

**IN A HEARTBEAT ACUTE MYOCARDIAL INFARCTION (AMI) COMMUNITY
ENGAGEMENT (ACE) WORKGROUP STRATEGIES**

PROMOTION OF “CALLING 911” FOR AMI

1/16/07

THE CHALLENGE

- Heart attacks are a serious threat to both life and quality of life. Loss of heart muscle can kill, or result in loss of function for those who do survive.
- When the heart attack results from a block in a major artery feeding the heart, the heart is deprived of blood and heart muscle is threatened. (This type of heart attack is a ST-elevation myocardial infarction or “STEMI”).
- The right treatment at the right time is critical.
- Trained medical professionals in specialized facilities can save heart muscle if they open the artery within 2 to 3 hours after symptom onset. Saving heart muscle means saving lives and quality of life.
- Every second counts!
- Survival rates are improved by up to 50% if blood flow to the heart is restored within one hour of symptom onset and by 23% if it is restored within 3 hours of symptom onset.¹
- Delaying treatment by 30 minutes can reduce average life expectancy by one year.²
- Most delay in treatment is due to patients not recognizing symptoms, and patients or their families failing to call 911—Emergency Medical Services (EMS).
- On average only about half of AMI victims call 911.³ An alarming 50% don’t. Many of those who don’t call, either die or lose some of their physical capacity.
- Only 12% of Maine residents can correctly identify the warning signs of a heart attack and the need to call 911.⁴
- Multiple national community-based efforts to improve call 911 for AMI have had disappointing results. The *In a Heartbeat* Project aims to do much better.

THE IN A HEARTBEAT COMMUNITY OUTREACH GOAL

- Recognize signs and symptoms of heart attack and call 911 first
- Vision is that in the future, everyone recognizes the symptoms of STEMI and calls 911 quickly.
- Establish metrics and baseline and show continuous improvement

THE IN A HEARTBEAT COMMUNITY OUTREACH AND ACTIVATION STRATEGY

- Target high risk populations and their family, friends and co-workers
- Target provider audiences.
- Develop a set of consistent messages that can be delivered statewide.
- Work with EMS, medical professionals, community, advocacy and social groups to:
 - Increase awareness of AMI symptoms.
 - Increase awareness of differences in symptoms between men and women.
 - Increase the number of symptomatic patients calling 911
 - Decrease time from presence of symptoms to calling 911

- Work with schools and youth to encourage students to recognize symptoms and take quick action and influence their family members
- Work with Primary Care Physicians and other providers to educate patients about early recognition and calling 911 rather than the PCP office.

MESSAGES

- AMI symptoms and urgency: Existing information from a number of sources (American Heart Association, National Heart Lung, and Blood Institute) provides adequate information on symptoms, early recognition and the need to calling 911. The ACE Workgroup will use these messages. (See AHA/NHLBI information on last page).

PLAN

Short Term Strategies (1-2 Years):

- Public outreach: Partner with EMS, Heart Safe Communities. Healthy Maine Partnerships, Healthy Communities and existing organizations, other community organizations and advocacy groups and social or service groups to deliver information and encouragement to the target audience through meetings and presentations in settings where individuals typically gather or get information.
 - Create a presentation toolkit for Call 911 focused on urgency and action. The toolkit will include a common set of messages, a standard slide show, handouts, and collateral material (magnets etc). The kit will also incorporate culturally appropriate material.
 - Engage EMS providers and community partners by integrating AMI kit resources into the Maine HeartSafe Communities program.
 - Train willing healthcare and EMS providers, and other appropriate speakers to work with community social and advocacy groups to conduct outreach to those at risk and the public
 - Develop incentives to sustain spokespersons enough to cover their personal expenses and enough to make the pass-through of funds to their organizations meaningful (EMS unit, community organization, provider organization).
 - Develop an evaluation plan that includes process and outcome measures.
 - Evaluate: identify control community and subject community of similar demographics for pre and post survey.
 - Explore use of public access television.
 - Launch a competition for 7th grade students to use their new laptops to develop short video presentations. Winning videos will be posted on the Maine Quality Forum website and aired as public service announcements. Explore use of high school student classes to develop media presentations.
 - Launch an email viral marketing campaign using existing organizations and networks, such as peers, advocacy groups, community groups and health organizations.
- Provider outreach:

- Work with Physician Hospital Organizations (PHOs), Federally Qualified Health Centers (FFQHCs) and other primary care providers to encourage patients experiencing symptoms to call 911 rather than the PCP offices
- Primary Care Providers: provide information on AMI to Primary Care providers and case managers to distribute and share, based on input from healthcare orgs.
- Include information on urgency, symptoms and calling 911 in CPR and AED trainings.
- Work with the American Heart Association to inform/train providers through their Scientific Sessions.
- Hospital outreach via existing mechanisms, including annual events, community education initiatives, etc.

Longer Term Strategies

- The Maine Quality Forum, the Maine Cardiovascular Health Program, Maine Healthcare Systems and EMS should jointly work together to implement the recommendations of the ACE Workgroup, with diverse representation from all regions.
- The *In a Heartbeat* ACE Workgroup should continue to convene, with expanded participation from EMS, hospitals, and other interested parties.
- The partners should explore additional strategies and funding mechanisms, including larger scale electronic media coverage.

Evaluation

With leadership from the Maine Quality Forum and the Maine CDC Cardiovascular Program, the ACE Workgroup will monitor implementation and evaluate short term strategies to assess their effectiveness. An evaluation plan will be developed that includes process and outcome measures specific to the strategies implemented.

COST

The current estimated cost for the ACE Workgroup strategies is \$129,000. MaineHealth, Central Maine Healthcare, and Eastern Maine Medical Center will contribute \$10,000 each. The Maine Quality Forum and Maine CDC Cardiovascular Health Program will support the ACE Workgroup with in-kind staffing.

In a Heartbeat ACE Funding Estimate (Two-year)

Activity	Total Cost
Public Outreach	
Tool Kit (web-based)	\$10,000
Train the Trainer	\$2,000
Presentations: \$200 honorarium/ 200 presentations	\$40,000
Evaluation	\$10,000
Student Competition (<i>place holder</i>)	\$10,000
Viral Marketing	\$17,000
Provider Outreach	
Distribute Existing Materials to PCPs (brochures@\$1.50/each (NHLBI)* 1200 PCPS*20 copies each. Postage at \$.39/brochure)	\$35,000
Develop and distribute web-based guide for PCPS	
CPR Training Information (\$20-30/per packet)	\$5,000
Total	\$129,000

Sources

¹ Simoons ML, Serruys PW, et al. Early thrombolysis in acute myocardial infarction: limitation of infarct size and improved survival. *J Am Coll Cardiol.* 1986; 7: 717–728.

² Rawles JM, Metcalfe MJ, Shirreffs C, Jennings K, Kenmure AC. Association of patient delay with symptoms, cardiac enzymes, and outcome in acute myocardial infarction. *Eur Heart J.* 1990; 11: 643–648.

³ Antman, EM, Anbe DT, et al. ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee to Revise the 1999 Guidelines for the Management of Patients With Acute Myocardial Infarction). 2004: e11. Available at www.acc.org/clinical/guidelines/stemi/index.pdf.

⁴ Maine Behavioral Risk Factor Surveillance System, Heart Attack and Stroke Signs and Symptoms Module, 2006.



Act in Time



The American Heart Association and the National Heart, Lung, and Blood Institute have launched a new "Act in Time" campaign to increase people's awareness of heart attack and the importance of calling 9-1-1 immediately at the onset of heart attack symptoms.

Statistics

Coronary heart disease is America's No. 1 killer. That's why it's so important to know the warning signs, and know how to respond quickly and properly if warning signs occur.



Dial 9-1-1 Fast

Heart attacks are life-and-death emergencies -- every second counts. If you see or have any of the listed symptoms, immediately call 9-1-1. Not all these signs occur in every heart attack or stroke. Sometimes they go away and return. If some occur, get help fast! Today heart attack victims can benefit from new medications and treatments unavailable in years past. For example, clot-busting drugs can stop some heart attacks in progress, reducing disability and saving lives. But to be effective, these drugs must be given relatively quickly after heart attack symptoms first appear. So again, don't delay -- get help right away!



Heart Attack Warning Signs

Some heart attacks are sudden and intense — the "movie heart attack," but most heart attacks start slowly, with mild pain or discomfort. Often people affected aren't sure what's wrong and wait too long before getting help. Here are signs that can mean a heart attack is happening:

- **Chest discomfort.** Most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes, or that goes away and comes back. It can feel like uncomfortable pressure, squeezing, fullness or pain.
- **Upper body discomfort: in one or both arms, the back, neck, jaw, or stomach**
- **Shortness of breath.** May occur with or without chest discomfort.
- **Breaking out in a cold sweat**
- **Nausea**
- **Lightheadedness**

As with men, women's most common heart attack symptom is chest pain or discomfort. Women are somewhat more likely than men to experience other common symptoms, particularly shortness of breath, nausea/vomiting, and back or jaw pain.

If you or someone you're with has chest discomfort, especially with one or more of the other signs, don't wait longer than five minutes before calling for help. Call 9-1-1. It is almost always the fastest way to get lifesaving treatment. Emergency medical services (EMS) staff can begin treatment when they arrive -- up to an hour sooner than if someone gets to the hospital by car. Patients who arrive by ambulance usually receive faster treatment at the hospital, too.