A New Level of Stroke Center

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Current types of stroke centers

- **ASRH**
  - Small, rural, drip and ship
- **PSC**
  - Variety of locations; > 1500 in US; can provide more services, stroke unit, standard Rx
- **CSC**
  - Typically urban, large, provides all services

Is there a need for another level of stroke center?

- AHA/ASA thought there was
- Concerns raised by several hospitals in LA County
- They wanted a definition and process for identifying centers capable of doing thrombectomy for acute ischemc stroke
- They used the term TSC

Rationale

- Recent studies of EVT really define a NEW standard of care for patients with large vessel occlusions
- CSCs must have EVT available 24/7
- Some PSCs offer this therapy in some hospitals at certain times
  - How will EMS know??
  - What incremental resources are needed for a PSC to be a TSC??
  - Staffing, infrastructure, expertise

Process

- AHA/ASA convened an expert panel
- Several meetings via conference call
- Participation was irregular and spotty
- Participants shared experience, stories, but not much data
- This was (apparently) largely driven by Joint Commission and a few AHA/ASA folks

Results

- Thrombectomy (TSC Center)
  - BAC prefers PSC-E enhanced or endovascular
  - Allows room for other new or novel treatments of technologies
- No advanced imaging in AHA/JC plan
  - BAC includes advanced imaging as was used in DAWN and DEFUSE3 studies
- AHA/JC proposal unclear about need for NICU at TSC
  - BAC prefers clear guidelines about need for NICU support on-site or a referral agreement
- BAC has new guidelines for all levels of stroke centers
  - Evidence-based, graded document
  - AHA is blocking publication
  - AHA/JC has no documents, no evidence

Related Issues

- Can a hospital be a TSC/PSC-E from 9AM to 5 PM only??
  - Is 24/7 designation needed or justified??
- Can a hospital offer NCC via telemedicine link vs having a real unit??
- What are the volume minimums for a TSC/PSC-E?
  - Are there supporting data?
  - Should analysis be per hospital or per practitioner?
- How will EMS know which patients need to go to a TSC/PSC-E vs a CSC or PSC??

Screening Paradigms for EVT at Stroke Centers

Bring all into the TSC/PSC-E	Screen where they first present	Hybrid model
Less expensive	More expensive	Moderate expense
Less time in the field	More time in the field	Variable field time
Less training needed	More training needed	Intermediate training
Makes sense in rural setting	More challenging in rural setting	Flexible for various settings

What Will Work in the Stroke Belt?

- Depends on 3 factors:
  1. Local geography and distances
  2. Distribution of hospitals and resources
  3. Coordination of local care systems (EMS and hospital networks)