

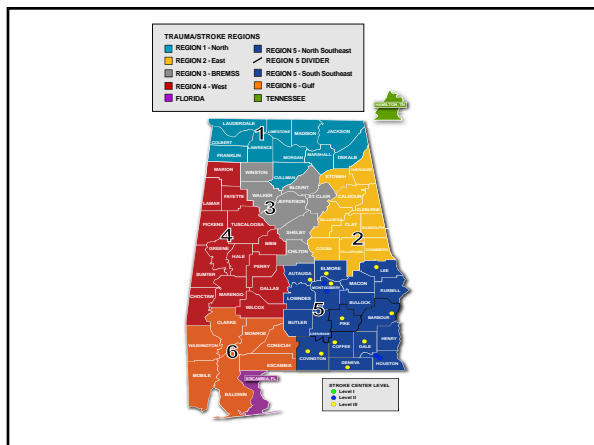
## Statewide Trauma and Health Systems Training

Satellite Conference and Live Webcast  
 Monday, June 27, 2013  
 10:00 – 12:00 p.m. Central Time

Produced by the Alabama Department of Public Health  
 Video Communications and Distance Learning Division

## Building a Statewide Stroke System in Alabama

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## Goals

- **Primary Goal:** To get lytic eligible patients with ischemic stroke to a center that can and will safely administer TPA when appropriate
- **Secondary Goal:** Facilitate transfers of stroke patients (both ischemic and hemorrhagic) when needed

## Ground Rules

- Voluntary for hospitals, mandatory for EMS
- Patients identified by FAST Scale with allowance for EMSP Discretion
- Patient choice may override system IF patient is “competent to decide”
- Hospitals self-report availability in real time (red / yellow / green)



### Workstation Display

Trauma/Stroke Emergency Resources Display

Level																			
Hospital	T	S	C	ED-T	ED	ANES	OR	X-RAY	TICU	YS	OS	NS	CF	SICU	NEURO	CCU	CARD	Clo	
A	1	1																	
B	1	2																	
C	1	2																	
D	2	1																	
E	1	2																	
F	2	3																	

Numbers are color-coded: Green for available, yellow for resource unavailable (but still accepting some patients), red for not available.  
 Hospital abbreviations are automatically color-coded for on-line status: Green for active, yellow for resource unavailable (but still accepting some patients)

### Alabama Trauma Communications Center



### Stroke vs. Trauma

- Both are “Time Dependent”
- Most smaller hospitals don't have resources to treat trauma
- Most smaller hospitals do have the resources to evaluate and begin thrombolytic treatment of stroke

### Data Collection

- Paper form received by FAX in ED
- Paper form returned by FAX/email to communications center
- Patients identified by unique system generated number - NO NAMES

### Stroke Patient Report

TCG ID: 88858 Hospital: University of Alabama Hospital  
 Report Date: 05/09/2019  
 Patient Title: 09-10-21 System: Birmingham Flagler

Order Time Last Updated: 10/10/19 15:02:46 Transport Mode: Ground Ambulance  
 Originating Unit: M-Clinic Fax: Physician Time:  
 Ref: 10/10/19 09:55:24 ED-Clinic Fax: Arrival Time:  
 Transport Number: 895-56 Fax:  
 Source of Patient: 01-034

Initial Contact Date/Time: 10/10/19 17:18:48 Selected Hospital Status: Green  
 Adm: 01 Gender: Male Discharge: No  
 Contact Method: Other Hospital Selected By: Patient  
 Location: Alabama RFD 802  
 Incident Time: 10/10/19 18:05:48  
 Unit Dispatch Time: 10/10/19 18:07:48  
 Unit Arrival Date/Time: 10/10/19 18:48:41  
 Dispatch Date/Time: 10/10/19 17:05:41

White Medical History  
 ICD-9-CM ICD-10  
 Estimated Time of Onset: 10/10/19  
 SSN: 00-00-0000  
 Race: 1  
 Discharge Reading: 10-000

Emergency Contact  
 Level of Consciousness: appropriate oriented with increased irritability  
 Head Parameters: No noted or noted change  
 Facial Movement: Any abnormality  
 Sensing Parameters: None or hyporesponsive/inappropriate  
 Language and Speech: Appropriate articulation or language content

Stroke Type:  
 Ischemic:     
 Hemorrhagic:     
 Cryptogenic:     
 Unknown:     
 Other:

Please do not place patient name on this report.

### Who is Entered into the Stroke System?

- Patients with positive FAST screen or EMS discretion = any acute neuro deficit that cannot otherwise be explained
- The patient is then routed to the nearest appropriate stroke system hospital

### What About Patients that don't come by EMS?

- They can be entered into the system by the Emergency Department staff
- Hospitals not participating in the stroke system can transfer patients with criteria for stroke by simply calling the ATCC

### Three Level System

- Level 3: Acute Stroke Ready Hospital
- Level 2: Primary Stroke Center
- Level 1: Comprehensive Stroke Center

### Regional Comparison

	BREMSS	Southeast
Population	217 persons/sq mile	80 persons/sq mile
Design	Single tier with neurologist readily available	3-tiered with lower levels utilizing phone/telemed
Triage tool	Cincinnati stroke scale +EMS discretion	Cincinnati stroke scale +EMS discretion
Communication	ATCC	ATCC
Stroke Hospitals	11	15 (4 Level II, 11 Level III)

### Outcomes - 8/1/2012-5/3/2016

	BREMSS	Southeast
Patients	6345	5580
Data Reports	4987 (78.5%)	4325 (77.5%)
Accuracy	2301 (46%)	1676 (39%)
Hemorrhagic	508 (22%)	389 (23%)
Ischemic	1713	1235
TPA	322 (18.7%)	217 (17.6%)
Adverse Events	0	0
Admitted	4206 (84%)	3388 (78%)

### QA / QI

- Voluntary participation in GWTG
- Mandatory 95% compliance for ATCC data reports
- Fax the report back to the ATCC within 48 hours
- The information is then entered into Lifetrac by the ATCC

### Cost

- Central Communications Center
- Computer Workstation in Each Hospital
- ADPH Staff
- Regional Staff
- Site Visits/Travel
- NO \$\$ to hospitals
- NO \$\$ for robust data system such as GWTG

### **Current Challenges**

- **Telemedicine vs Telephone: limited availability of neurologists and limited access to telemedicine**
- **Some ED physicians still resistant to giving TPA**
- **Keep the neurosurgeons happy - don't abuse them!**
- **Statewide implementation**

### **Pitfalls to Watch For**

- **Be inclusive in planning**
- **Consequences for Noncompliance**
- **Don't skimp on education**
- **Face time and relationships are priceless**