How to Implement a Regional Plan with Competing Hospitals

Lessons Learned from Across the Nation

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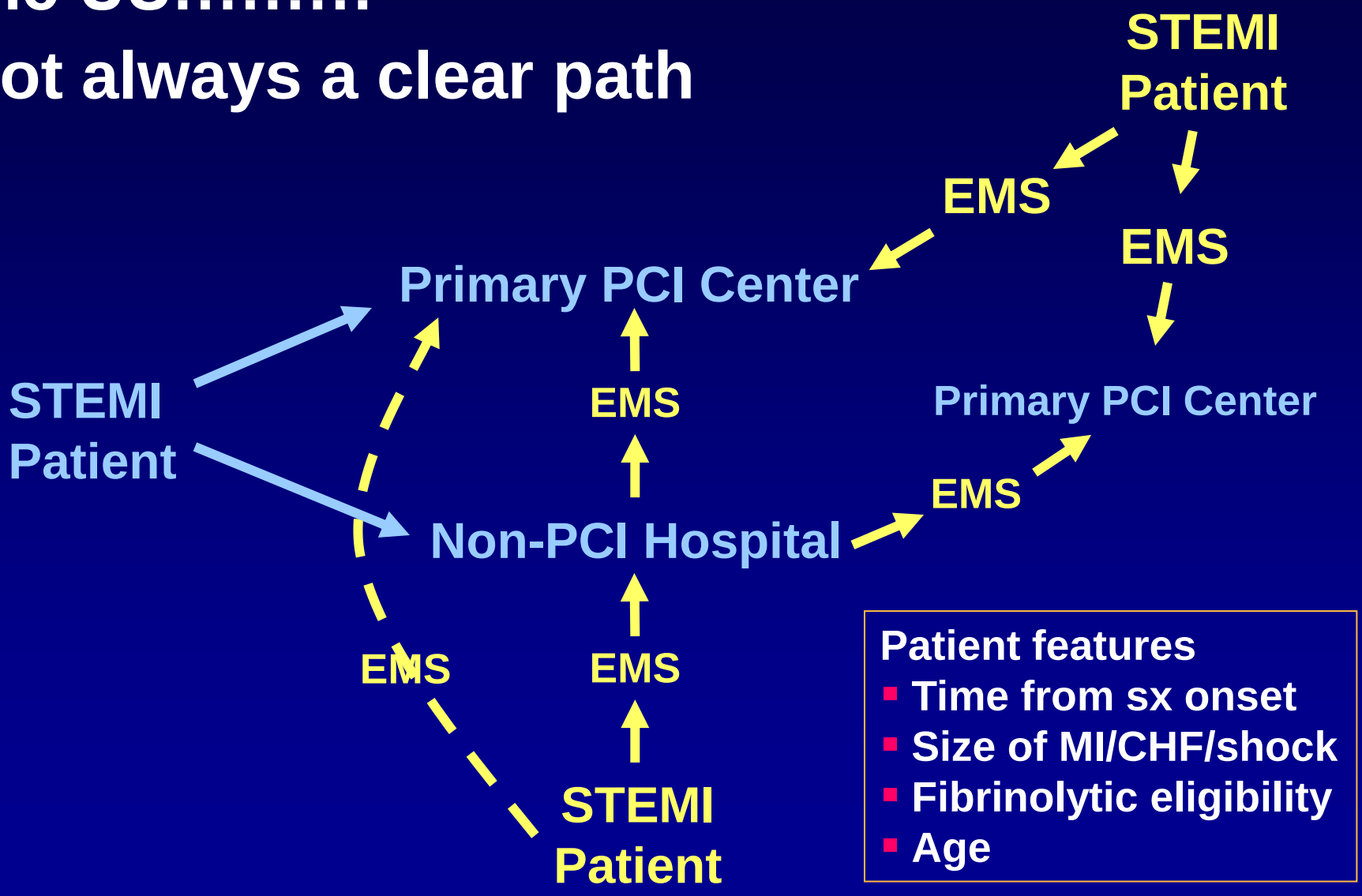
Patient Point of Entry In the US…….. not always a clear path



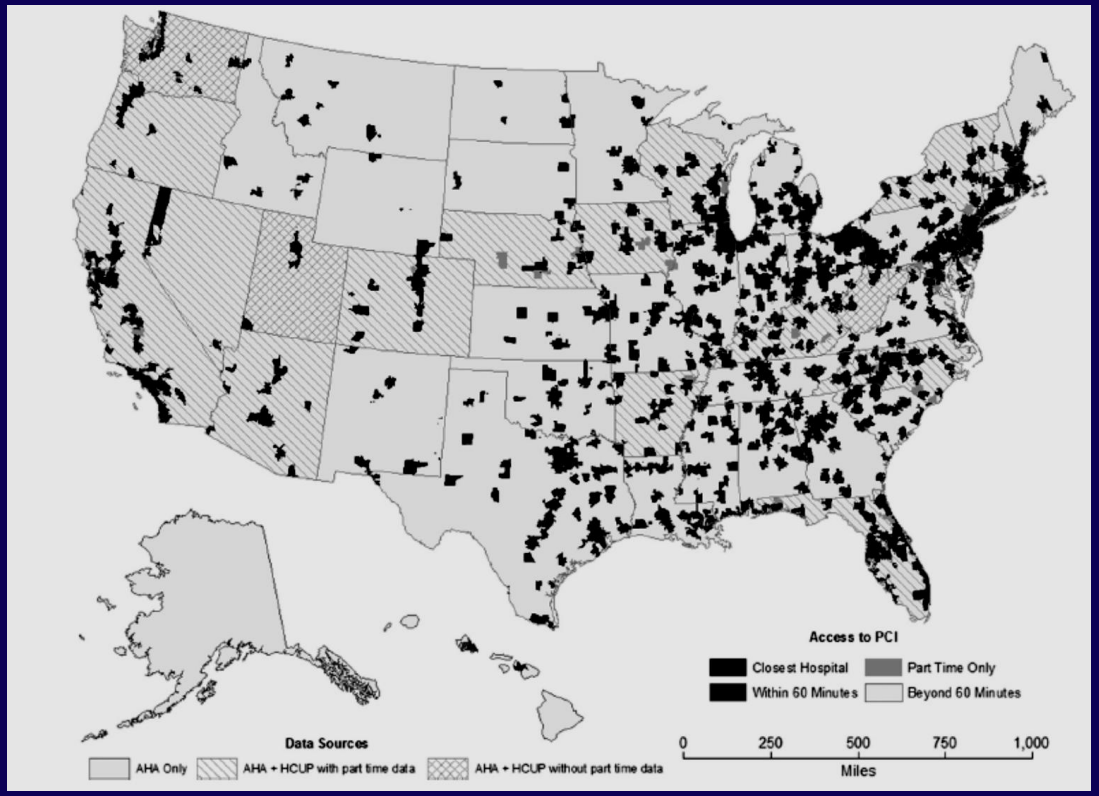
60 minute drive time to PCI lab
2001 – 2006 PCI Capable Hospital Expansion

- PCI-capable hospitals

  1176 to 1695

- access to PCI

  79.0% to 79.9%



Concannon T, et al. Circ Cardiovasc Qual Outcomes. 2012;5:14-20

How to Implement a Regional Plan with Competing Hospitals

ECC 2012: Regional Systems Development

May 12, 2012

Loni Denne RN BSN
Sr. Director Mission: Lifeline
American Heart Association
SouthWest Affiliate

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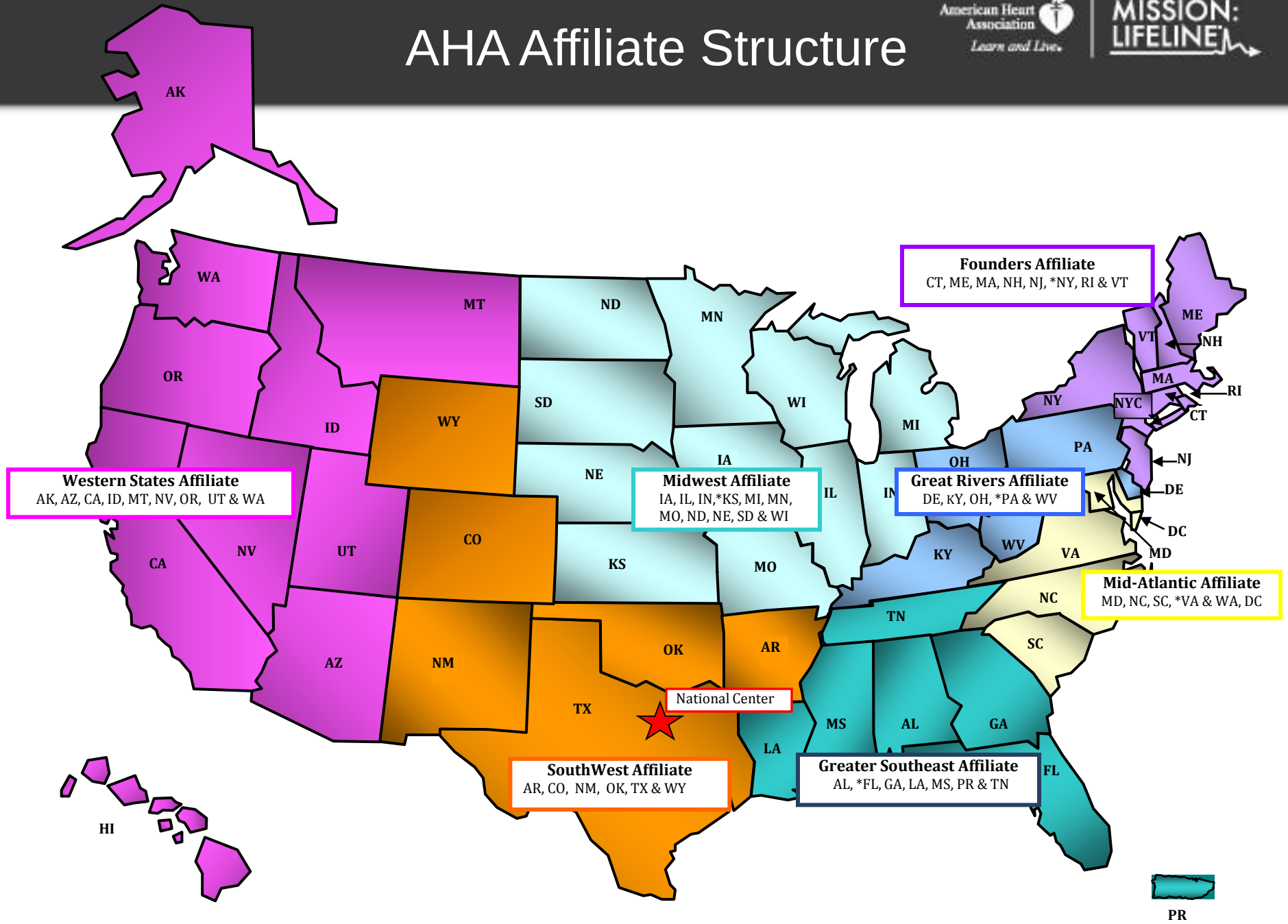
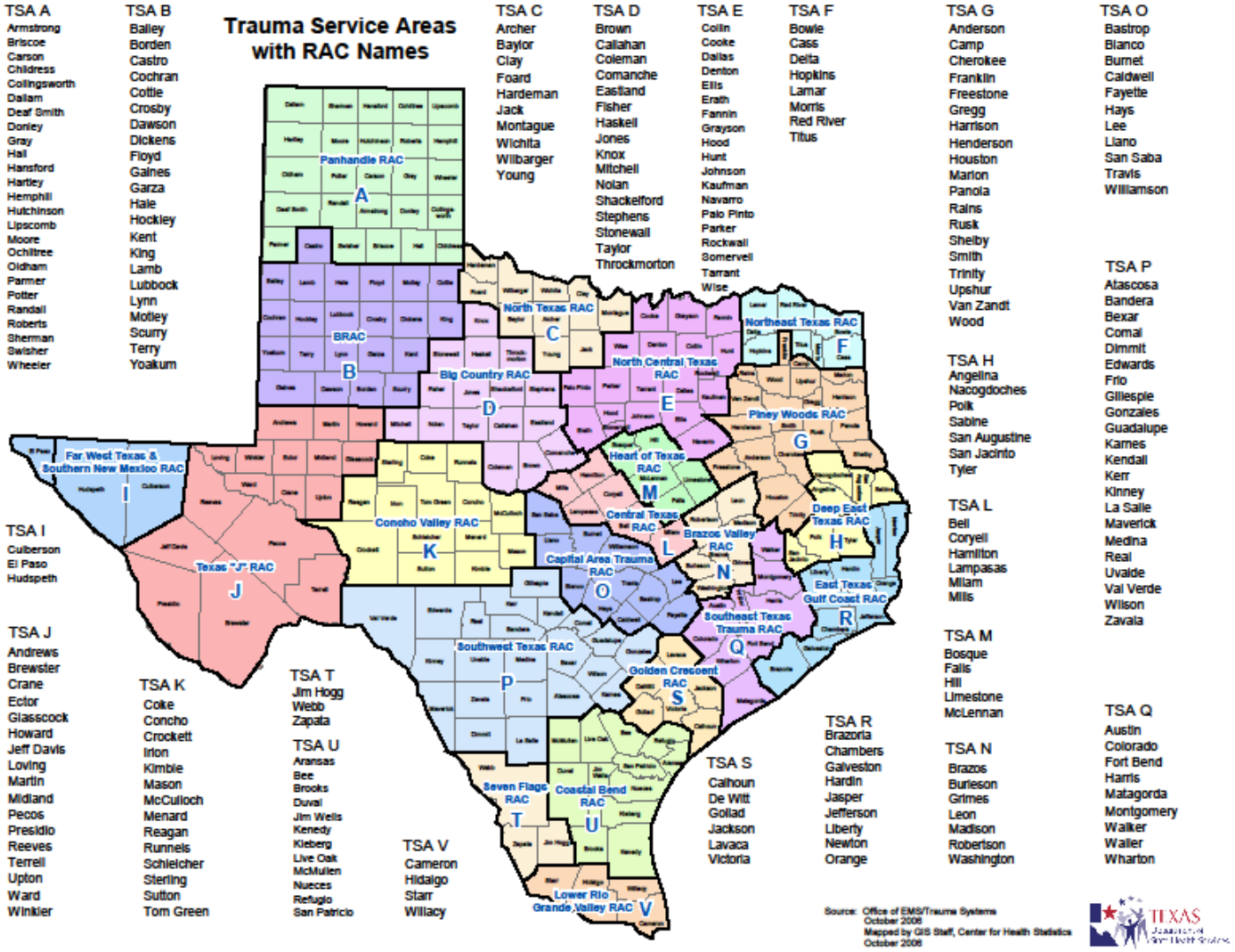
AHA Affiliate Structure



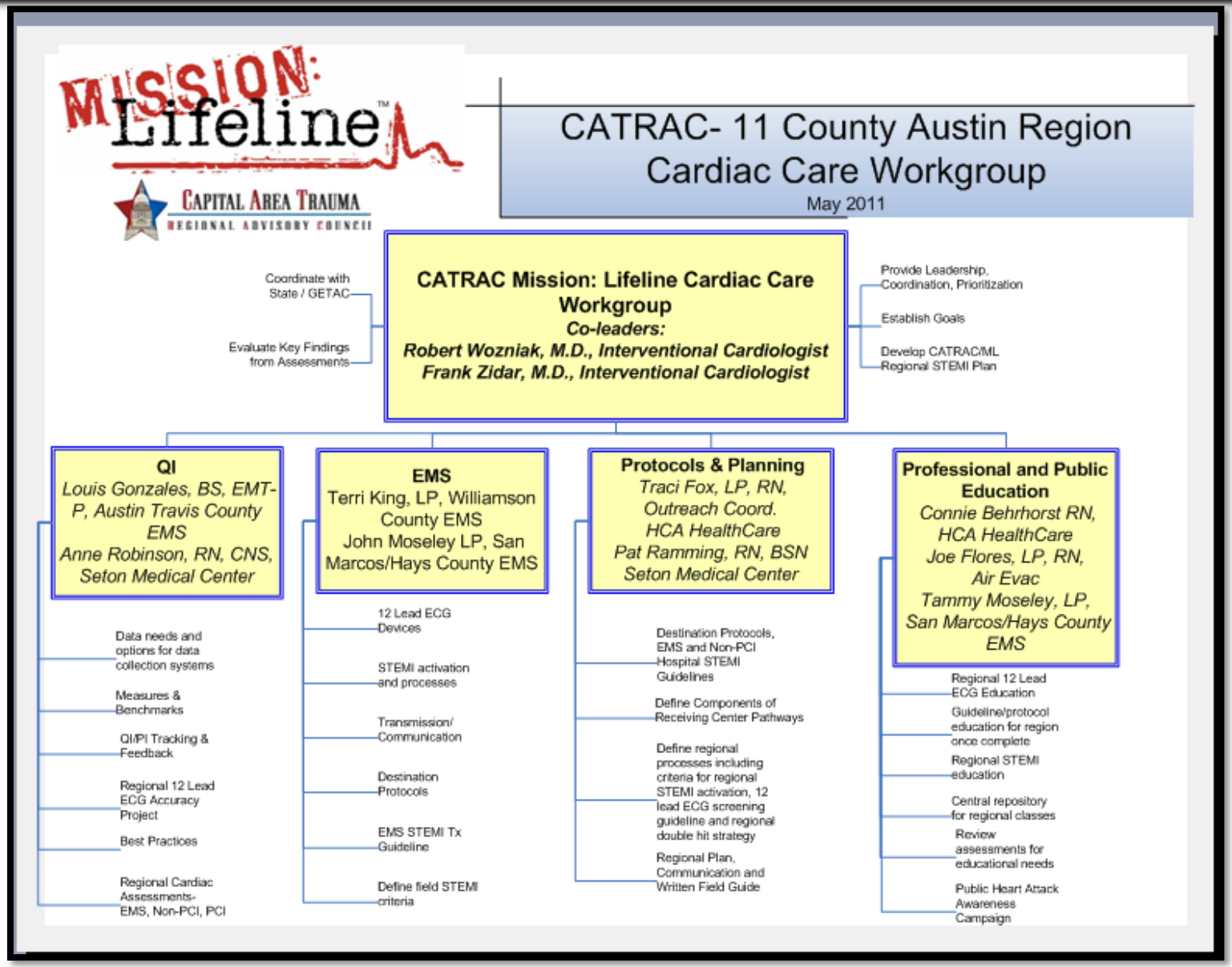
County, Regional and Statewide STEMI Systems of Care



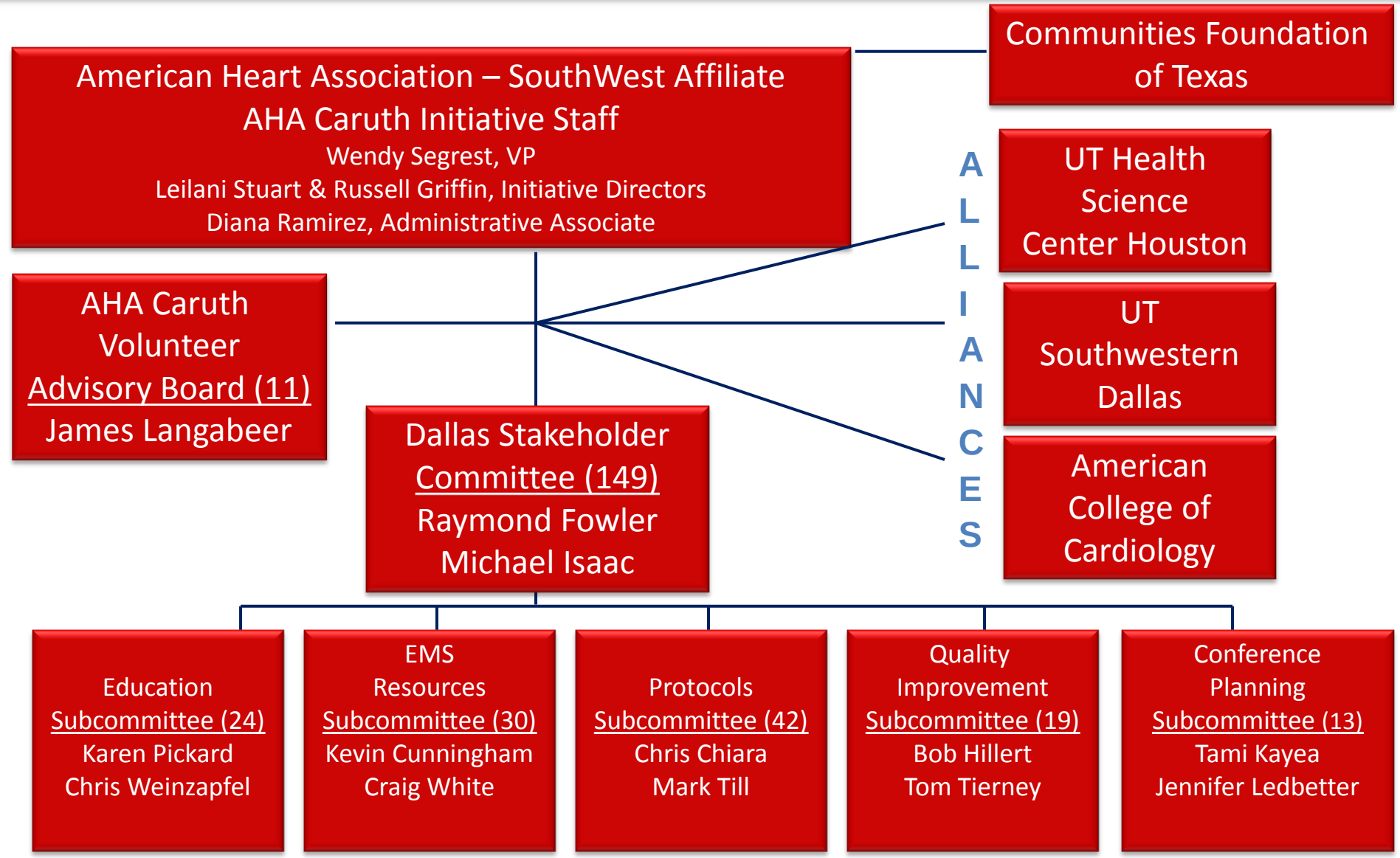
Leadership

- It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat.

Joint Leadership



AHA Dallas Caruth Initiative Infrastructure



A Mission, A Plan, A Goal

SETRAC Mission: Lifeline Cardiac Care Committee

July 30, 2010, Friday, 8:00-9:30 am

HCA Gulf Coast Division Office at 7400 Fannin, Auditorium, 6th floor

Houston, Texas

Agenda

Co-facilitators:

Todd Caliva, CEO, West Houston MC

James McCarthy M.D., Emergency Medicine, MH

Conference line will be available for this meeting. 888-909-0847 pass code 1283272

RECORDER: **MEMBERS PRESENT:** **MEMBERS TELECONFERENCING:**

Mission: "To establish a collaborative, coordinated, consistent and transparent system to improve cardiac care for all citizens in the SETRAC region"

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Task Oriented Workgroups

American Heart Association – SouthWest Affiliate

Wendy Segrest, MS, VP Quality Systems Initiatives, AHA SWA
Julie Blakie, RN MBA, Director QSI, Colorado and Wyoming, AHA SWA
Stephanie Chapman, Sr. Director, Quality System Initiatives, AHA SWA
Loni Denne, RN, BSN, Sr. Director, Mission: Lifeline, AHA SWA

Colorado Mission: Lifeline Stakeholder Committee

Jeb Burchenal, MD
Interventional Cardiologist
South Denver Cardiology

Fred Severyn, M.D.
Emergency Physician
University of Colorado Hospital

Hospital Engagement Subcommittee

Jim Beckmann, MD
Interventional Cardiologist
Banner Health System, Greeley

Julie Benz, RN, DNP-c, CNS-BC
Cardiovascular CNS
St. Anthony Hospital, Denver

Funding Subcommittee

Scott Campbell, EdD
Chest Pain Center Coordinator
Penrose-St. Francis Health Services

John Messenger, MD
Interventional Cardiologist
University of Colorado Hospital

?

RACE

Reperfusion in AMI in North Carolina Emergency Departments

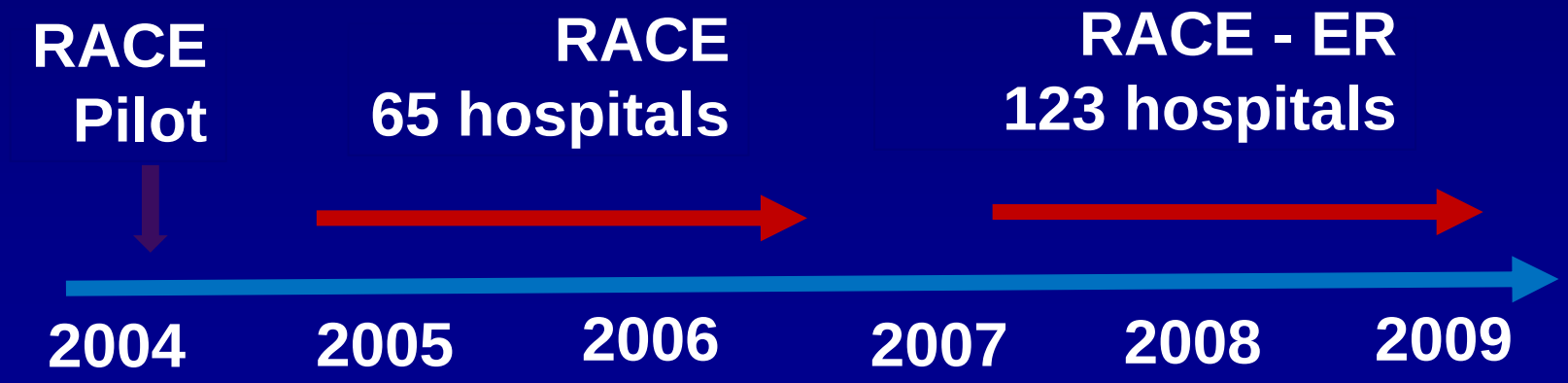
GOAL- **Utilize regional approach to overcome systematic barriers for STEMI care**

OBJECTIVES-

1) Increase reperfusion rate

2) Increase speed of reperfusion

3) Lower mortality (? In all points of entry?)

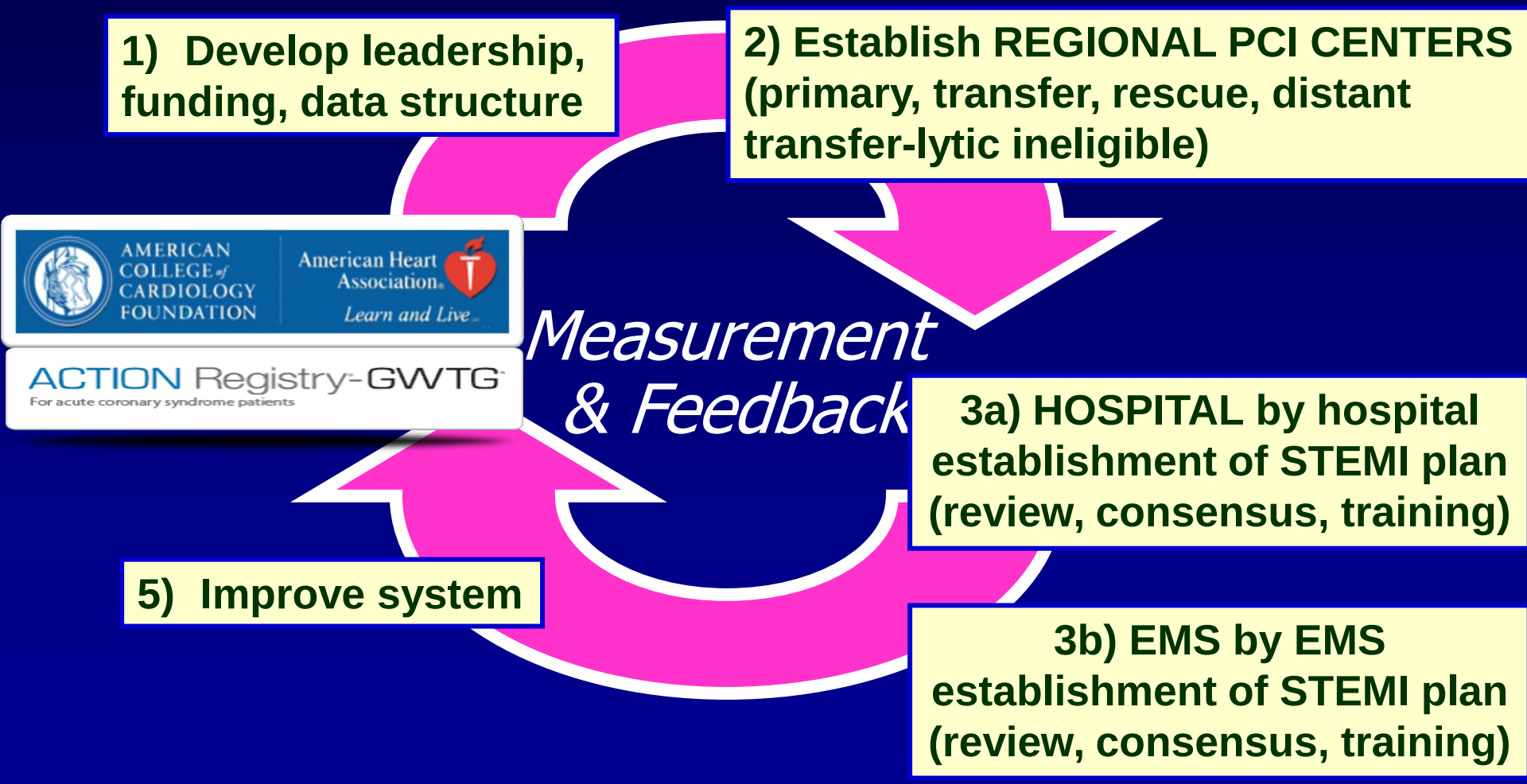


AHA 2010 Results

UNIQUE ASPECTS

- **Centralized multi-sourced funding for state cooperative STEMI project**
- **Central leadership team, evidenced based reperfusion plans, data collection plan**
  - "DCRI = Switzerland"
  - Regional coordinators not tied to one PCI center- but shared in first phase
- **Regional steering teams to adapt state plan to unique geographic & political situations.** (Local solutions using menu of standardized proven approaches)
- **"Inclusiveness"- All hospitals- All EMS or no RACE support**

RACE Process for Regionalization

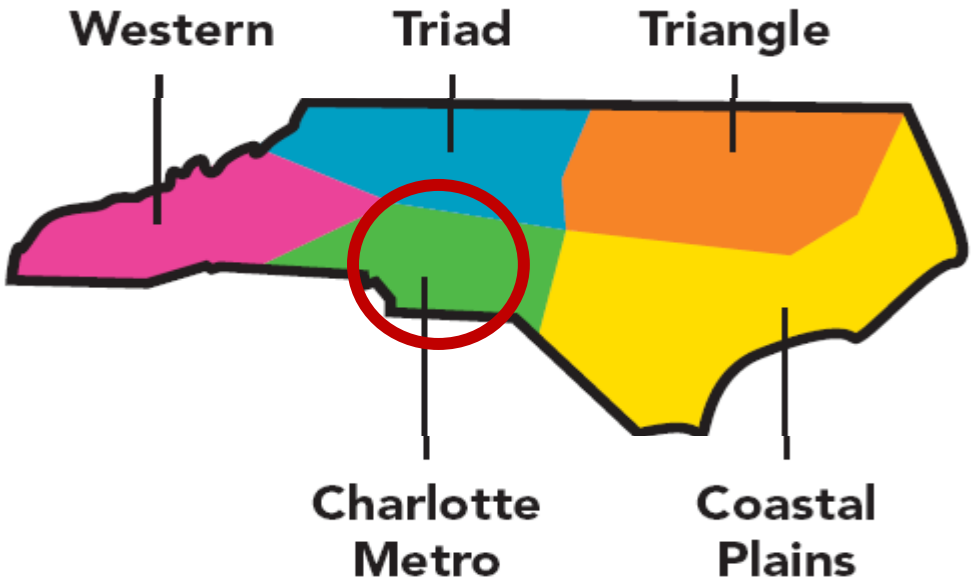


Charlotte Metro pop. >1,050,000 (2008)
18th largest city in the U.S.

98 Non PCI Hospitals

21 PCI Hospitals

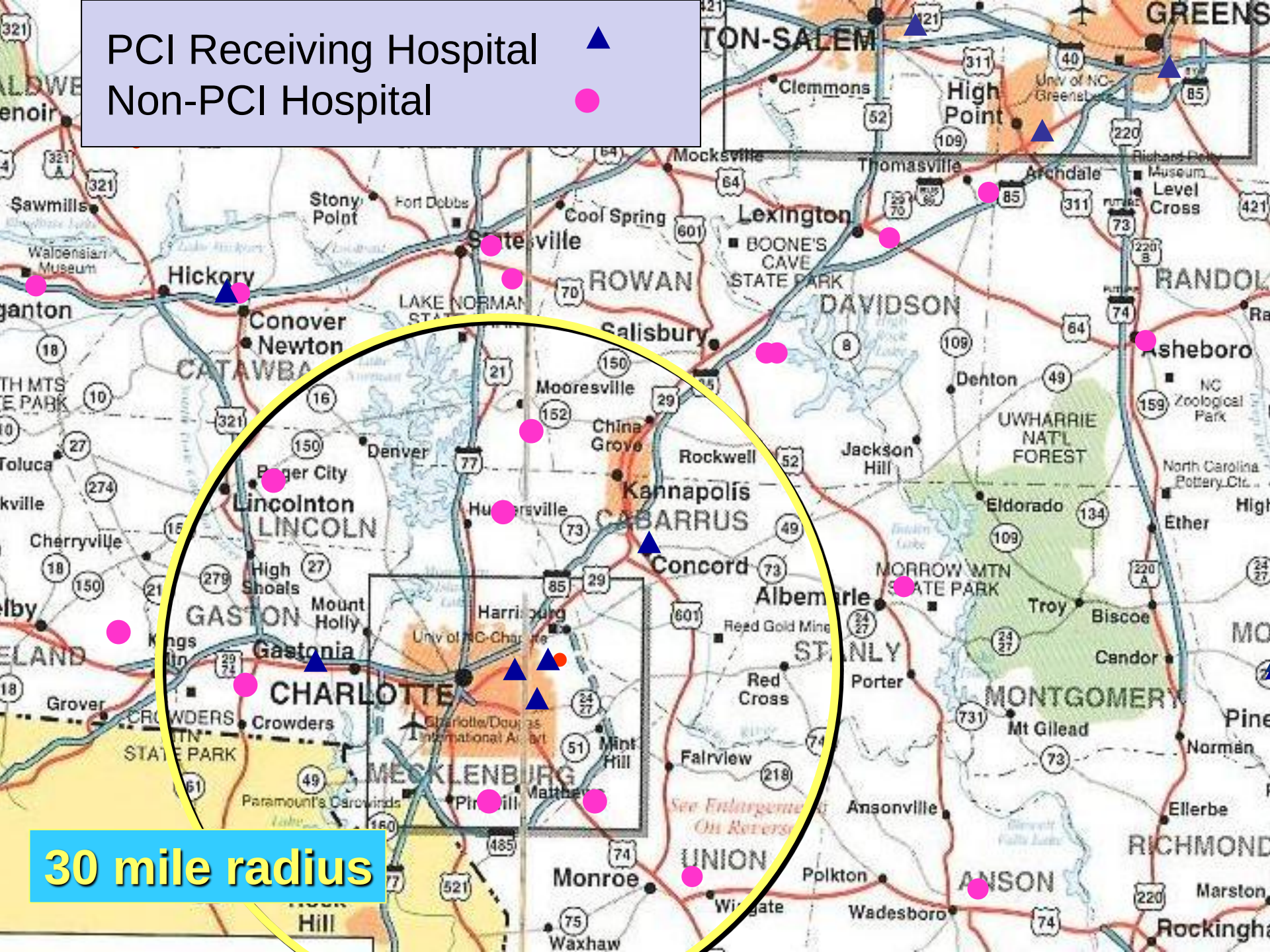
700+ EMS Systems



RACE PCI Hospitals by Region (24 / 7 availability with on-site surgical backup)

Western	Triad	Charlotte Metro	Triangle	Coastal Plains
Frye	Forsyth	CMC	Duke	Cape Fear Valley
Mission	Highpoint	CMC-Mercy	Durham Regional	CarolinaEast
	Moses Cone	CMC-Northeast	UNC	First Health
	WFUBMC	Gaston	Rex	New Hanover
		Presbyterian	Wake	Pitt

Visit WWW.RACE-ER.org for contact information


PCI Receiving Hospital
Non-PCI Hospital
30 mile radius
CHARLOTTE
Concord
Kannapolis
Salisbury
Lexington
Hickory
Conover
Newton
Lincolnton
Gastonia
Mount Holly
Harrisburg
Mooresville
China Grove
Rockwell
Albemarle
Monroe
Wadesboro
Asheboro
Thomasville
Archdale
High Point
Clemmons
Mocksville
Cool Spring
Statesville
Stony Point
Fort Dobbs
Sawmills
Denver
Cherryville
High Shoals
Grover
Crowders
Mint Hill
Fairview
Red Cross
Porter
Ansonville
Polkton
Wingate
Waxhaw
Jackson Hill
Denton
Eldorado
Troy
Biscoe
Candor
Mt Gilead
Norman
Ellerbe
Marston
Rockingham
Ether
Richard Petty Museum
Level Cross
Univ of NC-Greensboro
Univ of NC-Charlotte
Charlotte/Douglas International Airport
Paramount's Carowinds
Reed Gold Mine
Walpensian Museum
Toluca
Hill
CATAWBA
LINCOLN
GASTON
MECKLENBURG
ROWAN
DAVIDSON
CABARRUS
STANLY
MONTGOMERY
ANSON
UNION
RICHMOND
RANDOLPH
UWHARRIE NAT'L FOREST
MORROW MTN STATE PARK
BOONE'S CAVE STATE PARK
LAKE NORMAN
CROWDERS MTN STATE PARK
NC Zoological Park
North Carolina Pottery Ctr.
See Enlargement On Reverse

MAPQUEST
Kenilworth Ave
S Independence Blvd
Baxter Street Park
Pearle Street Park
S Kings Dr
Cecil St
King's College
Presbyterian Hospital
Presby
Mercy
Vail Ave
E 3rd St
Ellison St
Carolinas Medical Center
Carolinas
E Morehead St
Bromley Rd
Queens Rd
Hermitage Rd
Moravian Ln
Crescent Ave
Medical Center Dr
N Edgehill Rd
Edgehill Park
Carolinas Medical Center
Mercy
2001
Competition
0
200 m
600 ft
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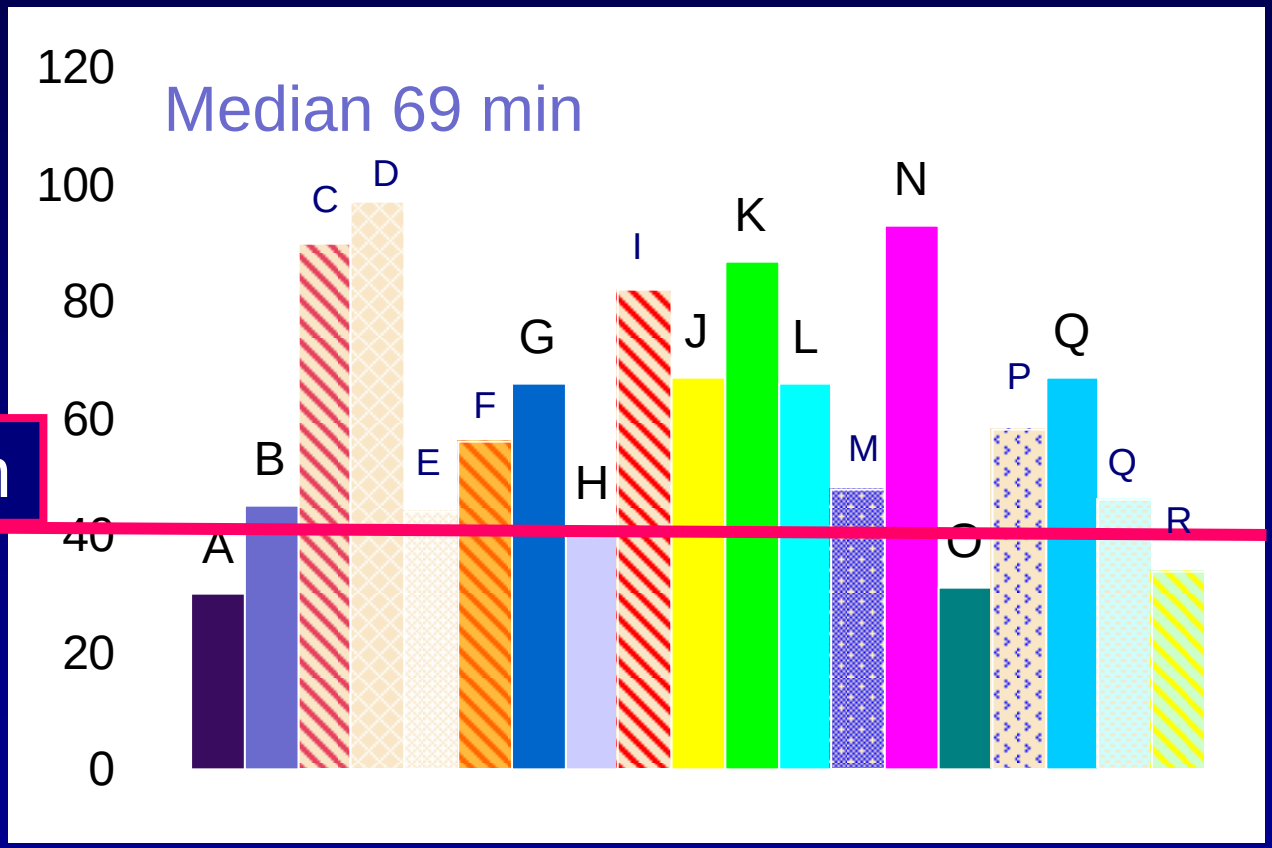
Critical Success Factors for Regionalization

- Place patient first, not competition or $$
- Have a “neutral” party coordinate competitive regions (Key-> funding the neutral body)
- Cardiology, ED Medicine, Nursing, EMS leadership, CV Administration & QI
- Empower ED Medicine and EMS to be decision makers & activate the reperfusion plan
- Keep Reperfusion plan simple, parallel processing
- Data drives change-> both immediate and QI quarterly monitoring important
- Nurse or paramedic coordinators essential to success-> “the 1st mate of the ship”

Alpha Blinded Coding Used in QI in North Carolina Hospitals

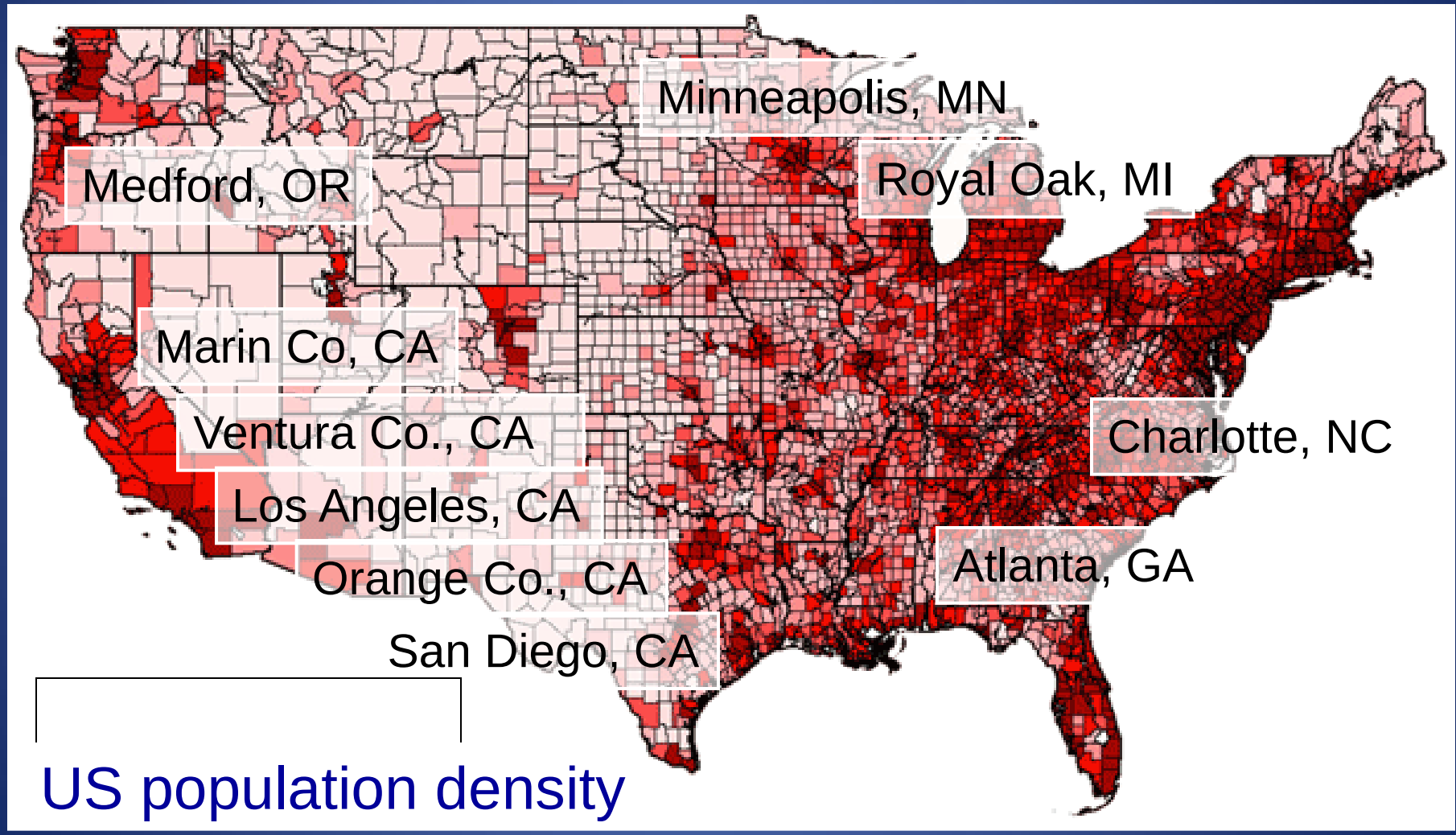


DTB = 1st Door to Balloon for Primary PCI
DTN = Door to Needle for Lytics

Remember

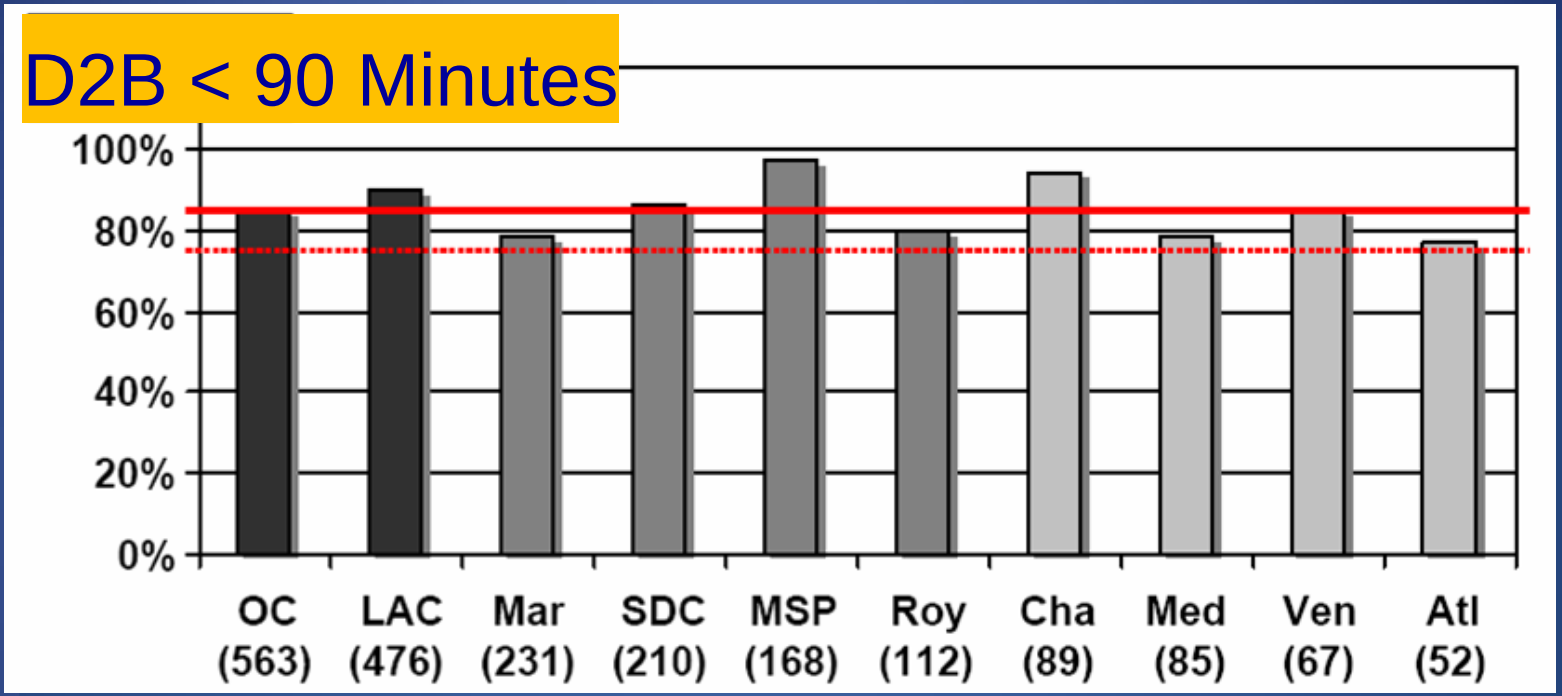
- **Don't change referral lines if they are aligned with good patient care**
  - Patient/ EMS and ED Medicine choice
- **Patients walk into all hospitals**
  - Every hospital, every EMS agency responding to 9-1-1 C/P calls must be included in a system plan
- **Competition is good… incents participation but can slow down process**
- **Neutral Convening Entity**
- **Focus on the PATIENT**

10 Regional STEMI Receiving Center Systems
Population 20 million, Paramedics 5822



Rokos et al. JACC Interv.

10 Regional STEMI Receiving Center Systems
Pre-Hospital ECG Activation



D2B≤90 min	86%
D2B≤60 min	50%
E2B≤90 min	68%

Rokos et al. JACC Interv.