

**URBAN STROKE SYSTEMS:
GO LOCAL, GO FAST**

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**PRESENTER DISCLOSURE
INFORMATION**

FINANCIAL DISCLOSURE:

- No relevant financial relationship exists

OPTIMAL CARE

- Stroke identified in prehospital setting
- Nearest primary stroke center alerted
- Immediate rapid assessment including CT/ CT Angio/ CT perfusion
 - Identify LVO
 - tPA rapidly where appropriate
 - Images travel by cloud – reviewed in comprehensive center
- Patient with LVO rapidly transferred direct to angio suite arrives with tPA still hanging with a critical care ambulance

THE SYSTEM


- Fire Based
 - Paramedic on an Engine company
 - Ambulance may only be a basic provider
- 3rd service
 - Paramedic ambulance
- Critical Care Ambulance – separate from 911 system requested urgently when primary center suspects LVO or big stroke

THE EMS CALL

What about the next call?!

<ul style="list-style-type: none"> • Length of call approximately 1 hour • 5-10 minute response time • 20 minutes assessment and care • Vital Signs/cardiac monitor • Fingertstick Blood Glucose • Intravenous Line • Airway management if necessary • 10 minute transport time • 10 minutes handoff • 10 minutes restock • 10 minutes to back in service in area • Time elapsed from call 85 minutes 	<ul style="list-style-type: none"> • Length of call 75 minutes • 5-10 minute response time • 25 minutes assessment and care • Vital Signs/cardiac monitor • Fingertstick Blood Glucose • Intravenous Line • Airway management if necessary • 20 minute transport time • 10 minutes handoff • 10 minutes restock • 20 minutes until back in service in area • Time elapsed from call 100 minutes
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ORIGINAL COMMUNICATION

Clinical prediction of large vessel occlusion in anterior circulation stroke: mission impossible?

Mirjam R. Heldner¹ · Kety Hsieh² · Anne Broeg-Morvay¹ · Pasquale Mordasini² · Monika Bühlmann¹ · Simon Jung^{1,2} · Marcel Arnold¹ · Heinrich P. Mattle¹ · Jan Gralla² · Urs Fischer¹

At the intersection of the sensitivity and specificity curves, the best total NIHSS score cut-off to find LVO in all patients was 7 (PPV 84.2 %, sens 81.0 %, spec 76.6 %, NPV 72.4 %, and ACC 79.3 %) (Fig. S2 in the online material).

9% of all LVOs had NIH ≤4

THE BENEFIT

- Primary center keeps all those cases not eligible for endovascular
- Comprehensive center not overwhelmed
- 911 Ambulances more available for the next 911 call
- Rapid care and assessment for all
- More patients get tPA
- More patients get endovascular
