

Get With The Guidelines[®]-Stroke is the American Heart Association's collaborative performance improvement program, demonstrated to improve adherence to evidence-based care of patients hospitalized with stroke.

The program provides hospitals with a Web-based Patient Management Tool™ (powered by Outcome, A Quintiles Company), decision support, a robust registry, real-time benchmarking capabilities and other performance improvement methodologies toward the goal of enhancing patient outcomes and saving lives.

This fact sheet provides an overview of the achievement, quality, descriptive, and reporting measures currently reported on via Get With The Guidelines-Stroke.

Get With The Guidelines-Stroke is for patients with stroke and transient ischemic attack (TIA).

The following is a list of the common stroke-related diagnoses included in Get With The Guidelines-Stroke: 430; 431; 432.9; 433.00; 433.01; 433.10; 433.11; 433.20; 433.21; 433.30; 433.31; 433.80; 433.81; 433.90; 433.91; 434.00; 434.01; 434.10; 434.11; 434.90; 434.91; 435.0; 435.1; 435.2; 435.3; 435.8; 435.9; 436; 671.51; 671.52; 671.53; 671.54; 674.00; 674.01; 674.02; 674.03; 674.04.

STROKE ACHIEVEMENT MEASURES

ACUTE:

- **IV rt-PA arrive by 2 hour, treat by 3 hour:** Percent of acute ischemic stroke patients who arrive at the hospital within 120 minutes (2 hours) of time last known well and for whom IV t-PA was initiated at this hospital within 180 minutes (3 hours) of time last known well.

Corresponding measure available for inpatient stroke cases

- **Early antithrombotics:** Percent of patients with ischemic stroke or TIA who receive antithrombotic therapy by the end of hospital day two.

Corresponding measure available for inpatient stroke cases

- **VTE prophylaxis:** Percent of patients with ischemic stroke, hemorrhagic stroke, or stroke not otherwise specified who receive VTE prophylaxis the day of or the day after hospital admission.

NEW MEASURE

AT OR BY DISCHARGE:

- **Antithrombotics:** Percent of patients with an ischemic stroke or TIA prescribed antithrombotic therapy at discharge. *Corresponding measure available for inpatient stroke cases*
- **Anticoag for AFib/Aflutter:** Percent of patients with an ischemic stroke or TIA with atrial fibrillation/flutter discharged on anticoagulation therapy. *Corresponding measure available for inpatient stroke cases*
- **Smoking cessation:** Percent of patients with ischemic or hemorrhagic stroke, or TIA with a history of smoking cigarettes, who are, or whose caregivers are, given smoking cessation advice or counseling during hospital stay. *Corresponding measure available for inpatient stroke cases*

- **LDL 100 or ND - Statin:** Percent of ischemic stroke or TIA patients with LDL \geq 100, or LDL not measured, or on cholesterol-reducer prior to admission who are discharged on statin medication.

Corresponding measure available for inpatient stroke cases

COMPOSITE AND DEFECT FREE MEASURES:

- **GWTG/PAA Composite Measure:** The composite quality of care measure indicates how well the healthcare system does to provide appropriate, evidence-based interventions for each patient.
- **GWTG/PAA Defect-Free Measure:** Defect-free measure gauges how well your hospital did in providing all the appropriate interventions to every patient.

STROKE QUALITY MEASURES

ACUTE:

- **Dysphagia screen:** Percent of stroke patients who undergo screening for dysphagia with an evidence-based bedside testing protocol approved by the hospital before being given any food, fluids, or medication by mouth. *Corresponding measure available for inpatient stroke cases*
- **Time to intravenous thrombolytic therapy:** Percent of acute ischemic stroke patients receiving intravenous tissue plasminogen activator (tPA) therapy during the hospital stay who have a time from hospital arrival to initiation of thrombolytic therapy administration (door-to-needle time) of 60 minutes or less.

NEW MEASURE

Corresponding measure available for inpatient stroke cases

- **IV rt-PA arrive by 3.5 hour, treat by 4.5 hour:** Percent of acute ischemic stroke patients who arrive at the hospital within 210 minutes (3.5 hours) of time last known well and for whom IV t-PA was initiated at this hospital within 270 minutes (4.5 hours) of time last known well.

Corresponding measure available for inpatient stroke cases

- **NIHSS reported:** Percent of ischemic stroke and stroke not otherwise specified patients with a score reported for NIH Stroke Scale (Initial).

Corresponding measure available for inpatient stroke cases

AT OR BY DISCHARGE:

- **Stroke education:** Percent of patients with stroke or TIA or their caregivers who were given education and/or educational materials during the hospital stay addressing ALL of the following: personal risk factors for stroke, warning signs for stroke, activation of emergency medical system, need for follow-up after discharge, and medications prescribed.

Corresponding measure available for inpatient stroke cases

- **Rehabilitation considered:** Percent of patients with stroke who were assessed for rehabilitation services.

Corresponding measure available for inpatient stroke cases

- **LDL documented:** Percent of ischemic stroke or TIA patients with a documented lipid profile.

Corresponding measure available for inpatient stroke cases

- **Intensive Statin Therapy:** Percent of ischemic stroke and TIA patients who are discharged with intensive statin therapy. *Corresponding measure available for inpatient stroke cases*

COMPOSITE AND DEFECT FREE MEASURES:

- **CDC/COV Composite:** The composite quality of care measure indicates how well the healthcare system does to provide appropriate, evidence-based interventions for each patient.
- **CDC/COV Defect-Free:** Defect-free measure gauges how well your hospital did in providing all the appropriate interventions to every patient.

STROKE REPORTING MEASURES

ACUTE:

- **% No IV tPA 3 hour (Contra/Warning):** Percent of eligible acute ischemic stroke patients not treated with IV t-PA at my hospital who had reasons for not receiving IV t-PA.
- **% No IV tPA 4.5 hour (Contra/Warning):** Percent of eligible acute ischemic stroke patients not treated with IV t-PA at my hospital who had reasons for not receiving IV t-PA.
- **Complication types:** Types of bleeding complications seen with thrombolytic therapies received by ischemic stroke patients at my hospital.
- **Door to CT <3 hour:** Time from triage (ED arrival) to initial imaging work-up for all patients who arrive < 3 hours from time last known well.

Corresponding measure available for inpatient stroke cases

- **Door to CT <4.5 hour:** Time from triage to initial imaging work-up for all patients who arrive within 4.5 hours from time last known well.

- **Door to CT <8 hour:** Time from triage to initial imaging work-up for all patients who arrive within 8 hours from time last known well.

- **% Door to CT ≤ 25 minutes:** Percent of patients who receive brain imaging within 25 minutes of arrival.

Corresponding measure available for inpatient stroke cases

- **Door to IV rt-PA in 60 minutes (Historic-Quality):** Percent of ischemic stroke patients receiving IV t-PA at your hospital who are treated within 60 minutes after triage (ED arrival). **TARGET: STROKE MEASURE**

- **Door to IV rt-PA times:** Time from triage (ED arrival) to administration of IV t-PA for ischemic stroke patients treated at my hospital.

- **DVT prophylaxis (GWTG-Historic):** Percent of patients with an ischemic stroke, or a hemorrhagic stroke, or stroke not otherwise specified and who are non-ambulatory who receive DVT prophylaxis by end of hospital day two.

- **EMS:** Patients grouped by how they arrived at your hospital.

- **IV rt-PA arrive by 3 hour, treat by 3 hour:** Percent of acute ischemic stroke patients who arrive at the hospital within 180 minutes (3 hours) of time last known well and for whom IV t-PA was initiated at this hospital within 180 minutes (3 hours) of time last known well.

- **IV rt-PA arrive by 4.5 hour, treat by 4.5 hour:** Percent of acute ischemic stroke patients who arrive at the hospital within 270 minutes (4.5 hours) of time last known well and for whom IV t-PA was initiated at this hospital within 270 minutes (4.5 hours) of time last known well.

- **Last known well to arrival times:** Time from last known well to ED arrival at your hospital.

Corresponding measure available for inpatient stroke cases

- **Last known well to IV rt-PA times:** Time from symptom onset to administration of IV t-PA for ischemic stroke patients treated at my hospital.

- **Missing time data:** Missing, incomplete, or invalid date/time data for ischemic stroke patients.

- **Not admitted:** Patients grouped by reasons why they were not admitted.

- **Pre-notification:** Percent of cases of advanced notification by EMS for patients transported by EMS from scene.

- **Reasons for no IV rt-PA (Contra/Warning):** Reasons why eligible acute ischemic stroke patients were not treated with IV t-PA at my hospital.

- **Reasons for no IV tPA (Hospital-Related):** Reasons why eligible acute ischemic stroke patients were not treated with IV t-PA at my hospital.

- **Thrombolytic complications:** Percent of ischemic stroke patients with bleeding complications to thrombolytic therapy received at my hospital.

- **Thrombolytic therapies:** A histogram of the various thrombolytic therapies.

AT OR BY DISCHARGE:

- **Antihypertensives:** Rate of prescription of different types of anti-hypertensive medications at discharge for ischemic stroke or TIA patients.
 - **Antithrombotic medication(s) at discharge:** Patients grouped by antithrombotic medication prescribed at discharge.
 - **Discharge disposition:** Patients grouped by discharge disposition.
 - **Diabetic medications:** Percent of patients who have diabetes mellitus or are taking diabetic medication prior to admission who are discharged on diabetic medication.
 - **Diabetes teaching:** Percent of diabetic patients or newly-diagnosed diabetics receiving diabetes teaching at discharge.
 - **Diabetes treatment:** Percent of diabetic patients or newly-diagnosed diabetics receiving diabetes treatment in the form of glycemic control (diet and/or medication) at discharge.
 - **In-hospital mortality:** In-hospital mortality.
 - **LDL 100:** Percent of ischemic stroke or TIA patients with LDL \geq 100 or on cholesterol-reducer prior to admission, who are discharged on cholesterol reducing drugs.
 - **Modified Rankin Scale at discharge:** Patients grouped by Modified Rankin Scale at discharge.
- NEW MEASURE**
- **Weight recommendation:** Percent of ischemic stroke or TIA patients with BMI \geq 25 kg/m² who receive recommendations at discharge for reducing weight and/or increasing activity.

STROKE DESCRIPTIVE MEASURES

- **Age:** Patients grouped by age.
- **Diagnosis:** Patients grouped by final clinical diagnosis related to stroke.
- **Dysphagia screening results:** Patients grouped by dysphagia screening results.
- **Gender:** Percent of female, male, and unknown patients.
- **Initial exam findings:** Patients grouped by initial exam findings.
- **LOS:** Length of Stay, grouped by diagnosis.
- **Medical History:** A histogram of previously known medical history.
- **Race:** Patients grouped by race and Hispanic ethnicity.
- **Risk-Adjusted Mortality Ratio (Ischemic-Only model):** A ratio comparing the actual in-hospital mortality rate to the risk-adjusted expected mortality rate. A ratio equal to 1 is interpreted as no difference between the hospital's mortality rate and the expected rate. A ratio greater than 1 indicates that the hospital's mortality rate is higher than the expected rate. A ratio of less than 1 indicates that the hospital's mortality rate is lower than the expected rate.

- **Risk-Adjusted Mortality Ratio (Ischemic and Hemorrhagic model):** A ratio comparing the actual in-hospital mortality rate to the risk-adjusted expected mortality rate. A ratio equal to 1 is interpreted as no difference between the hospital's mortality rate and the expected rate. A ratio greater than 1 indicates that the hospital's mortality rate is higher than the expected rate. A ratio of less than 1 indicates that the hospital's mortality rate is lower than the expected rate.
- **Symptom duration if diagnosis of TIA:** TIA patients grouped by symptom duration.

**THE JOINT COMMISSION (TJC)/
PRIMARY STROKE CENTER (PSC)/
STROKE CORE MEASURES**

- **STK -1:** Ischemic and hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission.
- **STK-2:** Ischemic stroke patients prescribed antithrombotic therapy at hospital discharge.
- **STK-3:** Ischemic stroke patients with atrial fibrillation/flutter who are prescribed anticoagulation therapy at hospital discharge.
- **STK-4:** Acute ischemic stroke patients who arrive at this hospital within 2 hours of time last known well and for whom IV t-PA was initiated at this hospital within 3 hours of time last known well.
- **STK-5:** Ischemic stroke patients administered antithrombotic therapy by the end of hospital day 2.
- **STK-6:** Ischemic stroke patients with LDL greater than or equal to 100 mg/dL, or LDL not measured, or who were on a lipid-lowering medication prior to hospital arrival are prescribed statin medication at hospital discharge.
- **STK-8:** Ischemic or hemorrhagic stroke patients or their caregivers who were given educational materials during the hospital stay addressing all of the following: activation of emergency medical system, need for follow-up after discharge, medications prescribed at discharge, risk factors for stroke, and warning signs and symptoms of stroke.
- **STK-10:** Ischemic or hemorrhagic stroke patients who were assessed for rehabilitation services.

HOW ACHIEVEMENT AND QUALITY MEASURES ARE DETERMINED

Achievement and quality measures provide the basis for evaluating and improving treatment of stroke patients based on scientific evidence. Formulating those measures begins with a detailed review of stroke guidelines. Reporting and descriptive measures help sites to interpret their results on the achievement and quality measures by focusing on intermediate process steps, sub-populations of patients or emerging measures of care delivery.

When evidence for a process or aspect of care is so strong that failure to act on it reduces the likelihood of an optimal patient outcome, an achievement measure may be developed regarding that process or aspect of care. Achievement measure data are continually collected and results are monitored over time to determine when new initiatives or revised processes should be incorporated. As such, achievement measures help speed the translation of strong clinical evidence into practice.

In order for participating hospitals to earn recognition for their achievement in the program, they must adhere to achievement measures.

Quality measures apply to processes and aspects of care that are strongly supported by science. Application of quality measures may not, however, be as universally indicated as achievement measures.

The Get With The Guidelines team follows a strict set of criteria in creating achievement and quality measures. We make every effort to ensure compatibility with existing performance measures from other organizations.

GET WITH THE GUIDELINES–STROKE AWARDS: RECOGNITION FOR YOUR PERFORMANCE

Hospital teams that participate actively and consistently in Get With The Guidelines-Stroke get more than a pat on the back. They're rewarded with public recognition that helps hospitals hone a competitive edge in the marketplace by providing patients and stakeholders with tangible evidence of their commitment to improving quality care.

Silver, Gold, Silver Plus and Gold Plus award-winning Get With The Guidelines-Stroke hospitals are honored at national recognition events during the International Stroke Conference and listed by name in advertisements that appear annually in the journal *Stroke* and in the "Best Hospitals" issue of U.S. News & World Report. Moreover, all award-winning hospitals are provided with customizable marketing materials they can use to announce their achievements locally.

TARGET: STROKESM

Stroke kills more than 133,000 people each year and is a leading cause of serious, long-term disability. The outcome depends in large part on how and when the patient is treated. For every eight patients treated with intravenous thrombolysis, one additional patient returns to living a normal life. And the sooner, the better, since reducing the time between emergency department arrival and IV thrombolysis improves each patient's odds of a good outcome. The American Stroke Association is ready to help you make that happen through our new campaign, Target: Stroke.

Target: Stroke provides health care professionals with 10 Best Practice Strategies for achieving door-to-needle (DTN) times of 60 minutes or less for ischemic stroke patients. The strategies include protocols, clinical decision support, order sets, guidelines, data measurement tools, feedback processes and other resources for improving and reporting DTN times.

To learn more about Target: Stroke go to www.strokeassociation.org/targetstroke.

STROKE CORE MEASURES

Outcome, A Quintiles Company is a Center for Medicare and Medicaid Services (CMS) approved vendor. As a Get With The Guidelines-Stroke participating hospital, you may choose to use Outcome to submit for stroke core measures (additional fees apply). Contact the Help Desk for additional information at 888-526-6700.

Visit heart.org/quality for more information.

Web-based Patient Management Tool™ provided by Outcome, A Quintiles Company, Cambridge, Mass.