1. **What is the definition of "stroke population"?**

The stroke population is defined by the organization and protocols are built around that population. For example: the organization may look at hospital admission data to identify the types of strokes commonly received at the hospital. The hospital will then develop protocols based on that population’s clinical need. A spoke hospital may utilize partnering hospitals to assist in the development of protocols and transfer agreements.

2. **Standard 01.00.01 What is the role of the Core Stroke Leaders and how does it differ from the Acute Stroke Response Team?**

The **Core Stroke Leaders** are designated by the governing body of the hospital that includes a minimum of two people – one being the physician who serves as Stroke Service Director.

The core stroke leaders are responsible for the review of the stroke protocols at least annually (and revision as necessary), including a review of the number and types of stroke patients, nature of any complications of thrombolytic therapy, compliance with certification requirements, Stroke QAPI and performance measures and the design/delivery of policy and competency driven education.

The **Acute Stroke Response Team** means physician(s) and other health care professionals, e.g., nurse, physician's assistant, or nurse practitioner with stroke expertise who are available to respond and evaluate patients presenting with acute stroke symptoms (the composition of the response "team" is further defined by each hospital).

3. **Standard 02.04.04 What is required for the Acute Stroke Response Team Protocols?**

- Identification of the Acute Stroke Response Team, e.g., members, qualifications and availability.
- Responsibilities of team members.
- The process to promptly notify and activate the Acute Stroke Response Team.
- Acute Stroke Response Team member guidelines on evaluation, identification and initial management of patients with acute stroke symptoms.

4. **If telemedicine does the initial evaluation is a neurologist required to be at the bedside or does an ED physician qualify?**

In the **Primary Stroke** setting it is a requirement to have a physician present at the bedside. There is no restriction on the specialty of the physician: it may be internal medicine, neurology, ED for example.

In the event that the physician is not able to be physically present due to being ‘caught up’ in another situation or during the night duty hours, it is acceptable to have a telemedicine consult at the bedside.

In the **Stroke Ready** setting it is acceptable to have a telemedicine consult at the bedside anytime of the day or night.
5. For rural Stroke Ready centers can the EDMD from the telemedicine serve as medical director and get radiology read on CT in the 45 minute window - Then send to the nearest Primary stroke center or Comprehensive stroke center?

Yes, the role of the medical director may be via telemedicine in the event that no physician is onsite.

6. Standard 02.00.05 Laboratory Services: If we have an accurate way of evaluating blood glucose within 45 minutes and meet that turn-around times (TAT), we meet the standard?

This is the essential minimum along with INR, PT & PTT (if clinically indicated) and additional labs determined by stroke protocol / physician order.

7. Standard 02.00.05 We need to have a commitment letter from the Lab Director that Lab will meet the 45 minute standard 24/7 for Blood Glucose and "other labs" that we designate as necessary in our policy?

Correct

8. Laboratory Services: Other lab-we can determine our acceptable turn-around times for other emergency labs?

Your organization determines ‘additional’ labs, however the TAT for these labs, is surveyed according to best practice guidelines. Refer to the AHA/ASA’s most recent guidelines, note that page 12, and table 8 states “Immediate Diagnostic Tests.”

Whilst this document provides no clear reference of time, the recommendation for TAT has not changed from 45 minutes referenced in the attached Target Stroke Campaign Manual.

9. Standard 02.00.06B states “AHA/ASA guidelines recommend door to drug (≤80% compliance) within 60 minutes”, yet Get with the Guidelines are working toward 50%.

The revised Primary Stroke standards were reviewed to reflect current best practice and clinical guidelines. The recent changes reference AHA/ASA DTN time (within 60 minutes) compliance of 80%, this recommendation was incorporated into our newly required measure – and with all our measures the benchmark was set at 85%.

Hospitals participating in Get With The Guidelines have a current Target Stroke Campaign are working towards a goal of at least 50% (Door-To-Needle IVtPA within 60 minutes).

HFAP acknowledges that 85% appears to be a high benchmark which may be difficult for hospitals to achieve at this stage. The target stroke campaign which enlists hospital to reach for 50% is supported as a step forward. Hospitals working towards the 50% goal will be supported in this achievement.
10. The 3 hour window was not met however the 3-4.5 hour window was met. How is this reflected in the QI submission? Is it not applicable in the 3 hour category and reflected in the 3-4.5 hour window? The eligible but did not receive t-PA worksheet does not seem appropriate related to the t-PA administration.

**Standard 02.00.06B states:** The Primary Stroke Center establishes a goal for “Door – to – Needle” time for administration of t-PA within three (3) hours of symptom onset.

**Measure SM-5 states:** Acute ischemic stroke patients who arrive at this hospital within 2 hours (120 minutes) of time last known well and for whom IV t-PA was initiated at this hospital within 3 hours of time last known well.

**Measure SM-14 denominator inclusion states:** All acute ischemic stroke patients who received intravenous thrombolytic therapy within 4.5 hours of symptom onset.

**Manual development background:**

Standard 02.00.06B and SM-5 are in reference to CMS measure requirements. The manual and measure was based on CMS guidelines because at the end of the day, when 2015 arrives, CMS reimburse based on that measure.

Secondly, the 4.5 hour window has NOT yet been approved by the FDA. HFAP standards must reflect the highest governing body which includes: 1) CMS and; 2) FDA; while the AHA/ASA develop best practice guidelines, they are not a regulating body.

HFAP however, acknowledges that clinical practice guidelines recommend 4.5 hour window and in acknowledgement of this, SM-14 has been incorporated as a required measure to be collected.

11. We need to continue to track our TAT for labs for those patients who are eligible for tPA but did not receive the tPA and report to the QI-Stroke Committee.

Correct – the reason for these patients who were eligible but did not receive tPA must be considered. Upon closer review, is there a trend of eligible patients not receiving tPA, what is that trend linked to, Is education required? Is there an adequate stock of tPA available, etc.

12. What are the requirements for protocol development?

- The term protocol is defined differently within various organizations. For the purpose of HFAP standards - protocols are determined by the facility and may include policies, procedures, order sets, critical pathways, algorithms, etc.
- Must be available in the Emergency Department (ED) and other areas that evaluate and treat patients with acute stroke.
- Be reviewed and revised as necessary and at least annually.
- Jointly developed by hospitals that routinely transfer and/or receive patients.
13. Standard 02.02.01 What are the guidelines for program design?

Program design is promoted through the development and use of protocols / policies / procedures. Hospitals must develop and implement written care protocols for the management and monitoring of ischemic stroke, hemorrhagic stroke and other (determined by facility) that are based on current clinical guidelines and/or developed by a multidisciplinary team organized by the Stroke Service.

- Hospitals identify and define their stroke population and develop protocols to meet the needs of that population.
- Telemedicine / Teleradiology Services, if applicable, are credentialed and include a notification system, physician responsibilities and availability.
- Stroke protocols require a triage plan, which includes (but not limited to): patient assessment, pre-incident history, etc. Initial and ongoing patient clinical assessments with the use of formal stroke scale or scoring system, such as the National Institute of Health Stroke Scale (NIHSS). Assessments include (but not limited to): stabilization of vital functions, ongoing monitoring, management of increased intracranial pressure and blood pressure.
- Systems are in place to promptly perform initial diagnostic tests, such as laboratory, brain computed tomography (CT) or magnetic resonance imaging (MRI), laboratory, electrocardiograms and chest x-rays as ordered.
- Use of medications, including but not limited to intravenous tissue-type plasminogen activator (IV tPA), the protocols include eligibility criteria (contraindications/warnings), management of complications and post-thrombolysis management.
- Post hospital care coordination including assessments, education, referral and follow-up.
- Patient/Family Education, e.g., potential complications, diagnostic testing, risk/benefits of treatment, risk factor and lifestyle modifications, warning signs and symptoms of stroke.

14. Does standard 02.04.03 Clinical Deterioration refer to in-patients or ED patients or both?

This standard relates to both the inpatient population and those that present to the emergency department.

15. Standard 02.04.01 What are the requirements for EMS integration?

- A written plan for transporting and receiving patients with acute stroke symptoms.
- Lines of communication, to notify the hospital emergency department of incoming patient to allow the Emergency Department (ED) to more efficiently prepare for patient arrival.
- The written agreement is attached to EMS guidelines on evaluation, identification and initial EMS management of patients with stroke symptoms.
16. What if our EMS region prohibits EMS pre-hospital notification of impending stroke arrival?

It is essential for hospitals to determine what their EMS region limitations are around pre-hospital notification and patient care and routing.

- If your EMS region has any limitations, or a policy by which they do not pre-notify hospitals it is important to convey this at the opening conference - day of the onsite review.
- If your EMS region does not have such a policy, the facility is required to include pre-notification into the service agreement.

17. What is the purpose of EMS involvement in policy development and education?

- Studies have identified two factors that impact pre-hospital delay:
  - Patient transport to the ED by ambulance. It was determined that this group had almost half the pre-hospital delay and three-fourths the delay to CT scan as compared to patients who arrived by other means.
  - Delay in taking action. Studies show that patients who wait 90 minutes from onset of symptoms before calling the EMS might not arrive to the ED in time to be eligible for thrombolytic therapy.
- Integrating with EMS through policy development and educational fosters a working partnership.

18. What is the purpose of the Stroke Ready Transfer Agreement?

Stroke Ready hospitals are required to have working agreements with primary and or comprehensive stroke centers. The purpose is to ensure patients receive higher level of care with access to neurosurgical services.

The transfer agreement engages the primary / comprehensive stroke center in the development of protocols relating to the assessment, diagnosis and management of acute stroke patients.

This engagement facilitates networking and educational opportunities for stroke ready centers.

19. How is compliance with physician and nursing education demonstrated?

- Attendance sheets / CME / CEU records.
- Topic and content outline.
- If not a live presentation:
  - A post-test is given and the results of the post-tests are maintained
  - Post-tests are used as part of an educational needs assessment
  - Post-tests are trended and used to improve the presentation
  - A system is in place for participants to ask questions and receive answers
20. **What are Education Requirements for the Primary Stroke center?**

- The annual calendar is determined by the facility.
- The core stroke leaders are required to maintain eight (8) hours of Continued Education Units (category 1 or 2 CME / CEU) annually on acute stroke / cerebrovascular disease diagnosis / assessment and management.
- The core leaders determine annual education needs of the service and delivery of training / competency accordingly.
- Education is based on acute stroke / cerebrovascular disease diagnosis / assessment and management (category 1 or 2 CME / CEU / policy / competency driven).
  - Eight Hours: Acute Stroke Response Team (ASRT) members
  - Two Hours: All physicians that work with stroke patients e.g., in the ED/ICU/Stroke
  - Six Hours: Nurses who work in the ICU and Stroke Unit who care for stroke patients
  - Two Hours: Emergency department nurses
  - Two Hours: Non-physician professional staff who work with stroke patients
  - Two Hours: Emergency Medical Services (two - one hour sessions per calendar year)
  - Two hours: Community (two - one hour sessions per calendar year)

21. **What are Education Requirements for the Stroke Ready center?**

- The annual calendar is determined by the facility.
- The core stroke leaders are required to maintain six (6) hours of Continued Education Units (CME / CEU) annually on acute stroke / cerebrovascular disease diagnosis / assessment and management.
- The core leaders determine annual education needs of the service and delivery of training / competency accordingly.
- Education is based on acute stroke / cerebrovascular disease diagnosis / assessment and management (may be category 1 or 2 CME / CEU / policy / competency driven).
  - Six Hours: Acute Stroke Response Team (ASRT) members
  - Two Hours: All other physicians that work with stroke patients e.g., in the ED
  - Two Hours: Emergency department nurses
  - Two Hours: Non-physician professional staff who work with stroke patients
  - One Hour: Emergency Medical Services (one session per calendar year)
  - One hour: Community (one session per calendar year)
22. What are methods for Community Education?

Optional methods for community education:

- Newsletters / Mailing / Newspapers
- Public Service Announcements
- Stroke education/educational materials provided at locations such as community health fairs, flu/blood pressure clinics
- Education provided to area health care providers
- Speaker Forums - e.g., presentations at hospitals, community centers, senior centers, school assemblies, church groups, workplace sites

23. Standard 02.02.02 Who performs the physical rehabilitation assessment and when is this done?

This standard was changed to reflect the CMS measure for rehabilitation assessment. Patients receive an initial evaluation by physical therapy and additional evaluations according to clinical need / deficit. The initial time parameter for this standard was removed and the onus is now on the facility to determine when the initial assessment is done and incorporate this information into the applicable protocols.

24. What if a standard is not clinically appropriate for a patient (an example would be prescribing a statin on discharge)?

Patients should be looked at on an individual basis. If the medical opinion of the physician is that the initiation of a statin is not medical appropriate/necessary, then it would not have to be ordered. The reasoning behind this decision must be documented in the medical record, in order to avoid a citation relating to that standard. Best practice and evidence-based decisions should always be practiced.

25. What if a TIA patient scores 0 on the NIHSS should we exclude them from the dysphagia screen measure?

The Dysphagia screen measure refers to those patients age 18 and older with acute stroke symptoms. The organization defines their acute stroke patients and protocol requirements.

26. Is participating in a stroke registry such as “Paul Coverdell” or “Get With The Guidelines” (GWTG) mandatory?

This is not a requirement, however it is recommended. There are several advantages of submitting data to a registry such as opportunity to network and benchmark. This data is also used for research. CMS require organizations to indicate if they participate in a registry or not when submitting data.
27. If a patient is discharged from ER with a diagnosis of TIA is that patient included in the data (numerator / denominator of performance measures)?

Depending on the measure. The CMS measure for example excludes TIAs.

28. If a TIA patient has rehab therapy ordered but is discharged prior to being seen by therapist, is this patient excluded from the numerator / denominator for this indicator?

The patient is included and the reason should be documented in the patient notes.

29. Where are the measures derived from?

The measures are in line with CMS stroke core measures. This is seen to be an important change to the HFAP measures because effective January 2013, CMS created a ‘pay for participation’ scheme, this scheme is said to transition into a ‘pay for performance’ scheme in the future. As a result HFAP have adopted the CMS stroke measures and definitions (which are also reflected throughout the standards).

30. As a new facility, how much data is required at the time of the onsite review?

New facilities must have a minimum of three to four months of recent data by the time of the onsite review. The data must be entered into the HFAP data reporting tool and available to the reviewers on request.

31. If I have questions or would like more information, where do I go?

Standards interpretation staff are available via email at stroke@hfap.org

Bi-weekly teleconferencing is also made available to support the organization with implementation.