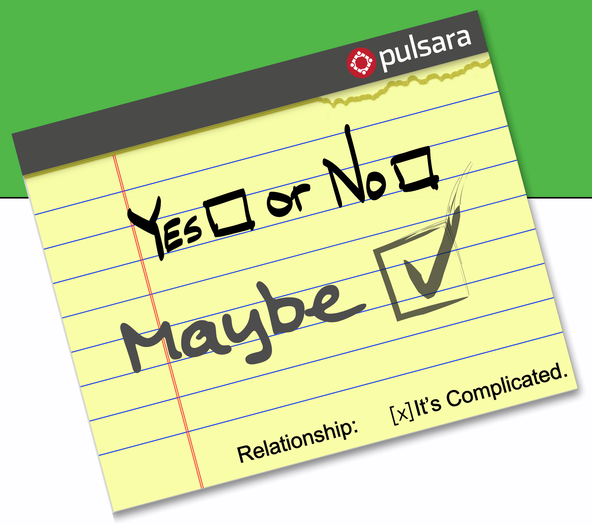


Is LVO the New STEMI?

LVOs (Large Vessel Occlusions) and STEMIs are both time sensitive emergencies. Time = Tissue. We need to quickly mobilize many resources that are scattered throughout the hospital or even the city.

However, from there things seem to be a bit more challenging …

STEMI

"I have chest pain!"

- Patients take signs and symptoms seriously.

"I'm having a heart attack!"

- Patients know to call 911 right away.

"This is a high priority!"

- There is a sense of urgency in response.

"We know what to do."

- The EMS response for treatment of the cardiac patient is clear.
- There is a high suspicion based on chief complaint and time benchmarks.

"Let's get a 12-lead."

- The 12-Lead ECG is the definitive test for STEMI.
  - It identifies next steps.

"What do we have?"

- Based on the 12-Lead, we know where to take the patient.
  - STEMI Identified = Cath Lab
  - Angina, NSTEMI or other = Further Evaluation

"Let's go to the PCI Center."

- If there is a PCI center within a reasonable distance, the patient is taken directly there.

"We follow protocols."

- Paramedics have a plan. It's the standard of care to bypass non-PCI centers for PCI centers.

"Let's activate the cath lab."

- It's accepted practice for paramedic to activate a STEMI alert from the field.
- An automatic alert notifies the Emergency Department, Cardiologist, and Cath Lab.

STROKE

"I feel off today."

- The signs and symptoms of a stroke can be vague.

"I just need a nap."

- Patients often delay getting medical attention.

"High or low priority?"

- Or medium Priority?
- Based on the initial call, dispatch alerts can be varied. For example, a complaint of "weakness" or "dizziness" can elicit a spectrum of responses.

"Lights & sirens?"

- Non-emergent?
- The EMS response for suspected stroke differs across the nation and between providers.
- Many other illnesses or injuries can mimic a stroke. There may be a varying index of suspicion based on the initial chief complaint.

"Which exam do I use?"

- There are a multitude of exams available.
  - FAST? RACE? LAMS? Cincinnati?
- What score = LVO?
  - Is it reproducible?

"What do we have?"

- There are many options.
  - LVO = TPA (Yes? No?) and INTERVENTION (Yes? No?)
  - Small Vessel Stroke = TPA (Yes? No?)
  - TIA or other diagnosis = Further evaluation
  - Hemorrhagic stroke – Treatment varies

"Where do we go?"

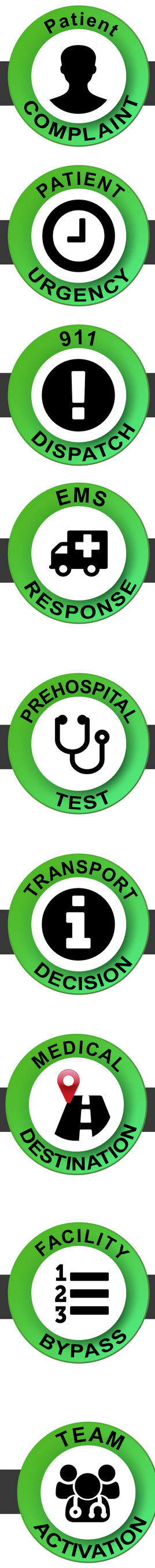
- There are multiple designations for stroke centers.
  - Stroke Ready
  - Primary Stroke Centers
  - Comprehensive Stroke Centers

"Transport LVO to?"

- New research is being published. New protocols are emerging. However, most regions have no standardized protocols.

"Who you gonna call?"

- The alert notification system is in its infancy.
  - Paramedics will notify the ED.
  - Every ED responds differently, depending on resources.
- What happens next?
  - Does it depend on the prehospital stroke scale?
  - When do other team members get notified?
  - Is there neurology in house?
  - Does the hospital have an Interventionalist?
  - Is there a developed Stroke Team?
  - Who's calling radiology?
  - Is the CT scanner ready?
- When do we request additional specialists?
  - The Interventionist?
  - The IR team?
  - Anesthesia?



How are you building your regional stroke system?