PROFESSIONAL RESOURCES**

[HTTPS://WWW.STROKE.ORG/EN/PROFESSIONALS/STROKE-RESOURCE-LIBRARY/ACUTE-ISCHEMIC-STROKE-HEALTHCARE-PROFESSIONAL-RESOURCE-PAGE](https://www.stroke.org/en/professionals/stroke-resource-library/acute-ischemic-stroke-healthcare-professional-resource-page)



Stroke Resource Library

Prevention

Order American Stroke Association Educational Brochures

Prehospital/EMS

Rectangular Snip

Acute Treatment

Acute Ischemic Stroke Toolkit

Acute Ischemic Stroke Healthcare Professional Resources

Post Stroke Care

Spasticity Resources

Adult Stroke Rehabilitation and Recovery Audiocast Series

Rectangular Snip

Stroke Resources in Spanish

# STROKE RESOURCES FOR HEALTHCARE PROFESSIONALS

- [www.heart.org/targetstroke](http://www.heart.org/targetstroke)–Best practices for reducing door-to-needle times
- [www.heart.org/quality](http://www.heart.org/quality)–AHA quality programs
- [www.strokeassociation.org/CS](http://www.strokeassociation.org/CS)–Cryptogenic Stroke Materials
- [www.coverdellwi.org](http://www.coverdellwi.org)



# Get With The Guidelines<sup>®</sup> - Stroke Clinical Tools Library

## Supporting Guidelines

- Scientific Rationale for the Inclusion and Exclusion Criteria for Intravenous Alteplase in Acute Ischemic Stroke
- Guidelines for Adult Stroke Rehabilitation and Recovery
- 2015 AHA/ASA Focused Update of the 2013 Guidelines for the Early Management of Patients With Acute Ischemic Stroke Regarding Endovascular Treatment
- Guidelines for the Primary Prevention of Stroke
- Guidelines for the Prevention of Stroke in Patients With Stroke and Transient Ischemic Attack
- Guidelines for the Prevention of Stroke in Women
- Interactions Within Stroke Systems of Care
- Guidelines for the Early Management of Patients With Acute Ischemic Stroke

Rectangular Snip

<https://www.heart.org/en/professional/quality-improvement/get-with-the-guidelines/get-with-the-guidelines-stroke/get-with-the-guidelines-stroke-clinical-tools>



# QUESTIONS & CONTACT INFORMATION



**Susan Abelt, MS**

Quality Improvement Manager

Quality, Outcomes Research & Analytics-  
National Center

American Heart Association

[susan.abelt@heart.org](mailto:susan.abelt@heart.org)

**THANK YOU FOR ALL THE WORK YOU DO EACH & EVERY DAY!**

**You are Improving the Quality of Care for your Stroke Patients!**

