



Stroke Bill:

An Act to Create a Stroke System of Care



AHA/ASA Guideline

2015 AHA/ASA Focused Update of the 2013 Guidelines for the Early Management of Patients With Acute Ischemic Stroke Regarding Endovascular Treatment

A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association

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Abstract

Purpose—The aim of this guideline is to provide a focused update of the current recommendations for the endovascular treatment of acute ischemic stroke. Where there is overlap, the recommendations made here supersede those of previous guidelines.

Methods—This focused update analyzes results from 8 randomized clinical trials of endovascular treatment and other relevant data published since 2013. It is not intended to be a complete literature review from the date of the previous guideline publication but rather to include pivotal new evidence that justifies changes in current recommendations. Members of the writing committee were appointed by the American Heart Association/American Stroke Association Stroke Council's Scientific Statement Oversight Committee and the American Heart Association/American Stroke Association Manuscript Oversight Committee (MOC). Strict adherence to the American Heart Association conflict of interest policy was maintained throughout the consensus process. Recommendations follow the American Heart Association/American Stroke Association methods of classifying the level of certainty of the treatment effect and the class of evidence. Prerelease review of the draft guideline was performed by 6 expert peer reviewers and by the members of the Stroke Council Scientific Statement Oversight Committee and Stroke Council Leadership Committee.

Results—Evidence-based guidelines are provided for the selection of patients with acute ischemic stroke for endovascular treatment, the endovascular procedure and for systems of care to facilitate endovascular treatment.

Conclusions—Certain endovascular procedures have been demonstrated to provide clinical benefit in selected patients with acute ischemic stroke. Systems of care should be organized to facilitate the delivery of this care.

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Stroke Guideline Recommendations 2015

1. **Patients should be transported rapidly to the closest available certified primary stroke center or comprehensive stroke center** or, if no such centers exist, the most appropriate institution that provides emergency stroke care as described in the 2013 guidelines (*Class I; Level of Evidence A*).
2. **Regional systems of stroke care should be developed.** These should consist of consisting of:
 - a. Healthcare facilities that provide initial emergency care including administration of tPA
 - b. Centers capable of performing endovascular stroke treatment with comprehensive periprocedural care (*Class I; Level of Evidence A*).
3. Primary stroke centers and other healthcare facilities that provide initial emergency care..**develop the capability of performing emergency noninvasive intracranial vascular imaging to most appropriately select patients for transfer for endovascular intervention** and reduce time to endovascular treatment.
4. Endovascular therapy requires the patient to be at an experienced stroke center with rapid access to cerebral angiography and qualified neurointerventionalists....Outcomes on all patients should be tracked. (*Class I; Level of Evidence E*).

Source: <http://stroke.ahajournals.org/content/early/2015/06/26/STR.0000000000000074>

Need for additional Stroke Tiers

1. Acute Stroke Ready Hospital Tier

- Resembles current PSS criteria

2. Primary Stroke Center Tier

- Several centers in MA may fall into this tier of providing full stroke care with the exception of endovascular therapy;

3. Comprehensive Tier

- Some facilities throughout the state are providing advanced stroke care, including mechanical interventions and advanced surgical procedures and thus may fall into this tier.
- Intra-facility transport is often not standardized for ischemic stroke patients. Transfers can take longer than needed and some patients may not be transferred at all.
- A coordinated system ensuring eligible patients can access these advanced therapies while providing oversight to facilities performing advanced stroke care would benefit patients.

Stroke Bill-Overview

- 1. Strengthen the system by differentiating levels of designation—**
 - The acute stroke ready level is the basic level of stroke care, likely met by all PSS hospitals
 - The primary stroke center level is a slightly higher level of care, these centers can handle the majority of strokes, with the exception of patients needing endovascular therapy.
 - The comprehensive stroke center level would identify centers with endovascular capabilities to treat patients with select large artery occlusions.
- 2. Certification by National Accreditation Bodies:** The bill calls for certification of stroke centers to be done by DPH and a variety of national accreditation bodies (such as The Joint Commission)
- 3. Dept of Health will be the overseeing body of the designation program** in that they will:
 - Authorize the certification of the hospitals (done by the outside entities)
 - Oversee the data quality (hospitals will have yearly data submissions to the Dept as they currently do)
 - Be directed by a group of expert physicians to ensure that the designation program and data quality standards are aligned with the latest science
- 4. EMS Protocols:** The bill calls for EMS agencies to have regional protocols in place with regards to how they will triage stroke patients. Given that the EMS capabilities vary so much throughout the state, the bill does not mandate what the protocols say, but rather that protocols actually exist and EMS protocols can be determined based on each region's needs.
- 5. Appropriate triage of patients:** bill includes language around making sure that the right patient gets to the right hospital

Section 51K

Designation of Comprehensive, Primary & Acute Stroke Ready Hospitals

What are the designation levels?

- The DPH shall designate hospitals that meet the criteria set forth in this Act as:
 - **Acute Stroke Ready Hospital (ASRH)** (basic services, provide tPA and ship patients out; all PSS hospitals meet this criteria)
 - **Primary Stroke Center (PSC)** (centers able to provide tPA and keep patients; most PSS hospitals meet this criteria)
 - **Comprehensive Stroke Center (CSC)** (centers capable of providing endovascular therapy; some PSS hospitals meet this criteria)

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- **How to apply?**
 - **Certifying bodies:** The DPH shall inform hospitals which nationally recognized certifying bodies are approved by the Department for certification of ASRH, PSC or CSC.
 - A hospital shall apply to the DPH for designation provided the hospital has been certified by a DPH-approved, nationally recognized certifying body as ASRH, PSC or CSC.
 - Designation by the MA DPH as a Primary Stroke Service (PSS) hospital will also provide deemed status for an ASRH designation that will not require certification by an outside body or agency.

Section 51K

Designation of Comprehensive, Primary & Acute Stroke Ready Hospitals

Current PSS Hospitals?

- Hospitals that are currently designated by the Department of Public Health as primary stroke services hospitals as of <<date>>, shall be designated as ASRH by the DPH.
- Until the Department begins the designation of hospitals, hospitals may maintain Primary Stroke Service designation utilizing the existing processes and criteria for a 12-month period provided in <<date>>.
- After that time, all PSS hospitals will be considered ASRH regardless of additional capacity until they apply for and receive a higher designation of PSC or CSC.

Section 51L

EMS Providers; Assessment and Transportation of Stroke Patients to Designated Stroke Center.

What changes for EMS?

- **Short answer:** pre-hospital care protocols and routing currently exist. EMS will need to work regionally to further discriminate how to triage patients to the appropriate hospital based on the type of stroke a patient may be having (i.e. LVO or not).
- All EMS Authorities across the state shall establish pre-hospital care protocols related to the assessment, treatment, transport and rerouting of stroke patients by licensed emergency medical services providers in this state to ASRH, PSC and CSC facilities. *This will likely be done in regulations*
- Such protocols shall include plans for the triage and transport of suspected stroke patients to an appropriate facility, within a specified timeframe of onset of symptoms and additional criteria to determine which level of care (ASRH, PSC, taking into account those who may have an emergent large vessel occlusion or CSC) is the most appropriate destination. *This will likely be done in regulations*
- EMS authorities will base their protocols on national recommendations.

Section 51L

EMS Providers; Assessment and Transportation of Stroke Patients to Designated Stroke Center.

How will EMS know how a hospital is designated?

- The DPH shall:
 - make available the list of designated stroke centers to the medical director of each licensed EMS provider in this state
 - maintain a copy of the list in the office designated within the department to oversee EMS services
 - post a list of all Designated Stroke Centers and the level of care (ASRH, PSC, take into account those who may have an emergent large vessel occlusion or CSC) to the DPH website

Section 51N

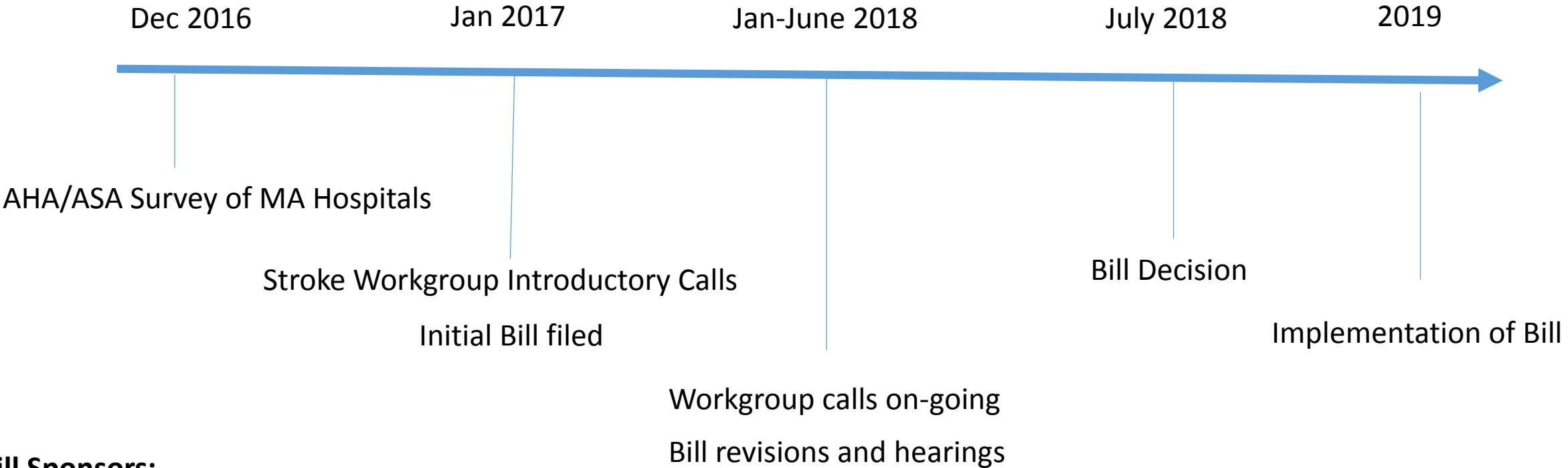
Continuous Improvement of Quality of Care for Stroke Patients

Short Answer: data collection remains in effect, stroke advisory taskforce will be created to advise DPH

The Department shall maintain a data oversight process which shall include:

- a) **A Massachusetts stroke registry database** that compiles information and statistics on stroke care which align with nationally recognized stroke measures ~already in existence
- b) Hospitals designated by the Department of Public Health as CSC, PSC or ASRH shall utilize a nationally recognized data platform to collect the stroke data set which is required by the state and by the CSC, PSC or ASRH designating body~already in existence
- c) These data elements will be collected via the data registry platform and transmitted to the State for inclusion in the Massachusetts stroke registry~already in existence
- d) The DPH will convene a group of experts with input from key stroke stakeholders and professional societies to form a state stroke advisory taskforce that will assist with data oversight, program management and advice regarding the stroke system of care. This task force will meet at least quarterly to review data and provide advice. ~new

Timeline & Legislative Process



Bill Sponsors:

House: Representative Mark Cusack (D-Braintree)
Senate: Senator Mark Montingy (D-New Bedford)

