

Surviving MI

AN ACC QUALITY INITIATIVE

June 26, 2014



Quality Improvement
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Speaker Bio



Henry H. Ting, MD, MBA, FACC

- Professor of Medicine
- Associate Dean, Mayo Clinic College of Medicine
- Director, Mayo Clinic Quality Academy

Effective July 2014

- Senior Vice President and Chief Quality Officer, New York-Presbyterian Hospital, The University Hospital of Columbia and Cornell



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Speaker Bio

MaryAnne Elma, MPH

Director, Quality Improvement Solutions
American College of Cardiology



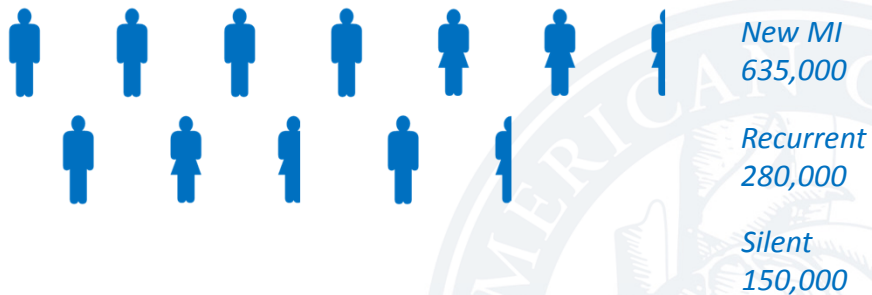
In her 15 years at the ACC, MaryAnne has led efforts that bring evidence-based medicine into the field with practical solutions using social marketing practices and information design. She oversees a portfolio of QI implementation programs, including the Hospital-to-Home (H2H) Initiative, Surviving MI Initiative, Clinical Tools – and the ACC's new Quality Improvement for Institutions program.

MaryAnne received her BA from Bucknell University and Masters in Public Health at the Johns Hopkins University School of Public Health.



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MI Statistics

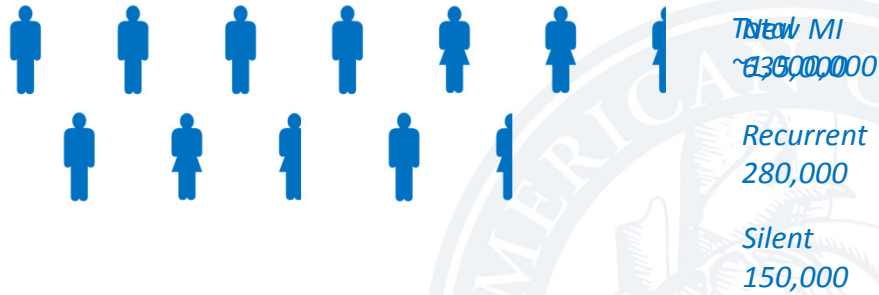


Go AS, Heart Disease and Stroke Statistics 2013. Circulation. 2013; 127:e6-245.



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MI Statistics

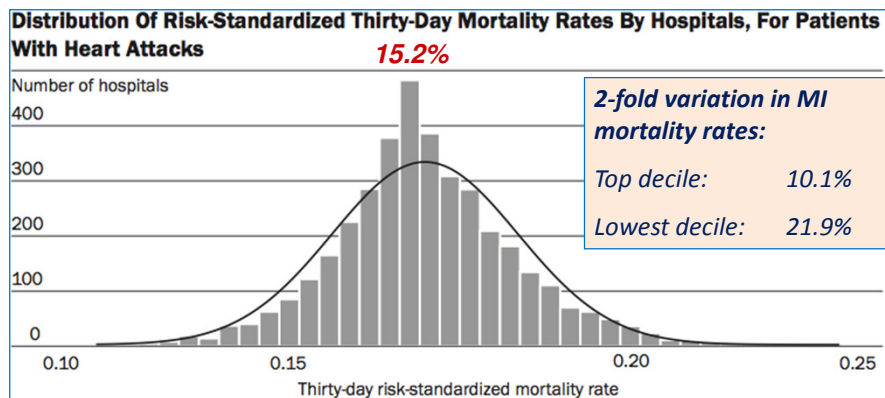


Go AS, Heart Disease and Stroke Statistics 2013. Circulation. 2013; 127:e6-245.



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AMI 30-Day RSMR

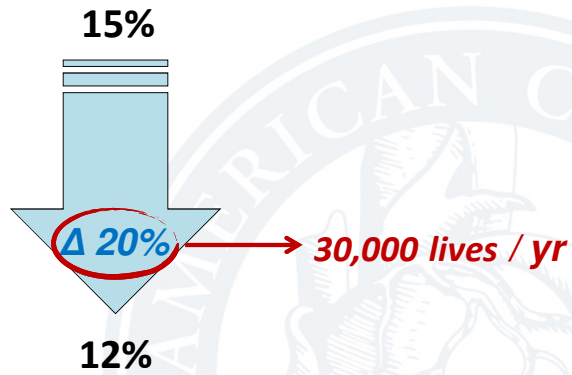


Krumholz HM et al. Health Affairs 2007;26:75-85



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Surviving MI Initiative



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Value Based Purchasing

FY 2013 Program Measures

Domain	Included Measures	Domain Weight
Clinical Process of Care	<ul style="list-style-type: none"> • AMI-7a. Fibrinolytic Therapy Rcvd within 30 Mins of Hospital Arrival • AMI-8a. Primary PCI Rcvd within 90 Mins of Hospital Arrival • HF-1. Discharge Instructions • PN-3b. Blood Cultures Performed in ED Prior to Initial Antibiotic in Hospital • PN-6. Initial Antibiotic Selection for CAP in Immunocompetent Patient • SCIP-Inf-1. Prophylactic Antibiotic Rcvd within 1 Hr Prior to Surgical Incision • SCIP-Inf-2. Prophylactic Antibiotic Selection for Surgical Patients • SCIP-Inf-3. Prophylactic Antibiotics Discontinued within 24 Hrs After Surgery End Time • SCIP-Inf-4. Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose • SCIP-Card-2. Surgery Patients on a Beta Blocker Prior to Arrival that Received a Beta Blocker during the Perioperative Period • SCIP-VTE-1. Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered • SCIP-VTE-2. Surgery Patients who Received Appropriate Venous Thromboembolism Prophylaxis within 24 Hrs Prior to Surgery to 24 Hrs After Surgery 	70%
Patient Experience	8 HCAHPS items: <ul style="list-style-type: none"> • Communication with Nurses • Communication with Doctors • Responsiveness of Hospital Staff • Pain Management • Communication about Medicines • Cleanliness and Quietness of the Hospital Environment • Discharge Information • Overall Rating of Hospital 	30%

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Value Based Purchasing

FY 2014 Program Measures

Domain	Included Measures	Domain Weight
Clinical Process of Care	Same as FY 2013 with one addition: <ul style="list-style-type: none"> • SCIP-Inf-9, Postoperative Urinary Catheter Removal on Post-Operative Day 1 or 2 	45%
Patient Experience	Same as FY 2013	30%
Outcomes	<ul style="list-style-type: none"> • AMI 30-day Mortality Rate • HF 30-day Mortality Rate • Pneumonia 30-day Mortality Rate 	25%

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Background

ORIGINAL RESEARCH

IMPROVING PATIENT CARE

What Distinguishes Top-Performing Hospitals in Acute Myocardial Infarction Mortality Rates?

A Qualitative Study

Leslie A. Curry, PhD; Erica Spatz, MD; Emily Cherlin, PhD, MSW; Jennifer W. Thompson, MPP; David Berg, PhD; Henry H. Ting, MD, MBA; Carole Decker, RN, PhD; Harlan M. Krumholz, MD, SM; and Elizabeth H. Bradley, PhD

Background: Mortality after acute myocardial infarction (AMI) varies widely among hospitals, suggesting that some hospitals have factors that may influence outcomes.

Objective: To identify factors that distinguish top-performing hospitals in AMI care.

Design: Qualitative study using interviews.

Setting: Eleven U.S. hospitals in the bottom 5% in risk-standardized mortality rates (RSMRs) from the Centers for Medicare & Medicaid Services (CMS) 2006 and 2007 to 2008 characteristics.

Participants: 158 medical and nursing staff involved with AMI care.

Measurements: Site visits to hospitals during 2009 and 2010 to collect data on hospital staff during 2009 and 2010.

ORIGINAL RESEARCH

IMPROVING PATIENT CARE

Hospital Strategies for Reducing Risk-Standardized Mortality Rates in Acute Myocardial Infarction

Elizabeth H. Bradley, PhD; Leslie A. Curry, PhD, MPH; Erica S. Spatz, MD, MHS; Jeph Herrin, PhD; Emily J. Cherlin, MSW, PhD; Jephtha P. Curtis, MD; Jennifer W. Thompson, MPP; Henry H. Ting, MD, MBA; Yongfei Wang, MS; and Harlan M. Krumholz, MD, SM

Background: Despite recent improvements in survival after acute myocardial infarction (AMI), U.S. hospitals vary 2-fold in their 30-day risk-standardized mortality rates (RSMRs). Nevertheless, information is limited on hospital-level factors that may be associated with RSMRs.

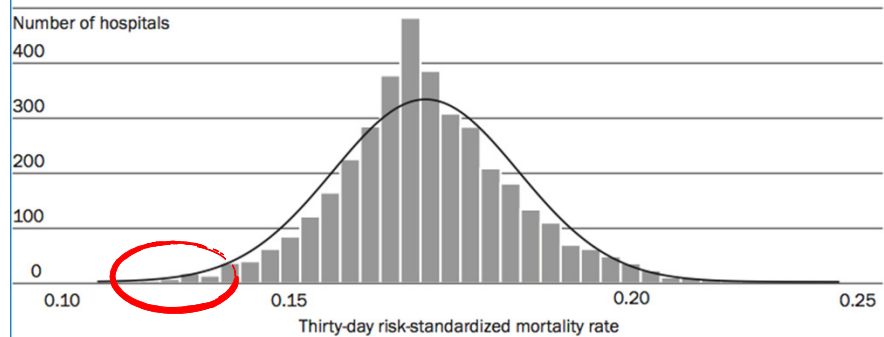
Objective: To identify hospital strategies that were associated with lower RSMRs.

Design: Cross-sectional survey of 537 hospitals (91% response rate) and weighted multivariate regression by using data from the Centers for Medicare & Medicaid Services to determine the associations between hospital strategies and hospital RSMRs.

strategies included holding monthly meetings to review AMI cases between hospital clinicians and staff who transported patients to the hospital (RSMR lower by 0.70 percentage points), having cardiologists always on site (lower by 0.54 percentage points), fostering an organizational environment in which clinicians are encouraged to solve problems creatively (lower by 0.84 percentage points), not cross-training nurses from intensive care units for the cardiac catheterization laboratory (lower by 0.44 percentage points), and having physician and nurse champions rather than nurse champions alone (lower by 0.88 percentage points). Fewer than 10% of hospitals reported using at least 4 of these 5 strategies.

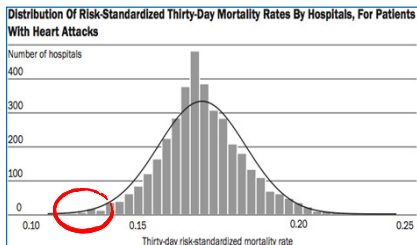
AMI 30-Day RSMR

Distribution Of Risk-Standardized Thirty-Day Mortality Rates By Hospitals, For Patients With Heart Attacks



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AMI 30-Day RSMR



- Hospital volume
- Urban/rural location
- Hospital teaching status
- Geographic region
- Safety net status
- Socioeconomic status of patients



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Key Themes of Top Performers

1. Organizational values and goals
2. Senior management involvement
3. Broad staff engagement & expertise in AMI care
4. Communication & coordination among groups
5. Problem solving and learning



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Key Themes of Top Performers

2. Senior management involvement

- “this is not acceptable and this is where we need to go, what do you need to get this done”
- “we use quality data to make strategic planning and resource allocation decisions”
- “accountability for low performers and recognition for high performers”

× “I have been here 7 years, and this is the third CEO, the second medical director, and third VP of nursing”



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Key Themes of Top Performers

3. Broad staff engagement & expertise in AMI care

- “empowered physician and nurse champions”
 - “a nurse started writing notes in physician progress note section – this is my assessment...I want you to read it, it’s not in the nurse’s section...I have some ideas and am open to talk about it”
- ✗ “there are no physicians on the committee...and they try to implement changes...and get it wrong”
- ✗ “cardiologists are little bit like bears and not the kindest, if a nurse calls about meds, they say I gave you orders, why are you calling me again?”



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Strategies Associated with Lower MI Mortality

Strategy associated with lower RSMR	% Points Decrease in RSMR
Physician AND nurse champions for AMI care	0.88
Organizational culture that supports creative problem solving	0.84
Monthly meetings with EMS to review AMI cases	0.70
Cardiologists on site 24/7 (including fellows)	0.54
Nurses are not cross trained from ICU for the cardiac catheterization laboratory	0.44
Pharmacists round on all patients with AMI	0.41

Bradley EA, Ting HH. Annals Intern Med. 2012; 156:618-626



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Strategies Associated with Lower MI Mortality

Strategy associated with lower RSMR	% Points Decrease in RSMR	% Hospitals Using Each Strategy
Physician AND nurse champions for AMI care	0.88	43
Organizational culture that supports creative problem solving	0.84	40
Monthly meetings with EMS to review AMI cases	0.70	15
Cardiologists on site 24/7 (including fellows)	0.54	14
Nurses are not cross trained from ICU for the cardiac catheterization laboratory	0.44	82
Pharmacists round on all patients with AMI	0.41	35

Bradley EA, Ting HH. Annals Intern Med. 2012; 156:618-626



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These strategies work!

Key strategies affect the whole hospital and different members of the care team including physicians, nurses, pharmacists and hospital administrators.



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Our Goal

Disseminate and implement strategies of top performers

Increase adoption of evidence-based strategies linked with lower 30-day RSMR

Improve hospital organizational culture

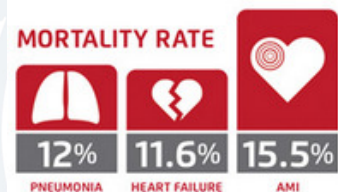
Create lasting change...



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How We'll Measure Success

- At least **350** ARG hospitals by June 2016
- Adoption of at least **2** implementation strategies by **80%** of all participants
- **100%** of total hospitals monitoring 30-day RSMR for AMI patients
- **Reduction** in 30-day RSMR for AMI patients over time



QualiSurviving MI
for In:

What “Participate” Means



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What “Participate” Means

1. Ability to collect and report in-hospital MI mortality
2. Active with Quality Improvement for Institutions
3. Has quality improvement team available
4. Participate in webinars and community calls
5. Complete online self-assessments
6. Implement at least 2 strategies or tools
7. Share your story online
8. Post to the listserv



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What “Participate” Means

1. Ability to collect and report in-hospital MI mortality

- Quarterly
- Using any data source
 - ACTION-Get With the Guidelines Registry
 - Health system reports
 - Hospital self-reported report



NCDR
NATIONAL CARDIOVASCULAR DATA REGISTRY



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What “Participate” Means

2. Activate with Quality Improvement for Institutions

- ACC program integrating registries, initiatives, and toolkits under one umbrella
- Website to access Surviving MI Initiative resources
- Free for NCDR hospitals
- Non-NCDR hospital have a \$5K fee

Program Website: CVQuality.acc.org/SurvivingMI



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NCDR INITIATIVES HOSPITAL RECOGNITION KIT CLINICAL TOOLKITS

Home > Initiatives > Surviving MI

Surviving MI

About Surviving MI
Getting Started
Share Your Story

The **Surviving MI Initiative** seeks to increase the adoption of evidence-based strategies associated with lower 30-day risk standardized mortality rates (RSMR) for patients hospitalized with acute myocardial infarction (AMI) through the creation of a hospital learning network.

ACTIVATE

Start now with an ACC (CardioSource) login, or register for access today.

Advertisement

Chronic Angina
A CardioSource Clinical Community

Go to CVQuality.acc.org and activate today!

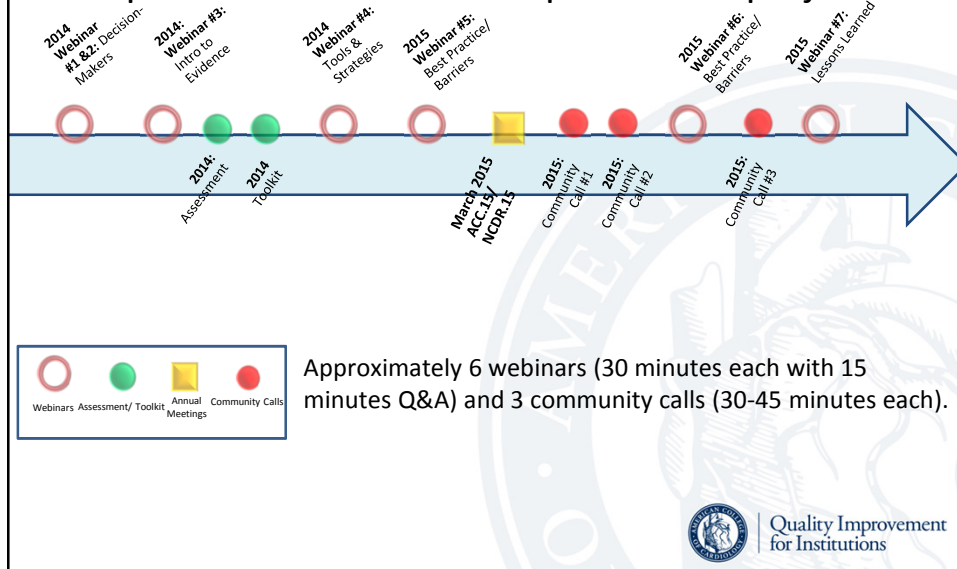
 **QualiSurviving MI for In:**

What “Participate” Means

- 3. Has a quality improvement team available**
 - Clinical and administrative cardiovascular and quality organizational leadership
- 4. Participate in webinars and community calls**
- 5. Complete online self-assessments**
- 6. Implement at least 2 strategies or tools**
- 7. Share your story online**
- 8. Post to the listserv**

Participation Activities

Implement a structured improvement project...



Self-Assessment Surveys

- Helps hospitals **prioritize** QI efforts
- Identify tools** for improvement
- Enables hospital to **monitor progress** quarterly
- Compares** hospitals that have completed the assessment



Change Culture to Change Care

Today

- **Improvement is possible:**
There are known evidence-based strategies you can adopt

Tomorrow

- **Sustainable change:**
Changing culture will improve other patient outcomes



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Your Next Steps

1. Have your baseline in-hospital MI mortality
2. Activate your ACC Quality Improvement for Institutions account
3. Confirm your quality improvement team
4. Tune in for the next webinar in Fall 2014:
"Introduction to Evidence"
5. Visit CVQuality.acc.org/SurvivingMI for more resources on Getting Started



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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.

Release the power of your data at CVQuality.acc.org.



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AMERICAN COLLEGE *of* CARDIOLOGY