



GET WITH THE GUIDELINES-STROKE UPDATE

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OVERVIEW

STROKE SYSTEM OF CARE PLAN

HIGHLIGHT GWTG-STROKE MEASURES

HIGHLIGHT PARTICIPATING HOSPITALS

REVIEW GWTG-STROKE DATA (2010-2017)

SHARE GWTG-STROKE DATA OPPORTUNITIES

NORTH CAROLINA STROKE SYSTEM OF CARE PLAN (2010)

PREVENTION & PUBLIC AWARENESS

PRE-HOSPITAL CARE

ACUTE/SUBACUTE CARE

RECOVERY/TRANSITIONS OF CARE

TELESTROKE



GWTG-STROKE MEASURES

Achievement Measures:

IV rt-PA arrive by 2 hour, treat by 3 hour

Early antithrombotics

VTE prophylaxis

Antithrombotics

Anticoagulation for AFib/Aflutter

Smoking cessation

Statin at discharge

Quality Measures:

Dysphagia screen

Time to intravenous thrombolytic therapy (60 min)

IV rt-PA arrive by 3.5 hour, treat by 4.5 hour

NIHSS reported

Stroke education

Rehabilitation considered

LDL documented

Intensive Statin Therapy



ADDITIONAL MEASURES

Smoking cessation

Anticoagulation for AFib/Flutter

Statin prescribed at discharge

Stroke education

Rehabilitation considered

% Door to CT \leq 25 min

Pre-notification

Reasons for delay beyond 60 min

Reasons for no IV rt-PA

MER for Eligible Patients with Ischemic Stroke

Door to start of revascularization in 120 min

Door to Puncture Times

90-Day Modified Rankin Scores

Diabetes teaching

Modified Rankin at discharge

PARTICIPATING HOSPITALS

- Over 2,700 hospitals participate in one or more of our quality improvement programs
- Get With The Guidelines-Stroke contains over 5 Million patient records

	2010	2018
# of NC Hospitals Participating in GWTG-Stroke	25	68
# of NC Hospitals with some level of stroke certification	23	50



GWTG-STROKE DATA PRESENTATION

HIGHLIGHTED GOALS FROM THE STROKE SYSTEM OF CARE PLAN

- Increase advanced notification by ems
- Decrease time to intravenous thrombolytic therapy
- Identify stroke centers and stroke capable hospitals

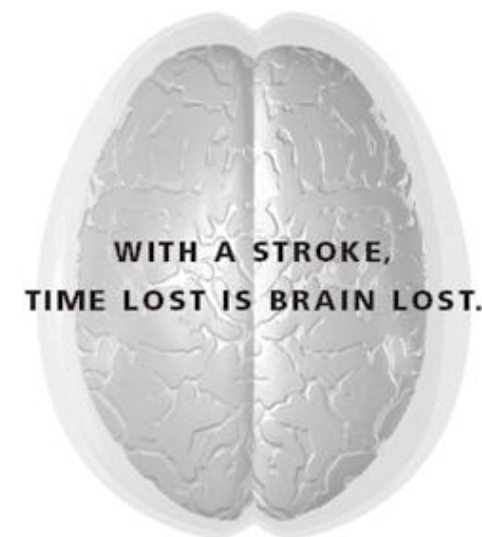
REVIEWED ASSOCIATED GWTG-STROKE MEASURES

- Arrival Mode (2010, 2017)
- Advanced notification for patients transported by EMS (2010-2017)
- IV rt-PA Arrive by 2 Hour, Treat by 3 Hour (2010-2017)
- Time to Thrombolytic Therapy - 60 min (2010-2017)
- Time to Thrombolytic Therapy - 45 min (2015-2017)
- Time to Intravenous Thrombolytic Therapy Times (Median) (2010-2017)



TARGET: STROKE

- **Phase I** launched in 2009 to increase the number of eligible ischemic stroke patients receiving IV rt-PA in **60 minutes** or less to 50% or more.
- **Phase II** launched in 2015 to increase the number of eligible ischemic stroke patients receiving IV rt-PA in **45 minutes** or less to 50% or more.
- **Phase III** is coming soon!





TARGET: STROKE SUCCESS IN NORTH CAROLINA

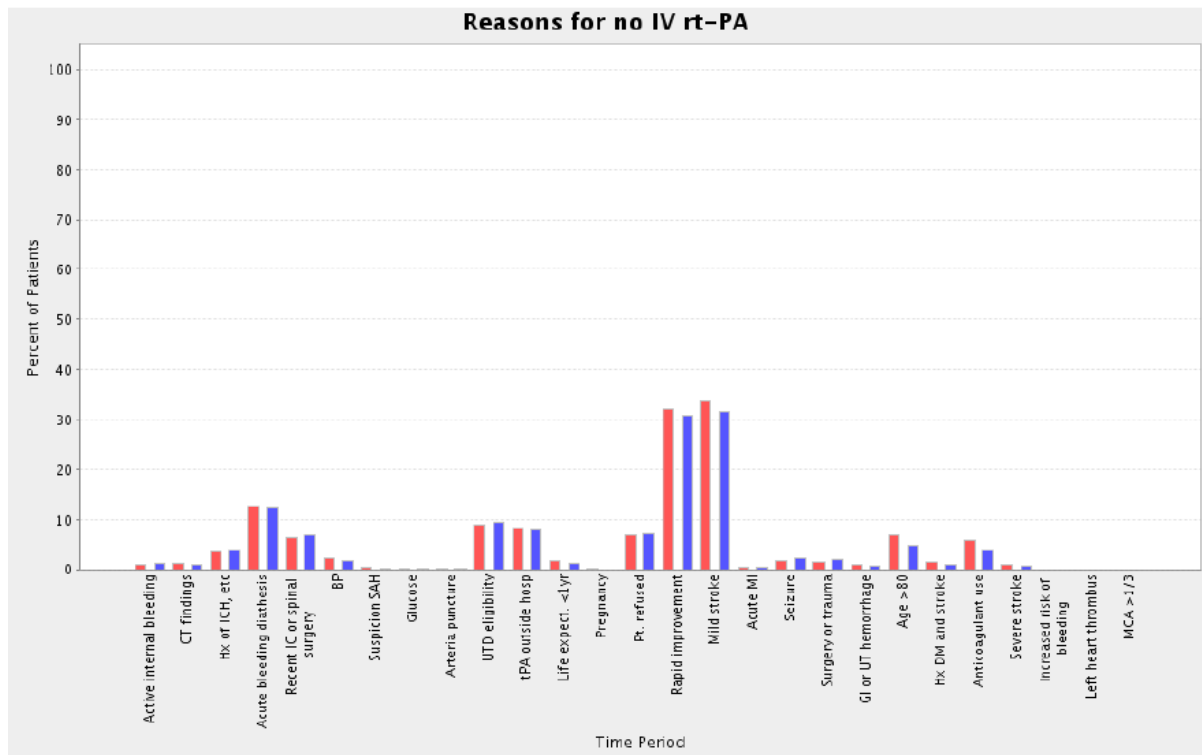
In 2018, of those 68 hospitals participating in Get With The Guidelines-Stroke:

- **37 hospitals** met the goal of time to thrombolytic therapy in ≤ 60 min for at least 50% of patients
- **27 hospitals** met the goal of ≤ 60 min for at least 75% of patients
- **17 hospitals** met the goal of ≤ 60 min for at least 75% of patients **and** ≤ 45 min in at least 50% of patients



REASONS FOR NO IV rt-PA

- Unable to Determine Eligibility
- Rapid Improvement
- Mild Stroke



3.5. IV Alteplase (Continued)	COR	LOE	New, Revised, or Unchanged
3. For otherwise eligible patients with mild stroke presenting in the 3- to 4.5-hour window, treatment with IV alteplase may be reasonable. Treatment risks should be weighed against possible benefits.	Ib	B-NR	New recommendation.

GOAL: IDENTIFY STROKE CENTERS AND STROKE CAPABLE HOSPITALS

Certified Stroke Centers in North Carolina

Certification	# Hospitals 2010	# Hospitals 2018**
Acute Stroke Ready Hospital (launched in 2015)	0	5
Primary Stroke Center	23*	37
Thrombectomy-Capable Stroke Center (launched in 2018)	0	0
Comprehensive Stroke Center (launched in 2013)	0	8

* Source: A Summary of Primary Stroke Center Policy in the United States, CDC: https://www.cdc.gov/dhdsp/pubs/docs/Primary_Stroke_Center_Report.pdf

** Data as of 8/10/2018. Sources: [The Joint Commission](#), [DNV](#).



AHA/TJC STROKE CERTIFICATION PROGRAM COMPARISON



Stroke Certification Programs – Program Concept Comparison



Program Concept	ASRH	PSC	TSC	CSC
Eligibility	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care.	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care.	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care. Organization must have performed mechanical thrombectomy and post-procedure care for at least 15 patients with ischemic stroke over the past 12 months (or 30 over past 24 months). Neurointerventionists who routinely take call to perform mechanical thrombectomy must: -Be CAST certified; OR -Completed ACGME/Equivalent residency in neurosurgery/neurology/radiology; -Completed ACGME/CAST/UCNS/Equivalent stroke/neurocritical care/neuroradiology fellowship; -Completed neuroendovascular training (CAST accredited or similarly rigorous program); -Performed 15 mechanical thrombectomies over the past 12 months (or 30 over past 24 months) (procedures performed at hospitals other than the one applying for TSC certification can be included)	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care. Treatment of 20 SAH caused by aneurysm annually (40 over 2 years) Capable of treating aneurysms by performing 15 endovascular coiling or microsurgical clipping procedures annually (30 over 2 years) Administering IV thrombolytic therapy 25 times annually (50 times over 2 years) **CSCs will be required to meet a minimum mechanical thrombectomy volume for eligibility in the future**
Program Medical Director	Sufficient knowledge of cerebrovascular disease	Sufficient knowledge of cerebrovascular disease	Neurology background with ability to provide clinical and administrative guidance to program	Has extensive expertise; available 24/7
Acute Stroke Team	Available 24/7, at bedside within 15 minutes	Available 24/7, at bedside within 15 minutes	Available 24/7, at bedside within 15 minutes	Available 24/7, at bedside within 15 minutes
Emergency Medical Services Collaboration	Access to protocols used by EMS	Access to protocols used by EMS	Access to protocols used by EMS, routing plans; records from transfer	Access to protocols used by EMS, routing plans; records from transfer
Stroke Unit	No designated beds for acute care of stroke patients	Stroke unit or designated beds for the acute care of stroke patients	Dedicated neuro intensive care beds for complex stroke patients available 24/7; on-site critical care coverage 24/7	Dedicated neuro intensive care beds for complex stroke patients available 24/7; on-site neurointensivist coverage 24/7
Initial Assessment of Patient	Emergency Department physician, nurse practitioner, or physician assistant	Emergency Department physician	Emergency Department physician	Emergency Department physician
Diagnostic Testing Capability	CT, labs 24/7 (MRI 24/7 if used)	CT, MRI (if used), labs 24/7; CTA and MRA (to guide treatment decisions), at least one modality for cardiac imaging when necessary	CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE as indicated	CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE, TTE as indicated
Neurologist Accessibility	24/7 via in person or telemedicine	24/7 via in person or telemedicine	24/7 via in person or telemedicine; written call schedule for attending physicians providing availability 24/7	Meets concurrently emergent needs of multiple complex stroke patients; Written call schedule for attending physicians providing availability 24/7

This grid is only a comparison of program requirements and should not be relied upon in lieu of reading a program manual. © Copyright 2018 The Joint Commission. The Stroke Certification Programs – Program Concept Comparison is used by American Heart Association/American Stroke Association with permission. Current as of 01/05/18





ADDITIONAL DATA OPTIONS

Telestroke Data Elements

Referring / Receiving Hospital Details

Pre-Hospital Data Elements

Benchmarking



TELESTROKE DATA ELEMENTS (LAUNCHED IN 2017)

- **WAS TELESTROKE CONSULTATION PERFORMED? (NEW OPTIONS)**
 - 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
- **IF YES, SELECT DELIVERY METHOD:**
 - Interactive Video
 - Teleradiology
 - Telephone Call

IF YES, ENTER DATE / TIME OF FIRST CONTACT WITH TELESTROKE PROVIDER



NEW! CAPTURE REFERRING AND RECEIVING HOSPITAL DETAILS

- IF PATIENT TRANSFERRED FROM YOUR ED TO ANOTHER HOSPITAL, SPECIFY NAME:
- REASON WHY PATIENT TRANSFERRED:

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

Not Admitted:
 Yes, not admitted
 No, patient admitted as inpatient
 Transferred from your ED to another acute care hospital
 Discharged directly from ED to home or other location that is not an acute care hospital
 Left from ED AMA

Reason Not Admitted:
 Died in ED
 Discharged from observation status without an inpatient admission
 Other

2 new fields

If patient transferred from your ED to another hospital, specify hospital name: 6120030-Concord Hospital
 Hospital Not On The List
 Hospital Not Documented
 Evaluation for IV tPA up to 4.5 hours
 Post Management of IV tPA (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

Select reason(s) for why patient transferred

Discharge Date: MM/DD/YYYY HH:MM
MM DD YYYY HH MI

For patients discharged on or after 04/01/2011: What was the patient's discharge disposition on the day of discharge?
4 Acute Care Facility

If Other Health Care Facility

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

To populate field:

Patients Download Reports Data Upload My Account

Account Information
User Information
View your user information.

Organization Information
View your organization's information.

Change Password
Change your current password.

Manage Code Lists
Manage site-maintained code lists.



NEW! CAPTURE REFERRING AND RECEIVING HOSPITAL DETAILS

- REFERRING HOSPITAL DISCHARGE DATE/TIME
- IF TRANSFER FROM ANOTHER HOSPITAL, SPECIFY NAME:
- REFERRING HOSPITAL ARRIVAL DATE/TIME
- IF PATIENT TRANSFERRED, REASON WHY?

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

Arrival & Admission Information

During this hospital stay, was the patient enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. STK, VTE)? Yes No

Was this patient admitted for the sole purpose of performance of elective carotid intervention? Yes No

Patient location when stroke symptoms discovered: Not in a healthcare setting

How patient arrived at your hospital: EMS from home/scene Mobile Stroke Unit Private transport/taxi/other from home/scene Transfer from other hospital

ND or Unknown

Referring hospital discharge date/time: MM/DD/YYYY HH:MM 11/30/2017 13:17

If transfer from another hospital, specify hospital name: 6110610-York Hospital

Hospital Not On The List

Hospital Not Documented

Referring hospital arrival date/time: MM/DD/YYYY HH:MM 11/30/2017 14:00

If patient transferred to your hospital, select transfer reason(s):

Evaluation for IV tPA up to 4.5 hours

Post Management of IV tPA (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

Added 4 Fields



NEW! PRE-HOSPITAL CARE MEASURES

1. DOOR-IN-DOOR-OUT TIMES AT FIRST HOSPITAL PRIOR TO TRANSFER FOR ACUTE THERAPY (GOAL \leq 60 MINUTES)
2. DOCUMENTATION OF TIME LAST KNOWN WELL OR TIME OF DISCOVERY OF STROKE SYMPTOMS
3. EVALUATION OF BLOOD GLUCOSE
4. IDENTIFICATION OF SUSPECTED STROKES
5. ON-SCENE TIMES FOR SUSPECTED STROKE (GOAL \leq 15 MINUTES)
6. STROKE SCREEN PERFORMED AND REPORTED
7. STROKE SEVERITY SCREEN PERFORMED AND REPORTED
8. TIMES FROM FIRST MEDICAL CONTACT TO THROMBECTOMY FOR ACUTE ISCHEMIC STROKE



IN THE FUTURE: STREAMLINING EMS DATA CAPTURE

GWTG Data Element	NEMESIS v3 Element
Date/Time call received by responding EMS agency	eTimes.03 (Unit Notified by Dispatch Date/Time)
First Medical Contact On-Scene	eTimes.07 (EMS Arrived at Patient Date/Time)
Dispatched as suspected stroke	eDispatch.01 (Complaint Reported by Dispatch) (code 2301067)
Dispatch Unit On-Scene Arrival	eTimes.06 (EMS Unit Arrived On-Scene)
On-Scene Departure	eTimes.09 (EMS Unit Left Scene Date/Time)
Blood Glucose level (mg/dL)	eVitals.18 (Blood Glucose Value)
Last Known Well as Documented by EMS	eSituation.18 (Date/Time last Known Well)
Date/Time pre-notification provided to hospital	eDisposition.25 (Date/Time of Destination Prearrival Alert or Activation)



IN THE FUTURE: NEW PLATFORM



Coronary Artery Disease
Demonstration Hospital

Abby Fairbank



[Collapse](#)

Select Measures

Type to search in list

- (All)
- Achievement Measures

Select Benchmarks

- My Hospital

Display Formats

Bar Chart

Comparison Variables

(None)

Error Bars

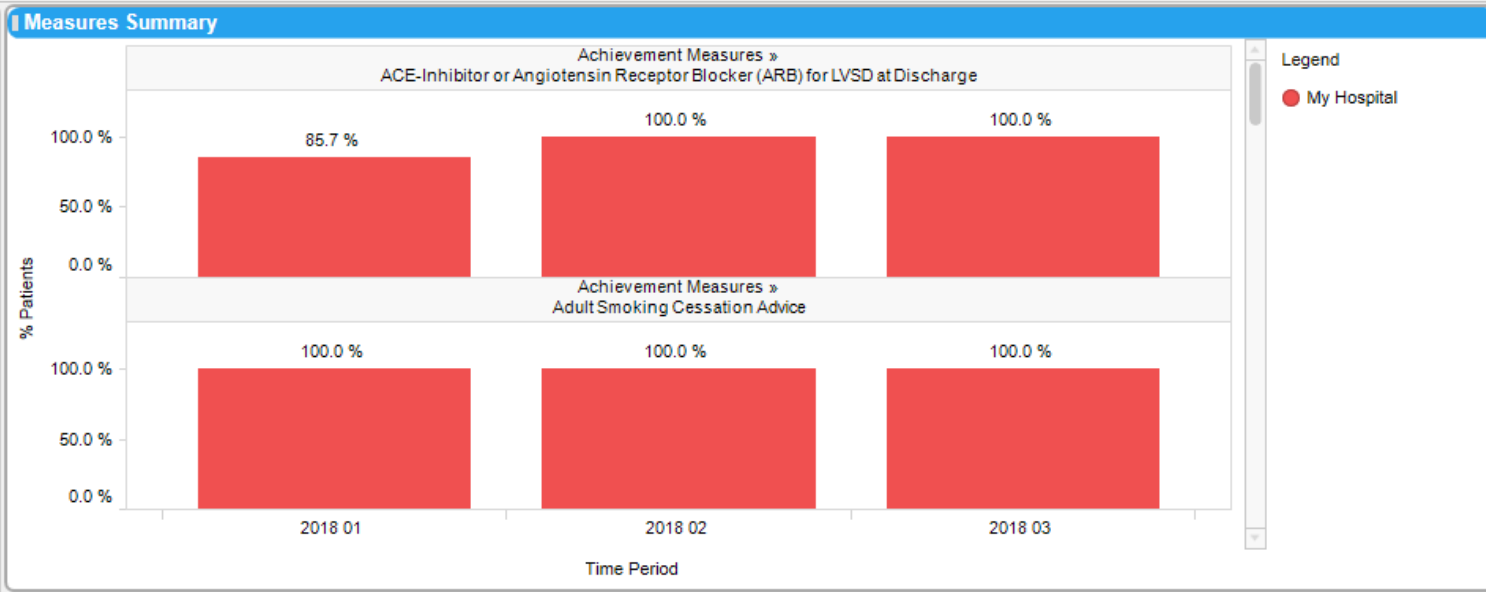
(None)

Display Options

(None)

Percentiles

(None)



Measure Details

Benchmark Group	Measure Group	Measure	Time Period	Total Patients	Numerator	Denominator	Exc
My Hospital	Achievement Measures	ACE-Inhibitor or Angiotensin Receptor Blocker (ARB) for LVSD at Discharge	2018 01	24	6	7	
			2018 02	7	1	1	
			2018 03	10	10	10	

NEXT STEPS

FOR GWTG HOSPITALS:

- ACTIVATE THE TELESTROKE DATA ELEMENTS
- ACTIVATE THE PRE-HOSPITAL DATA ELEMENTS
- SET UP BENCHMARKS FOR YOUR REGION, STROKE SYSTEM OF CARE

FOR NON-GWTG HOSPITALS: LET'S SCHEDULE SOME TIME TO TALK ABOUT HOW GWTG CAN SUPPORT YOUR HOSPITAL AND STROKE SYSTEM OF CARE EFFORTS

FOR THE STATE:

- WHICH DATA POINTS ARE MOST HELPFUL, HOW FREQUENTLY DO WE WANT TO LOOK AT THE DATA AND WHICH MEASURES?
- ARE THERE DATA ELEMENTS THAT WE WANT BUT DO NOT CURRENTLY SEE IN GWTG?



SAVE THE DATE: APRIL 22-26, 2019 IN RALEIGH!

CALL FOR PRESENTERS FOR THE 2019 AHA MID-ATLANTIC HEART & STROKE QUALITY SUMMIT. SUBMIT BY 8/31!

[HTTPS://MIDATLANTIC.HEART.ORG/QUALITYSUMMIT/](https://midatlantic.heart.org/qualitysummit/)

QUESTIONS?

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