GET WITH THE GUIDELINES-STROKE UPDATE

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American Heart Association
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 ≤ 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

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td># of NC Hospitals Participating in GWTG-Stroke</td>
<td>25</td>
<td>68</td>
</tr>
<tr>
<td># of NC Hospitals with some level of stroke certification</td>
<td>23</td>
<td>50</td>
</tr>
</tbody>
</table>
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!
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
# GOAL: IDENTIFY STROKE CENTERS AND STROKE CAPABLE HOSPITALS

## Certified Stroke Centers in North Carolina

<table>
<thead>
<tr>
<th>Certification</th>
<th># Hospitals 2010</th>
<th># Hospitals 2018**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Stroke Ready Hospital (launched in 2015)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Primary Stroke Center</td>
<td>23*</td>
<td>37</td>
</tr>
<tr>
<td>Thrombectomy-Capable Stroke Center (launched in 2018)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Comprehensive Stroke Center (launched in 2013)</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Program Concept</th>
<th>ASRH</th>
<th>PSC</th>
<th>TSC</th>
<th>CSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Director</td>
<td>Sufficient knowledge of cerebrovascular disease</td>
<td>Sufficient knowledge of cerebrovascular disease</td>
<td>Neurology background with ability to provide clinical and administrative guidance to program</td>
<td>Has extensive expertise; available 24/7</td>
</tr>
<tr>
<td>Acute Stroke Team</td>
<td>Available 24/7, at bedside within 15 minutes</td>
<td>Available 24/7, at bedside within 15 minutes</td>
<td>Available 24/7, at bedside within 15 minutes</td>
<td>Available 24/7, at bedside within 15 minutes</td>
</tr>
<tr>
<td>Emergency Medical Services Coordination</td>
<td>Access to protocols used by EMS</td>
<td>Access to protocols used by ED</td>
<td>Access to protocols used by ED, nursing plans; records from transfer</td>
<td>Access to protocols used by ED, nursing plans; records from transfer</td>
</tr>
<tr>
<td>Stroke Unit</td>
<td>No designated beds for acute care of stroke patients</td>
<td>Stroke unit or designated beds for the acute care of stroke patients</td>
<td>Dedicated emergency care beds for complex stroke patients; available 24/7; on-site interventional angioplasty</td>
<td>Dedicated emergency care beds for complex stroke patients; available 24/7; on-site interventional angioplasty</td>
</tr>
<tr>
<td>Initial Assessment of Patient</td>
<td>Emergency department physician, nurse practitioner, or physician assistant</td>
<td>Emergency department physician</td>
<td>Emergency department physician</td>
<td>Emergency department physician</td>
</tr>
<tr>
<td>Diagnostic Testing Capability</td>
<td>CT, MRI (if 24/7, MRI 24/7 if used)</td>
<td>CT, MRI, TGA, and MRA (to guide treatment decisions), at least one scanner for certain imaging when necessary</td>
<td>CT, MRI, TGA, MRI, catheter angioplasty 24/7, other cranial and carotid duplex ultrasound, TEE, TTE as indicated</td>
<td>CT, MRI, TGA, MRA, catheter angioplasty 24/7, other cranial and carotid duplex ultrasound, TEE, TTE as indicated</td>
</tr>
<tr>
<td>Neurological Accessibility</td>
<td>24/7 via in-person or telemedicine</td>
<td>24/7 via in-person or telemedicine; within 24 hours for all scenarios; availability 24/7</td>
<td>24/7 via in-person or telemedicine; within 24 hours for all scenarios; availability 24/7</td>
<td>24/7 via in-person or telemedicine; within 24 hours for all scenarios; availability 24/7</td>
</tr>
</tbody>
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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:

To populate field:

2 new fields
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?

Added 4 Fields
NEW! PRE-HOSPITAL CARE MEASURES

1. DOOR-IN-DOOR-OUT TIMES AT FIRST HOSPITAL PRIOR TO TRANSFER FOR ACUTE THERAPY (GOAL ≤ 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 ≤ 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

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

QUESTIONS?

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