



Licking Memorial Health Systems

1320 West Main Street
Newark, Ohio 43055

Please take a few minutes to read this month's report on **Heart Care**.

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Quality Report Card

Licking Memorial Health Systems

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Volume 13, Issue 2

February 2012

Health Tips – How to Respond to a Heart Attack

If you witness someone who is experiencing any of the common heart attack symptoms (chest pain or discomfort, shortness of breath, cold sweat, nausea, light-headedness, or pain in the arms, neck, jaw, back or stomach) for more than a few minutes, your immediate actions could be life-saving. Here are the steps you should take if you suspect someone is having a heart attack:

- Call 9-1-1. Make the call even if the person who is having symptoms insists that “It is nothing.” Do not attempt to drive the person to the hospital in a private vehicle, unless there is absolutely no alternative. Treatment actually begins in the EMS vehicle en route to the emergency department. Additionally, if the person stops breathing, you cannot drive and perform cardiopulmonary resuscitation (CPR) simultaneously.
- Stay with the person until emergency personnel arrive, except if you must leave in order to call 9-1-1.
- Have the person chew and swallow four baby aspirin (81 mg each) if the person is alert and has no restrictions against taking aspirin. If the person has a nitroglycerin prescription, provide assistance in taking the medicine.
- Use an automated external defibrillator (AED) if the person is unconscious and has no pulse. AEDs are available in many public buildings and emergency vehicles. The devices have instructions and will automatically deliver an electrical shock, if needed.
- Perform CPR if the person is unconscious and not breathing. The new hands-only CPR technique features rapid chest compressions without the need for mouth-to-mouth artificial respiration to keep blood flowing to the brain.
- Place the person in a seated position. Do not allow the person to move around.

Heart Care – How do we compare?

Check out
our Quality
Report Cards online
at www.LMHealth.org.

At Licking Memorial Health Systems (LMHS), we take pride in the care we provide. To monitor the quality of that care, we track specific quality measures and compare them to benchmark measures. Then, we publish them so you can draw your own conclusions regarding your health care choices.

1 Angiotensin-converting enzyme (ACE) inhibitors reduce the risk for mortality in patients with left ventricular systolic dysfunction (LVSD) after heart attack. LVSD refers to the reduced squeezing ability of the left ventricle that can occur after heart attack. Additionally, the likelihood of the patients having another heart attack can be reduced if an ACE inhibitor is administered.

	LMH 2008	LMH 2009	LMH 2010	National Average ⁽¹⁾
ACE/ARB at discharge for LVSD	100%	100%	100%	96%

2 The first step in heart attack treatment is to confirm that the patient is truly experiencing the symptoms of an attack. An electrocardiogram (EKG) measures the electrical activity of the heart and can determine if a heart attack is occurring.

	LMH 2008	LMH 2009	LMH 2010	Goal ⁽²⁾
Median time from arrival to completion of EKG	2 minutes	4 minutes	5 minutes	less than 10 minutes

3 In patients having a heart attack, emergency angioplasty restores blood flow to the heart muscle by re-opening blocked or clogged arteries. This is done by inserting a catheter into the artery that feeds the heart, inflating a balloon and placing a stent inside the artery to keep it open. This procedure can help reduce damage to the heart muscle, and has the best results when performed within 90 minutes after arriving in the Emergency Department. Licking Memorial Hospital began performing this procedure in 2008.

	LMH 2008	LMH 2009	LMH 2010	National Average	Goal
Median time from arrival until balloon angioplasty performed	74 minutes	67 minutes	70 minutes*	64 minutes ⁽³⁾	less than 90 minutes ⁽²⁾
Time to balloon within 90 minutes	92%	94%	86%	90% ⁽¹⁾	greater than 90%

*In the first 10 months of 2011, LMH's "median time from arrival until balloon angioplasty performed" improved to 52 minutes, while "time to balloon within 90 minutes" improved to 100 percent. The results from 2011's full year will be reported in the Heart Care issue of the Quality Report Card in February 2013.

4 During a heart attack, the heart tries to compensate for its weakened pumping action by beating faster which increases strain. Beta blockers reduce the heart's tendency to beat faster. Additionally, aspirin has been shown to prevent further blood clotting in heart attack patients.

	LMH 2008	LMH 2009	LMH 2010	National Average ⁽¹⁾
Aspirin within 24 hours of patient arrival	98%	100%	100%	99%
Aspirin ordered at hospital discharge	100%	90%	93%	99%
Beta blocker ordered at hospital discharge	94%	100%	100%	98%

5 Cardiac rehabilitation programs aid people who have experienced heart attacks. LMH's program provides medical oversight and heart monitoring for individuals as they exercise and strengthen their hearts. LMH also measures participants' progress in improving certain indicators of heart health. The following results were reported by cardiac rehabilitation patients.

Health Indicator	LMH 2008	LMH 2009	LMH 2010	Goal
Stopped smoking	70%	48%	78%	greater than 75%
Improved weight	44%	58%	57%*	greater than 75%
Increased exercise time	100%	100%	100%	100%

*The cardiac rehabilitation goals are customized for each individual patient. LMH offers nutritional counseling, supervised wellness sessions and an incentive program to reinforce the importance of making healthy lifestyle choices.

6 The left ventricle is the chamber of the heart that pumps blood out of the heart and into the body. Measuring left ventricular function (LVF) helps determine how well a chronic heart failure (CHF) patient's left ventricle is working.

	LMH 2008	LMH 2009	LMH 2010	National Average ⁽¹⁾
LVF assessment completed	95%	99%	99%	98%

7 Medications beneficial to many CHF patients include ACE inhibitors, beta-blockers, and angiotensin-receptor blockers (ARBs). ACE inhibitors and ARBs have been shown to lower mortality and improve functional capacity and quality of life. Beta-blockers can reverse or prevent some of the health effects associated with heart failure. Patients treated with beta-blockers may see significant improvement in heart function after three months.

	LMH 2008	LMH 2009	LMH 2010	National Average
CHF patients on ACE or ARB at discharge	96%	99%	94%	95% ⁽¹⁾
CHF patients on beta-blockers at discharge	99%	97%	94%	90% ⁽³⁾

8 It is vital that CHF patients be involved in their own care to reduce health complications and improve quality of life. They must monitor their weight, limit their salt intake, and take their medications regularly. Health care providers need to give thorough discharge instructions to help these patients effectively manage their condition.

	LMH 2008	LMH 2009	LMH 2010	National Average ⁽¹⁾
All discharge instructions given	85%	95%	93%	89%

9 Licking Memorial Health Professionals (LMHP) physicians also monitor the usage of antiplatelet drugs, such as aspirin or an antithrombotic drug, in patients with coronary artery disease (CAD). The usage of these medications lowers the risk of myocardial infarction (MI) or death in patients with CAD.

	LMHP 2008	LMHP 2009	LMHP 2010	Goal ⁽⁴⁾
LMHP CAD patients with aspirin and/or antithrombotic prescribed	95%	90%	92%	greater than 80%

10 LMHP physicians monitor the cholesterol levels, specifically the LDL (bad cholesterol) levels of their patients with diagnoses of CAD. Elevated LDL cholesterol level is a risk factor for myocardial infarction (MI), but is reversible through medication, diet and exercise.

	LMHP 2008	LMHP 2009	LMHP 2010	Goal ⁽⁴⁾
LMHP CAD patients with LDL less than or equal to 100 mg/dl	66%	61%	58%	greater than 50%

Data Footnotes: (1) *Hospitalcompare.hhs.gov national benchmarks.* (2) *ACC/AHA 2007 Guidelines for the Management of Patients with Unstable Angina/Non ST-Elevation Myocardial Infarction, J. Am. Coll. Cardiol. 2007; 50; e1-e157.* (3) *Comparative data from the Midas Comparative Database.* (4) *AHA/ASA/NCQA Heart/Stroke Recognition Program.*

Patient Story – Deacon Steve DeMers

With many people counting on him, Steve DeMers of Newark was determined after a heart attack in 2011 to work his way back to being the active husband, father, grandfather, businessman and church leader that he wanted to be. He knew it was going to take some hard work, but he wanted to return to his normal, busy life. He decided that the Cardiac Rehabilitation program at Licking Memorial Hospital (LMH) would provide his best chance of achieving that goal.



Steve and Theresa DeMers

On a Saturday in July 2011, Steve and his wife, Theresa, were working in the yard at home when he took a break. “I felt tightness in my chest, and I knew right away it must be a heart attack,” he said. “I also had heaviness in my chest and discomfort in my left shoulder and neck.”

Steve arrived at LMH’s Emergency Department just minutes later. “They immediately took me in and began to care for me,” he said. “I was diagnosed with a mild heart attack due to some blockage in a lower artery. I had a stent implanted in the Catheterization Lab at LMH on the following Monday, and the doctor said I also was having A fib (atrial fibrillation).”

After the stent was implanted, Steve was placed on several medications to control his heartbeat and was advised to complete a 12-week program of closely monitored heart-strengthening exercise at LMH’s Cardiac Rehabilitation Department. “When I first started, I told Marilyn (Marilyn Klingler, R.N.) that I owned a treadmill, and I would exercise at home. I work long days as the business manager of *Catholic Times* in Columbus. With my long hours, I did not think I would be able

to get to LMH to exercise. However, my employer was gracious and gave me time to fit in the exercise sessions. We knew that it was very important for my recovery.”

Steve soon learned that exercising at the Cardiac Rehabilitation center showed better results than exercising at home. “What I realized is that the staff closely monitors you,” he explained. “They take your blood pressure before and after you work out, and you wear a heart monitor while you exercise. They were able to tell instantly if I was going into A fib. There was one time they sent me down for an EKG because my heartbeat was different.”

Patient Story – Deacon Steve DeMers (continued on next page)

“It gave me confidence to have them close at hand,” he added. “I started with 10 to 12 minutes on the treadmill or step machine. By the time I had been there for several weeks, I had increased my treadmill time to 30 minutes. It gave me the confidence to push myself a little bit since I had someone watching over me, and Marilyn and Terri (Terri McConnell, R.N.) were very good at keeping me motivated.”

In 2004, Steve had suffered two strokes one week apart that left him with some minor speech and balance impairments. As he progressed through the Cardiac Rehabilitation program after his heart attack in 2011, he began to notice an improvement in his balance. Steve said, “When I first began to use the treadmill, I had to hold on to the hand rails, and when I walked down a hallway at work or home, I would intentionally bump against a wall to keep my balance. During the Cardiac Rehabilitation sessions, I was actually able to use the treadmill without holding on to the hand rails. With exercise, I have definitely seen an

improvement over the damage that the strokes caused. I am stronger and my balance is better.”

After graduating from the Cardiac Rehabilitation program, Steve made a special effort to increase his activity level during the day at his office in addition to using his treadmill at home. “My work is mostly sedentary, so I find ways to fit in exercise whenever I can. I walk to the bank, and I walk around the office building more. I try to move every hour or so, because I noticed that it is more difficult to stay mobile if I sit for long periods of time,” he said.

Steve and Theresa have been married 40 years. They have five children and 12 grandchildren. Steve also devotes evenings and weekends to his role as deacon at St. Francis de Sales Catholic Church, where he assists with Masses, leads several committees and a Bible study group, and presides over weddings, baptisms and prayer sessions.

Happiness Is Good for Your Heart

Although the exact reasons are not known, studies indicate a strong correlation between good mental health and good cardiovascular health. Adults with anger, anxiety and depression are at higher risk to develop heart disease, and conversely, adults with heart disease are at higher risk to develop depression. One study, published in 1996, examined 1,551 people in Baltimore, Maryland, who initially had no signs of heart disease. The study found that those who had a history of depression were four times more likely to have a heart attack within the next 14 years than those who did not have depression. Another study from Canada found that adults who reported a high level of happiness were 22 percent less likely to have a heart attack. Although these studies’ findings have not been scientifically proven, it is certainly in patients’ best interest to improve any negative outlook they may have.

“Stressful emotions, such as anger, anxiety and depression cause many physiological changes that affect the heart,” explained Interventional Cardiologist Hassan Rajjoub, M.D., of the Licking Memorial Heart Center. “These emotions cause a rapid heartbeat, high blood pressure, and elevated levels of hormones, insulin and cholesterol. In addition, stress can cause sleep disturbances, which are also associated with elevated blood pressure and heart disease. All of these factors cause damage to the arterial walls.”

Dr. Rajjoub recommends that patients of all ages engage in stress-beating activities on a daily basis. “Exercise is a great

way to relieve stress,” he said. “Moderate activity, such as walking, yard work or dancing will alleviate muscle tension. Relaxation and recreational activities, such as yoga, music, painting, hobbies and board games also provide stress relief. It is important to make time for enjoyable activities on a regular basis.”

Studies have also indicated that 1 out of every 3 cardiology patients will develop depression after a heart attack or cardiac surgery. Dr. Rajjoub said, “Their bodies have gone through a great deal of physical stress, and they may be having difficulty in coming to terms with their illness. Patients who are depressed may take longer to recover and may neglect to take their medications. Fortunately, depression is usually treatable, so cardiology patients should tell their physicians if they are feeling depressed, sad or anxious.”



Spending fun, happy times with family promotes good heart health.

Some individuals have been able to make improvements in their levels of happiness by implementing positive steps, such as:

- Making an effort to have a positive outlook every day
- Expressing gratitude every day
- Volunteering in the community
- Practicing forgiveness
- Practicing acts of kindness
- Interacting with friends and family

However, if feelings of sadness or depression persist, individuals should consult with their physician for possible treatment.