

# Multisociety Consensus Quality Improvement Guidelines for Intra-Arterial Catheter Directed Treatment of Acute Ischemic Stroke

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Associated with Neurosciences (2013)

## *Process Review Metrics*

### 1. Indications for IA Treatment

**Metric: 90% of patients treated with intra-arterial therapy should meet the institution selection criteria (indications/contraindications)**

- a. Stroke severity
- b. Time to treatment
- c. Imaging findings
- d. Clot location
- e. Patient age
- f. Medical comorbidities
- g. MI, GI bleed, recent surgery, INR, platelets, etc.

### 2. Data Collection

**Metric: 100% of patients have all required process and outcomes data entered into a national database, trial, or registry**

### 3. Key Time Intervals

#### a. Door to imaging

**Metric: 80% of acute stroke patients being evaluated for revascularization should have a non-contrast head CT or MRI within 25 minutes from time of arrival**

**Metric: 80% of acute stroke patients being evaluated for revascularization should have a non contrast head CT or MRI completed and interpreted within 45 minutes from time of arrival**

#### b. Use of CTA/CTP or MRA/MRI (for centers that perform MRI) as first step imaging

**Metric: At centers whose institutional protocols require non-invasive vascular and parenchymal imaging (CTA/CTP or MRA/MRI) prior to intervention, 80% of all patients potentially eligible for endovascular treatment should undergo these studies**

c. Door to puncture

**Metric: 75% of patients treated with endovascular therapy should have a door to puncture time  $\leq$  2 hours**

d. Puncture time to start of revascularization

**Metric: 50% of patients should have a time from puncture to start of lytic infusion or first pass of mechanical device in the target vessel of  $\leq$  45 minutes**

e. Puncture time to revascularization

**Metric: 50% of patients should have TIMI 2 or TICl 2a revascularization within 90 minutes of arterial puncture**

#### 4. Outcome Metrics

a. Recanalization/reperfusion

**Metric: 60% of patients should have TIMI 2 or TICl 2-3 recanalization for all clot locations at procedure completion**

b. Post-procedure CT/MRI

**Metric: 90% of patients should have a brain CT or MRI within 36 hours of the end of the procedure**

c. Symptomatic intracerebral hemorrhage

**Metric: 100% of cases with SICH are reviewed for educational purposes. The threshold for SICH is 12%.**

d. Clinical outcomes

**Metric: At least 30% of patients with strokes treated by endovascular methods should have an mRS 0-2 at 90 days**

e. Death within 72 hours of treatment

**Metric: 100% of cases with death within 72 hours of the end of the procedure are reviewed**