# Surviving MI AN ACC QUALITY INITIATIVE



Quality Improvement for Institutions

#### How this webinar is organized

Time	Торіс
1:00pm ET	Welcome and Introductions
1:05pm ET	Mississippi STEMI Network
1:20pm ET	Engaging executive leadership in culture change
1:35pm ET	Next Steps
1:40pm ET	Question-and-Answer



Quality Improvement for Institutions

#### Lower 30-Day Mortality Rates with these Seven Strategies





Surviving MI AN ACC QUALITY INITIATIVE

#### **Mississippi STEMI Network**

#### Thad Waites, MD



Quality Improvement for Institutions

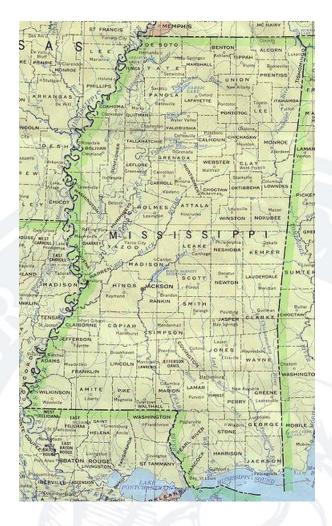
#### **Key Features of Top Performers**

- 1. Organizational Values and Goals
- 2. Senior Management Involvement
- 3. Broad staff presence and expertise in AMI care
- 4. Communication and Coordination
- 5. Problem Solving and Learning

Curry LA, Spatz E, Cherlin E, *et al*. What distinguishes top performing hospitals in acute myocardial infarction rates? *Annals of Internal Medicine*, 2011; 154:384-390.









We are Number 1 in many things. Most, we don't wanna be:

- Heart Disease
- Stroke
- Obesity, well maybe #2 now
- Infant Mortality
- Etc.





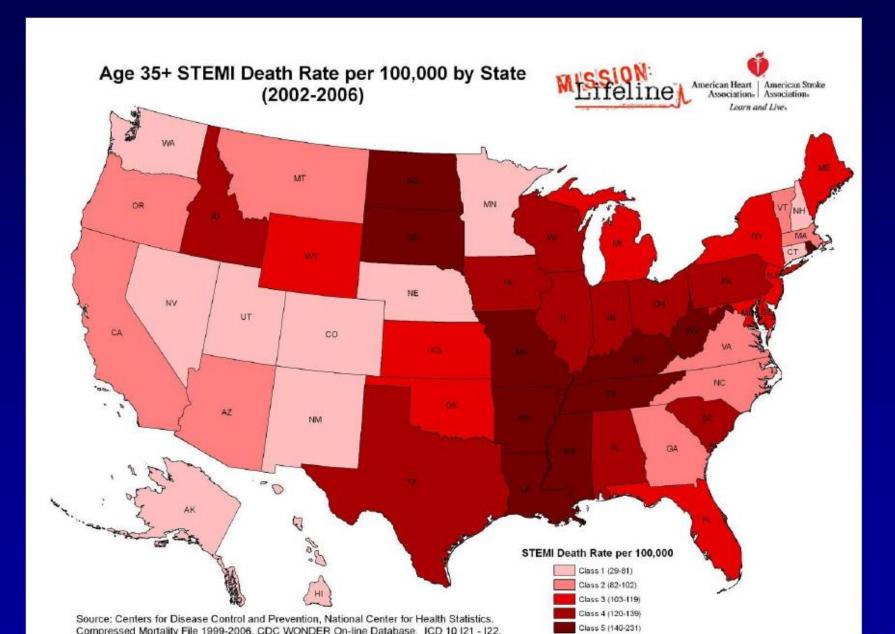


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# Variation in STEMI Mortality











We are Number 1 in many things.

Stereotypes







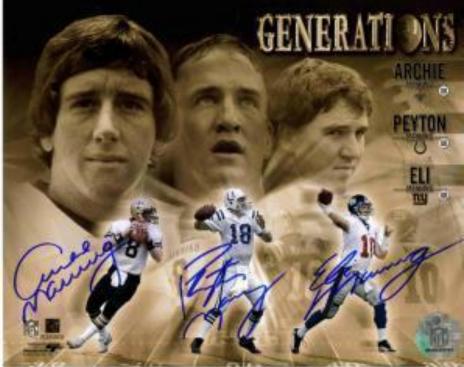
# Some of us even wear cleats.



















# Yes, we can read. A few of us can even write.

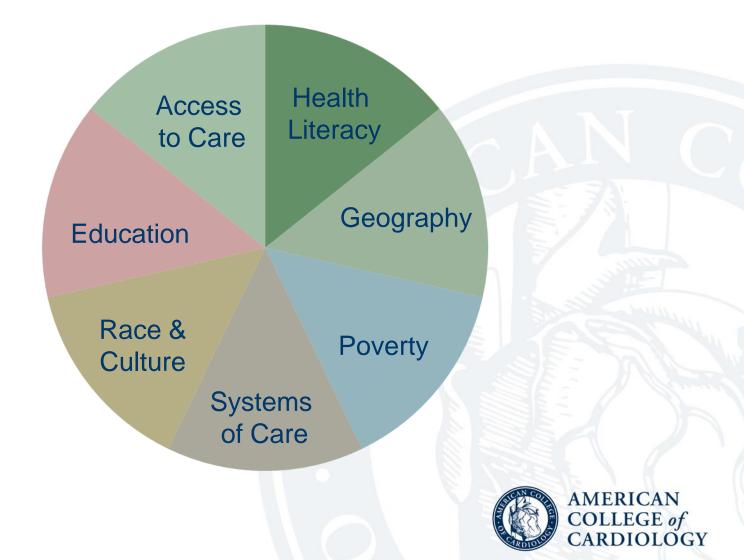




AMERICAN COLLEGE of CARDIOLOGY

Natasha Trethewey

#### The Social Determinants of Health Disproportionately Affect Mississippi's Health



#### **Representative Statewide Initiatives**

- MS Healthy Students Act **Healthy Linkages** Healthy Teens for a Better Mississippi **Telemedicine** • Tupelo HealthWorks! FOHC Bower Learn to Move • **MS** Healthcare UMMC/MPB Southern Remedy Radio and UMMC clinical pipeline Alliance Too Fat to Fight (Military) UMMC Expansion of Let's Move health professions' and residency training William Carey D.O. School Mississippi College P.A. • Health Access to Care Literacy • FQHC, MDH, Rural and Free Health Clinics Education Geography • Telemedicine School nurse programs • Jefferson County (Janelle Transportation systems Edwards) Race & Holmes County (Detra Bishop) Poverty National Baptist Church (Michael Culture Systems Minor) • Learn to Move (Larry Calhoun) of Care
- Hernando (Mayor Chip Johnson) •
- North MS Medical Foundation ٠
- Bower Foundation (Anne Travis) •
- UMMC/MUMC Community Health **Advocate Training Partnerships**

- Jackson Medical Corridor •
- Telemedicine
- Expansion of medical ٠ specialty services (transplant, heart failure, congenital heart disease)

- Downstream health industry economic expansion
- Employer educational programs
- Barksdale, Hearin and MS Rural **Physician Scholar Programs**
- MS Center for Health Policy
- MSU Social Science Research Center



# **State Health Assessment**

- MSDH chose to use the Mobilizing for Action through Partnerships and Planning (MAPP) process.
- 4 assessment tools
  - Forces of Change Assessment
  - Public Health System
     Assessment
  - Themes and Strengths
     Assessment
  - Health Status Assessment







**Improve Health Status and Reduce Health Disparities** 

#### **Three Statewide Systems of Care**

Trauma
STEMI
Stroke



## How did we do it?

- Small state
- > Well networked
- Involved
- American College of Cardiology Chapter
- Mississippi Healthcare Alliance
- Mission Lifeline
- Mississippi Department of Health
- Mississippi State Medical Association







Serve as 2013 State Capitol Doctor of the Day!

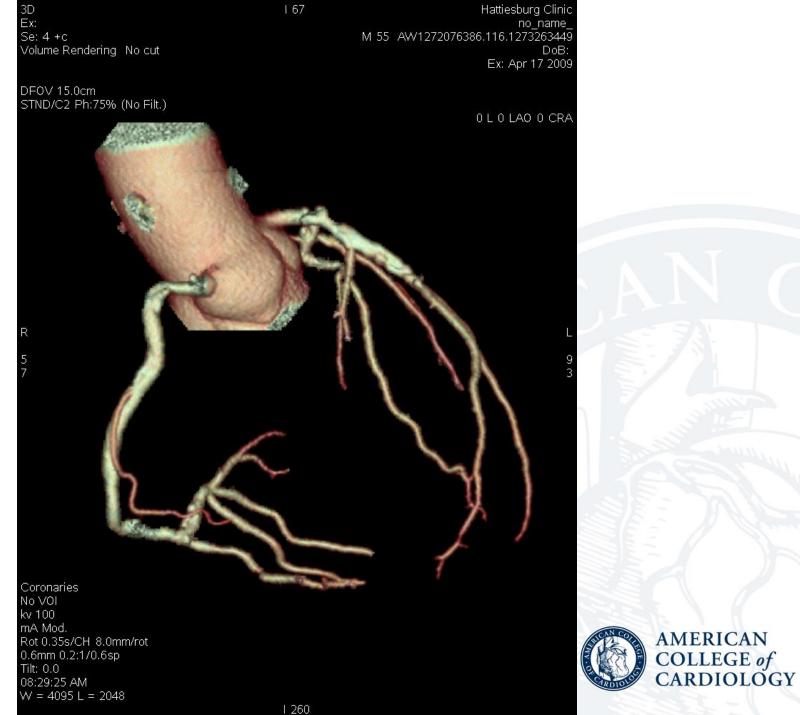
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#### Sign up now to serve as **Doctor of the Day** for the 2015 legislative

session any weekday from January to April. MSMA physicians who volunteer to serve as Doctor of the Day see patients, including legislators and their staff, for a variety of common ailments; the clinic is also staffed by the MSMA Capitol Nurse.

Doctors of the Day are granted floor privileges in both chambers of the State Legislature and are introduced in the House and the Senate at the opening of each day's session. The experience offers physicians a close-up view of legislative action and the opportunity to promote the practice of medicine to our elected officials with a distinctive and personal approach.





#### **Calcium Scoring of the Heart Mississippi State Legislature**

The Mississippi Chapter of the American College of Cardiology has arranged for each legislator to have a calcium score test. This will be offered through the courtesy of several CT centers around the state. Calcium scoring is a screening procedure that identifies calcified plaque in coronary arteries. It is a very sensitive test and can answer a major health question, "Do I have coronary artery disease?" This is the disease that leads to heart attacks and the disease that remains the number one killer of Mississippians. If the calcium score is positive, then plaque is present in the coronary arteries. The amount of calcium (the score) is also predictive of risk. The higher the score the more the heart attack risk. Your calcium scoring test will be done by the CT scanner of your choice. It is a quick procedure and is done by x-ray. There is nothing invasive about it. No pre-tests are required and no needle sticks are involved. You will lie on an x-ray table and a scanner will rapidly scan your heart area. If you have a positive score, you should then seek the advice of a medical professional. This can, of course, be done with your own personal physician. Or, if you or your physician would like, we will have cardiologists available to answer your questions about your test result. The cardiologists are listed on the back of this page. We are pleased to be able to offer this study and we do hope you will have the opportunity to do this and to learn your calcium score. All you need to do is call one of the centers listed and schedule the study. The main contact person at each center is listed on the back of this page. If you have any questions about the project, itself, please call: Thad F. Waites, MD.



It was a pleasure to speak to you today and tell you about the <u>calcium score project of the MS.</u> <u>Chapter of the Am. Col. of Cardiology</u>. As I mentioned we have already presented this to the Mississippi Legislature and the two health committees approved us to proceed. I did speak to Mr. Price and he approved it.

The project will proceed as follows. Each legislator will be provided an information sheet. This will explain the calcium score test and will tell them about CT scanners. They will then be invited to call any CT scanner unit that is participating and <u>schedule a free calcium score</u>. Just by the timing of it, this will occur at the end of the regular session and I predict that most senators and representatives will have this done at the <u>scanner closest to their homes</u>. Each unit will then supply the legislator with their report. Afterwards, each individual will likely want to check with the doctor of his choice regarding the results. There are <u>cardiologists all over the state that have agreed to offer phone consultation</u> regarding the results to the doctors or the individuals.

I presume you are the contact person that I will need to list on the info sheet? If you would provide me the best contact number, I would appreciate it.

Please let me know if you need further information.

Thad F. Waites, MD, FACC Governor for Mississippi in the American College of Cardiology.



OLLEGE *of* Ardiology -----Original Message-----From: Kevin To: Thad Waites Subject: Rep >>>>>> Calcium Score. Sent: Oct 27, 2009 4:15 PM

We did a calcium score on Rep. >>>> today. The score was 1668.

I gave him a copy and he is going to take the results to his doctor at home.

Thanks,

Κ







# Mississippi Healthcare Alliance The History

#### www.mshealthcarealliance.org









#### RIVER HILLS CLUB







## Mississippi Healthcare Alliance

North Mississippi Medical Center

Mississippi Baptist Medical Center

St. Dominic Hospital

Forrest General Hospital

Singing River Health System







Learn and Live

MISSION:

YOU CAN MAKE THE DIFFERENCE BETWEEN AN EVENT THAT KILLS AND ONE THAT DOESN'T. STEMI AND CARDIAC RESUSCITATION SYSTEMS OF CARE.



### **MHCA Partners of Care**

- American College of Cardiology
- American Heart Association
- MS State Department of Health
- MS Hospital Association
- MS Division of Medicaid
- Wise Carter Child & Caraway, PA
- Matthews, Cutrer, & Lindsay, PA





Mississippi Healthcare Alliance

#### Mississippi Healthcare Alliance Symposium

Saturday, August 28, 2010 7:00 a.m. – 3:30 p.m.

> Butler Snow Building 1020 Highland Colony Parkway Ridgeland, MS 39157

Systems of Care for Heart Attacks



## **TOP 10 LESSONS LEARNED!**

- 1. Do it the same way every time! STANDARDIZE!
- 2. KEEP IT SIMPLE!
- 3. TEAMWORK-LISTEN-TEAMWORK
- 4. MORE THAN D2B!!!!!!!
- 5. FEEDBACK, FEEDBACK AND MORE FEEDBACK!



# **TOP 10 LESSONS LEARNED!**

- 6. Cardiologists need to get over it!
- 7. Now ED docs need to get over it!!
- 8. Key people with energy: CAN DO!!
- 9. There will be CHALLENGES! NO CHALLENGE is TOO BIG!!
- 10. Its more Important than I thought! JUST DO IT !!!!



# **EMS COMPONENTS OF A SYSTEM**

PREHOSPITAL
 TRIAGE
 TRANSFER





50% use EMS 50% Pre-hosp ECG





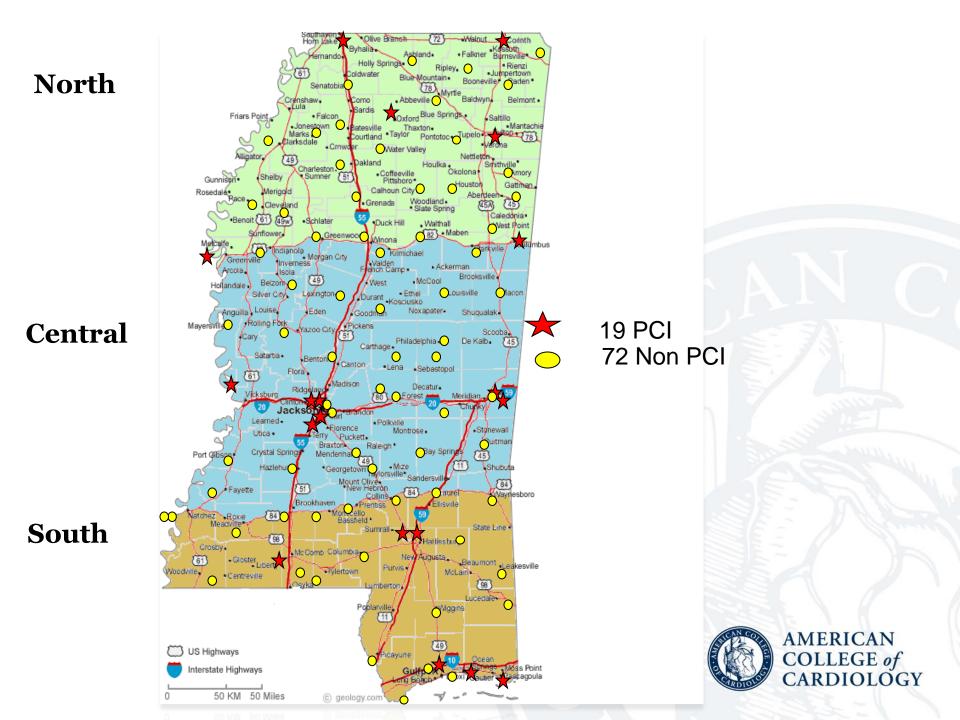
# Mississippi Healthcare Alliance

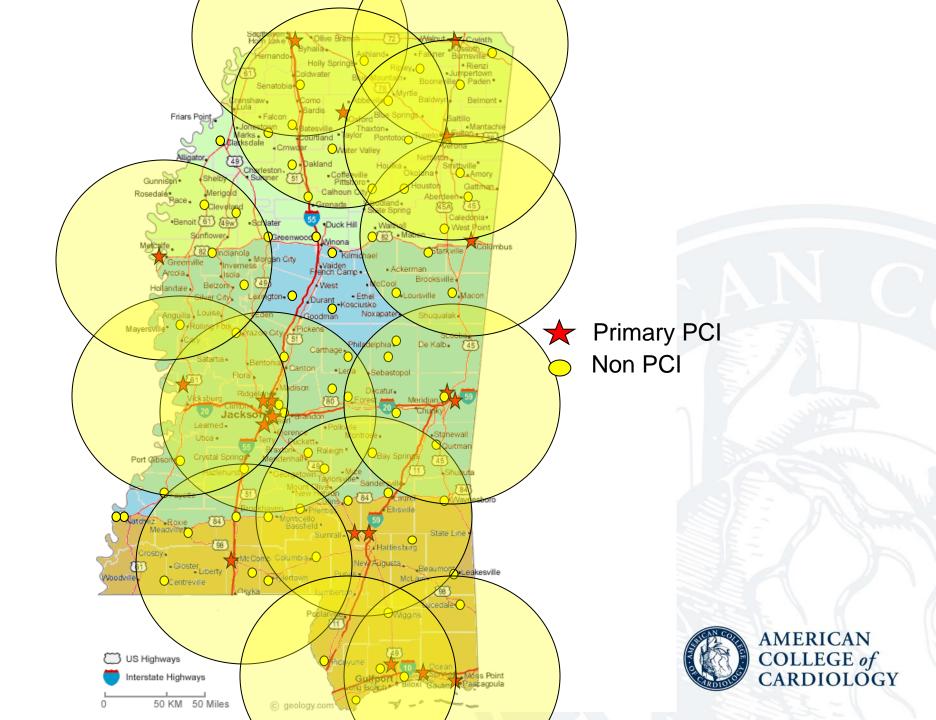
Baptist Memorial Hospital – Desoto Baptist Memorial Hospital – Golden Triangle Baptist Memorial Hospital – North Mississippi Delta Regional Medical Center North Mississippi Medical Center Magnolia Regional Health Center Central Mississippi Medical Center Jeff Anderson Regional Medical Center Mississippi Baptist Medical Center **River Region Medical Center** Rush Health Systems St. Dominic Hospital The University of Mississippi Medical Center Forrest General Hospital **Gulfport Memorial Hospital** Singing River Health System Southwest Mississippi Regional Medical Center Wesley Medical Center

# ACTION Registry-GWTG™









# **STEMI Care System**

### Mississippi State Board of Health Approved Care Plan:

June 2011



# **STEMI**

- Voluntary System
- STEMI Advisory Committee
- STEMI Performance Improvement Committee
- Developing Draft Rules/Regulations



## **Bureau of Acute Care Systems**

- Trauma
- STEMI
- Stroke
  - Only State in United States with 3
     Statewide Systems of Care
- Became an official bureau within Office of Health Protection – October 2014

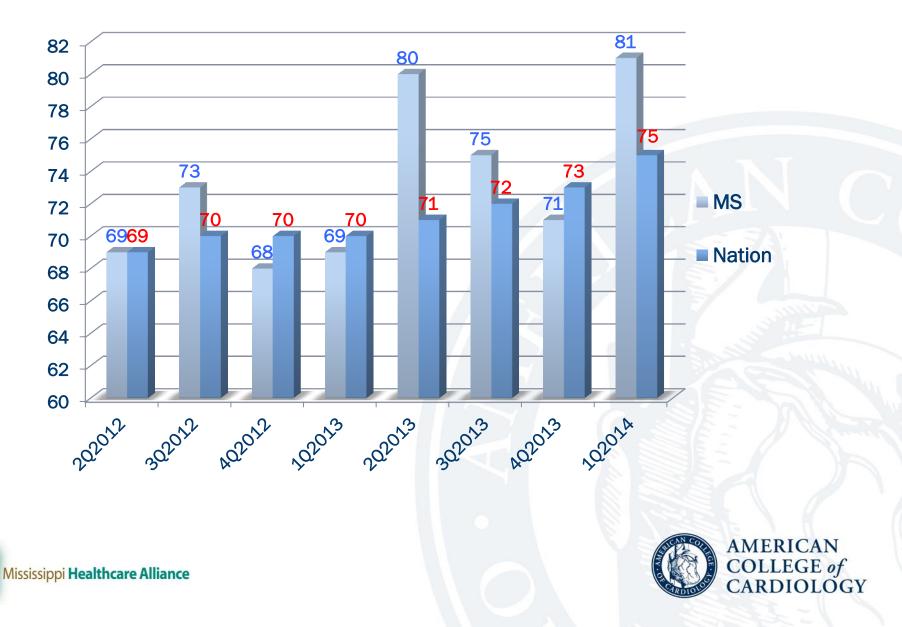




# Mission: Lifeline Update 1Q2014



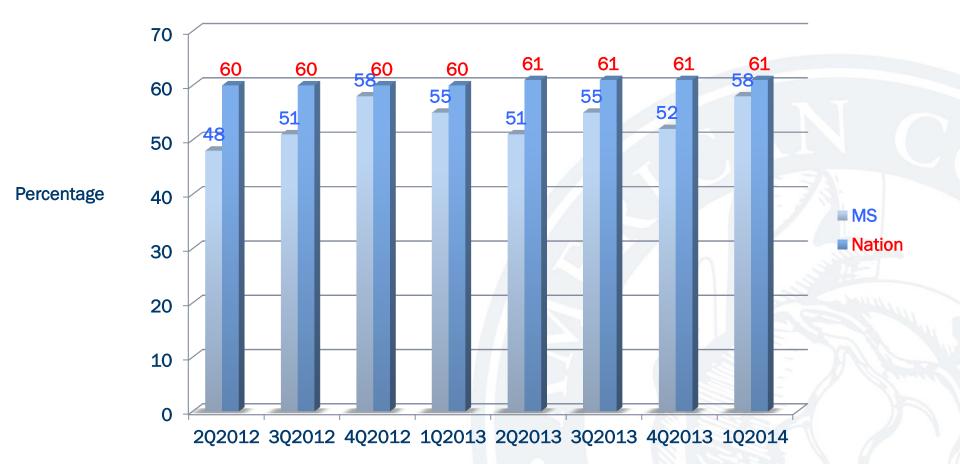
# **First EKG Obtained Prehospital**



# Direct Presentation POV



# Direct Presentation EMS



Mississippi Healthcare Alliance



# **Time Spent at Referral Facility**



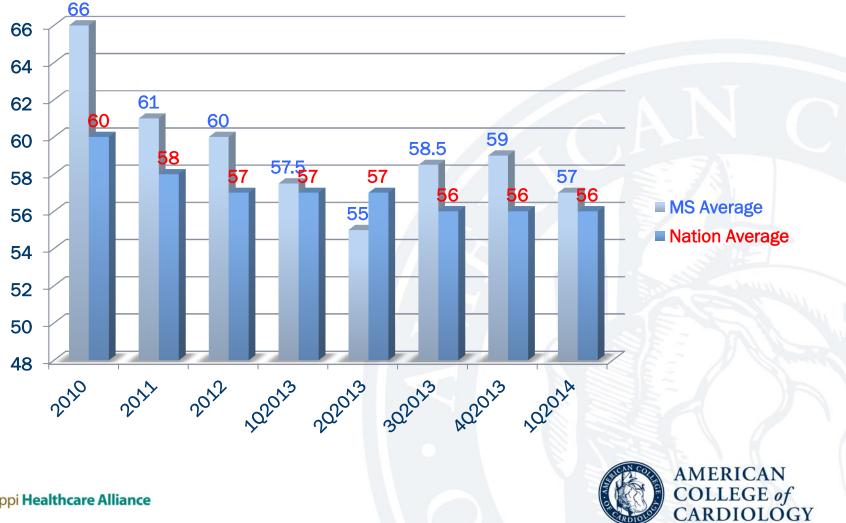
# **Time from Referral to Receiving Hospital (Transfer Time)**



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# **Door to PCI** (Direct Presentation)

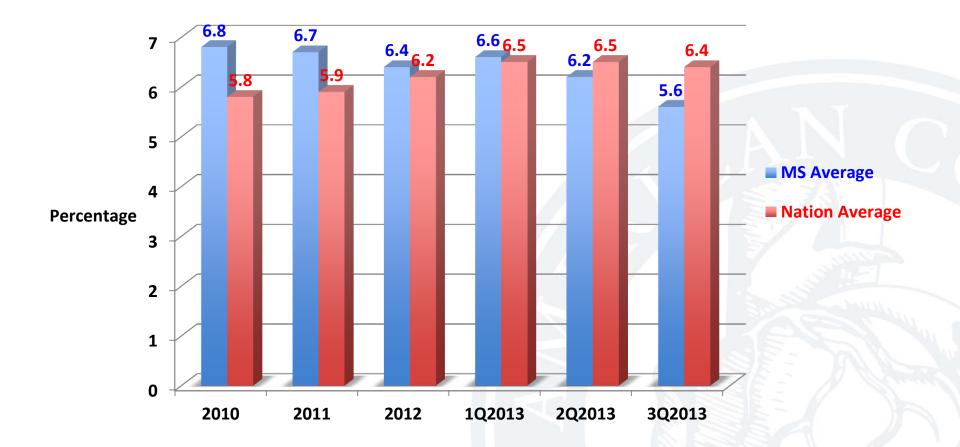


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# FMC to PCI (minutes)



# **In-Hospital Mortality**



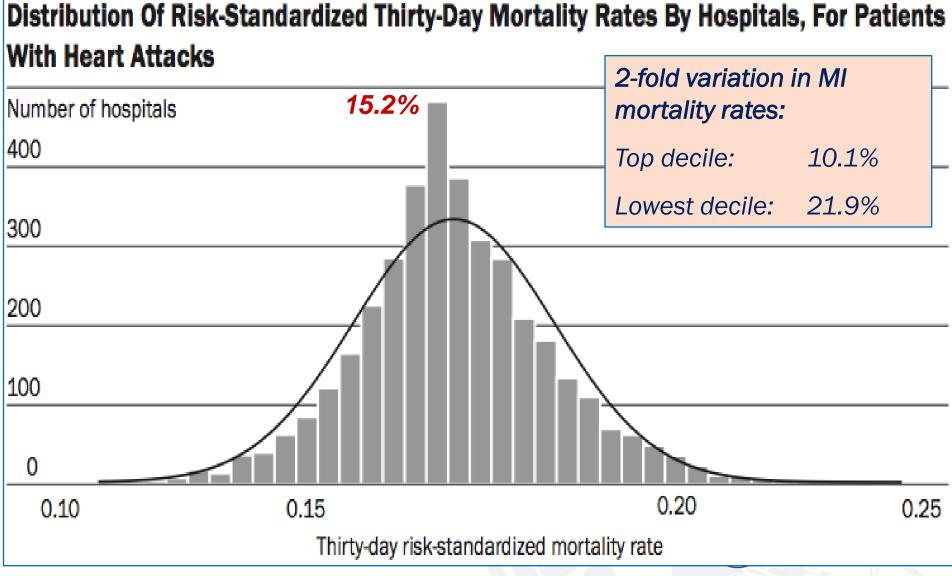


Strategy Associated With Lower RSMR	% Points RSMR Decrease (% implementing)
Physician AND nurse champions for AMI care	0.92 (by 43%)
Organizational culture supports creative problem solving	0.66 (by 40%)
Monthly meetings with EMS to review AMI cases	0.61 (by 15%)
Nurses are not cross trained from ICU for the cardiac catheterization laboratory	0.41 (by 82%)
Pharmacists round on all patients with AMI	0.41 (by 35%)
Having a cardiologist onsite 24-7	0.54 (by 14%)



Bradley EH, Curry LA, *et al*. Hospital strategies for reducing risk-standardized mortality rates in acute myocardial infarction. *Ann Intern Med*. 2012;156:618-26.

## AMI 30-Day RSMR



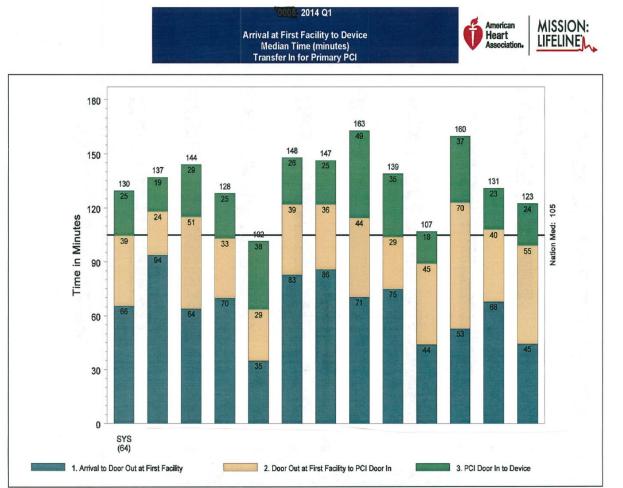
Krumholz HM et al. Health Affairs 2007;26:75-85

### Table 1. 30-Day Mortality Measure Results for the FY 2016 Hospital VBP Performance Period

Measure [a]	Number of Eligible Discharges [b]	Performance Period Survival Rate [c]	Achievement Threshold [d]	Benchmark [e]
AMI 30D				
Mortality	254	0.868591	0.847472	0.862371



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<sup>1</sup>Site labels and the corresponding number of patients eligible for at least one time interval are displayed on the x-axis <sup>2</sup>Bars are not displayed when there are no patients eligible for at least one time interval. Additionally, specific time intervals without any eligible patients are not plotted.

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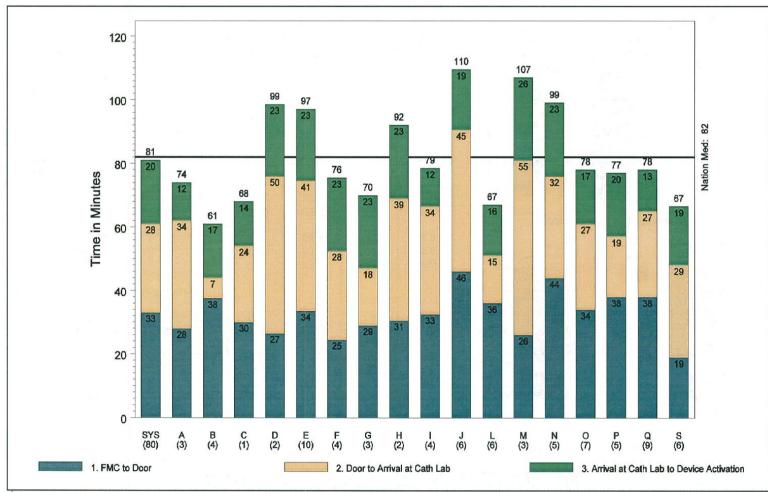


#### 0005: 2014 Q1

#### First Medical Contact to Device Median Time (minutes) Direct Presentation, Arriving via EMS







<sup>1</sup>Site labels and the corresponding number of patients eligible for at least one time interval are displayed on the x-axis <sup>2</sup>Bars are not displayed when there are no patients eligible for at least one time interval. Additionally, specific time intervals without any eligible patients are not plotted.

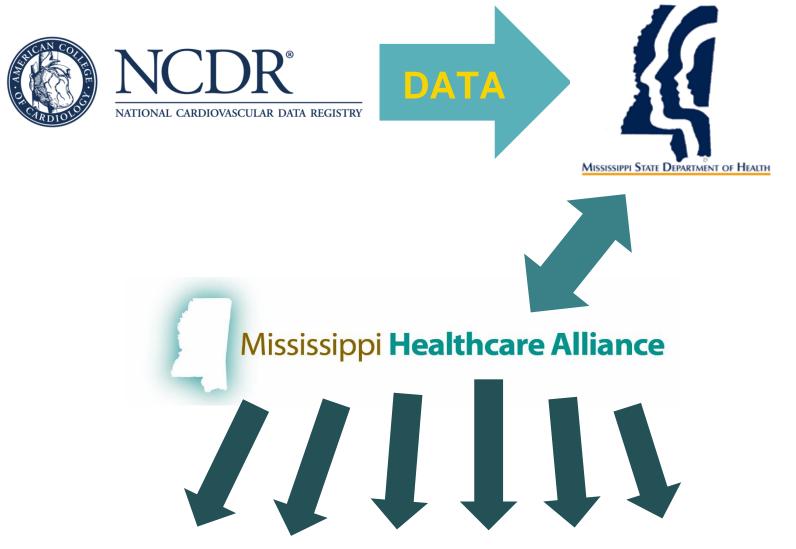




# Mississippi working closely with **ACC's NCDR®** to help achieve quality improvement



#### 2013 Mississippi Code, Title 41, Chapter 63, § 41-63-9



To Ultimately Improve Care in Mississippi STEMI Network

# Funding

- 2013 and 2014
  - \$200,000 provided by Legislature from Tobacco Funds
- 2015
  - Additional \$250,000 provided by Legislature in State General Funds
- Funds are provided through a contract with the Mississippi Health Care Alliance for development of the STEMI System of Care









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#### **Engaging executive leadership in culture change**

#### Eric Stecker MD, MPH

### Discussants: Charles Kilo MD, MPH & Dana Bjarnason RN, PhD



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### Introductions

### **Eric Stecker**

- Medical director for inpatient cardiology at OHSU
- Clinical electrophysiologist and researcher

### Dana Bjarnason

- Chief Nursing Officer and EVP at OHSU
- Leading a culture change effort (patient safety)

### Chuck Kilo

- Chief Medical Officer and EVP at OHSU
- Leading a culture and systems change effort (continuous quality improvement)



### Goal for this talk

A conversation that will provoke:

- Reflection on your own organization
- Discussion with colleagues and superiors
- Roughing out a "next step" to improve the care of your patients





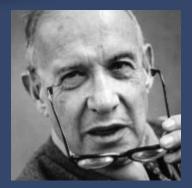
### Thoughts on organizational culture







### **Organizational culture**



### "Culture eats strategy for breakfast" - Peter Drucker (attributed)





### **Organizational culture**

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### • What is it?

The values and behaviors of people within an organization that create its unique environment and define its performance

- So far, limited evidence on the impact of culture change efforts
- But it is widely accepted as critical





### Two paths to culture change

### 1. Leader-driven

2. Organic (like a social movement)

### Both require executive leadership involvement







### Different roles in culture change

### Front-line champions

- Close to where care is delivered
- Respect of and access to patients, providers and others involved in front line patient care

### Middle-level champions

- Control some budget and personnel
- Have a network that can get things done
- Tuned in to both patient care are ROI's

### Executive champions

- Influence tough or big budget decisions
- Remove barriers across larger swaths of organization

CARI

Oregon Health & Science University





### Importance of executive leadership

- Depends on how big the change is (degree of change × scope of change = bigness)
- Big change  $\rightarrow$ 
  - get a C-suite champion
  - get all hands on deck
  - (but be realistic)
- Focused change  $\rightarrow$ 
  - find a like-minded, dedicated group
  - (but try something ambitious)







#### Understanding and managing resistance

#### **Gleicher's Formula**

Formula for Change

# D \* V \* F > R

The following factors are critical for organizational change:

- Dissatisfaction with AS-IS state
- Vision of possible TO-BE state
- First steps (the plan)

The change is possible if the product is greater than R:

- Resistance to change

http://www.comindwork.com/images/weekly/gleichers-formula-for-organizational-change.png/







#### **Engaging critical stakeholders**

- All levels need to be engaged (front-line, middle and executive) for a successful program
- Executive level champions want to see a number of things, including:
  - An effective pitch about the need for change
  - Alignment with existing, high-priority organizational goals
  - Leadership by people with record of performance
  - A realistic plan



# How you can use Surviving MI to help?







## Surviving MI Assessment

http://cvquality.acc.org/Initiatives/Surviving-MI/Features/Assessment.aspx

#### A great way to get the ball rolling

- Provides an opportunity for cardiologists and cardiac service line directors to sit down and talk about the big picture
- Requires consideration of key, evidencebased elements of systems of care
- Can provoke both culture change and process improvement projects



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Monitoring progress and outcomes

#### Structure and processes of care

1. Use SAMI survey and ACTION Registry to evaluate current state and assess progress

Outcomes

- 2. Monitor <u>in-hospital AMI mortality</u> with ACTION
- 3. Monitor <u>30-day AMI mortality</u> for Medicare patients

(http://www.medicare.gov/hospitalcompare/)







# Examples from our organization







## What is OHSU doing?

CV institute established a quality steering committee

- Reviews and directs work of quality subcommittees
- Promotes regular review of outcome / process metrics by individual clinicians
- Promotes engagement in high priority focuses from executive leadership (and communicates to executive leadership)

KNIGI

Oregon Health & Science University

CARDI





### What is OHSU doing?

Ischemic heart disease quality subcommittee

- Regular review of process and outcome metrics (UHC, NCDR, CMS)
- Regular reassessments of barriers and "wins" in systems of care
- Representatives from across the institute
- Achieves change using members' networks, steering committee and line management





## What is OHSU doing?

Two big system-wide culture change efforts (topdown model)

- Continuous improvement culture (lean management)
- Safety culture

CV Institute is engaging these efforts and often is a testing venue for them







#### Discussion by Drs. Kilo and Bjarnason











## Eric Stecker steckere@ohsu.edu



Surviving MI

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# **Next Steps**

- 1. Have a quality improvement team available
- 2. Complete online self-assessment at CVQuality.ACC.org/SurvivingMI
- 3. Use the Assessment results to identify success metrics to improve
- 4. Implement at least 2 strategies or tools
- 5. Share your story online
- 6. Post to the listserv



## **Thank You**

# Surviving MI An ACC QUALITY INITIATIVE

Please submit your questions for the moderated question and answer session.

#### SurvivingMI@acc.org CVQuality.ACC.org/SurvivingMI



Quality Improvement for Institutions



Quality Improvement for Institutions

The Quality Improvement for Institutions program combines the ACC's NCDR data registries with toolkits and proven hospital-based quality improvement initiatives like Hospital to Home, the D2B Alliance and Surviving MI.

Simple Solutions. Big Impact. CVQuality.ACC.org.



Quality Improvement for Institutions