

Understanding and managing blood flow in the brain is essential to preventing and treating stroke in any setting around the world. The study of global burden of disease related to stroke provides numbers affected, whereas surveys of stroke resources are limited, don't account for geographical distribution or address how tools such as imaging are actually used on a daily basis. Similarly, stroke specialists and endovascular therapy may have recently flourished but it is unclear how counting case volumes can be interpreted without verification or data quality. Ultimately, global data on approaches to cerebral blood flow, minimizing ischemia via collaterals and reperfusion are paramount.

The following questions about your center in your home country help gauge current hemodynamic aspects of stroke research and practice. It is also **important to understand how your center is representative of the rest of your country**, so please comment:

1. **Clinical practice** – are collaterals or hemodynamics used?
 - a. Describe use of collaterals or hemodynamics
 - b. If no, what barriers exist?
 - c. Comments _____
2. **Research** – any scientific investigation
 - a. Describe type of research on collaterals or hemodynamics (basic or clinical research)
 - b. If no, what barriers exist?
 - c. Comment on availability of data, access to literature, academic opportunities or scientific meetings
 - d. Other comments _____
3. **Triage of acute stroke from prehospital to emergency department** – do you use:
 - a. Head positioning?
 - b. Intravenous fluids?
 - c. Blood pressure manipulation?
 - d. Other collateral therapeutics _____
 - e. If no, what barriers exist?
 - f. Comments _____
4. **Imaging of blood flow** – are hemodynamics or blood flow measured:
 - a. Is CT or MRI perfusion imaging available? Always obtained? Automated imaging analysis for LVO or manual interpretation?
 - b. If no, what barriers exist?
 - c. Comments _____
5. **Intracranial or extracranial atherosclerosis** – are other imaging approaches tailored to patients with atherosclerosis?
 - a. If no, why not?
 - b. Comments _____
6. **Timing of acute stroke patients** – is a fixed time window used?
 - a. Describe time window
 - b. Are different imaging strategies used for fast and slow progressors?
 - c. If no, why not?

- d. Comments _____
- 7. **Patient access** – what percent of all acute stroke patients are you able to triage?
- 8. **Stroke unit** – do you have a dedicated inpatient service?
 - a. Describe
 - b. If no, why not?
 - c. Do you have written protocols for hemodynamic management or is it empirically guided?
 - d. Comments _____
- 9. **Reperfusion therapies**
 - a. Is intravenous thrombolysis used?
 - i. # cases per year at your center
 - ii. If not, what are barriers?
 - iii. Comments _____
 - b. Is endovascular therapy used?
 - i. # cases per year at your center
 - ii. How many centers and people trained to perform endovascular therapy?
 - iii. Is most common approach stent retriever/other device or aspiration?
 - iv. If not, what are barriers (diagnostic, physical or financial access)?
 - v. Comments _____
- 10. **Serial evaluation** – do you see patients in follow-up?
 - a. Do you obtain serial or repeat imaging months or years later or only triggered by new symptoms?
 - b. Comments _____
- 11. **Specialty training of physician treating stroke patients** – approximate percentage
 - a. Neurology
 - b. Neurosurgery
 - c. Radiology
 - d. Cardiology
 - e. Internal Medicine
 - f. Comments _____
- 12. **Policy for stroke care in your country**
 - a. Is there accreditation of stroke centers?
 - b. Is stroke care centralized at specific hospitals or distributed across the country?
 - c. Do patients have a choice regarding where they are treated for stroke?
 - d. Describe system of care for stroke – is there EMS/field identification? are prehospital staff trained about stroke?
 - e. How do acute stroke patients arrive (EMS, private, etc.)?
 - f. Is annual volume of stroke cases, expertise, or quality outcomes measured?
 - g. Comments _____