Blood Pressure Management in Acute Stroke
Clinical Guideline

**Purpose:** To guide the acute management of patients presenting to the emergency department with acute ischemic stroke and hypertension.

**Procedure:** Code BAT patients presenting with hypertension with possibility of eventually receiving alteplase for acute ischemic stroke or possibility of acute intracerebral hemorrhage should be rapidly assessed and have their blood pressure monitored and treated as follows.

1. Ideally two, preferably large bore, intravenous access lines should be established prior to CT. The second IV can be placed on return from imaging.
2. Start normal saline at 75 cc/hr. intravenously for fluid maintenance, IV fluids may be started on return from CT.
3. In CT, if patient is an alteplase candidate or has possibility of acute intracerebral bleeding and heart rate can tolerate, give labetalol 10mg IV push for BP>180/105mmHg. Target BP <160/90.
4. After five minutes, repeat labetalol 10mg IV push if BP has not reached target.
5. If BP still not at target, start nicardipine drip at 5mg/hour.

Patient otherwise eligible for reperfusion treatment (e.g., alteplase) except blood pressure (BP) >185/105 mm Hg: Initiate 5 mg/hour; titrate by 2.5 mg/hour at 5- to 15-minute intervals (maximum dose: 15 mg/hour). When goal BP obtained, adjust dose to maintain proper BP limits. If BP does not decline and remains >185/105 mm Hg, alteplase should not be administered.

For patients going to interventional neuroradiology: titrate as above with target <180/105mmHg. Adjust BP targets per neurosurgical recommendations.

For patients with acute ischemic stroke not getting alteplase or interventional neuroradiology: Target BP <220/120 mmHg and manage as above. Target may be adjusted based on imaging findings.

For patients with hemorrhage: See separate guideline.