## Taking Quality To Heart

...a community report on patient care quality

## Licking Memorial Health Systems

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Take a few minutes to read this month's quality report. You'll soon discover why Licking Memorial Hospital has been named one of the nation's 100 Top Hospitals for three consecutive years.

# Heart Care... How do we compare?

Time is muscle when it comes to heart attacks. This is why most quality measures for heart attacks relate to speed. In addition, there are several standard measures for heart services, including the use of medications and inpatient mortality.

### **1. Patient Arrival to Emergency Department**

The speed at which an individual goes to an Emergency Department after experiencing the initial symptoms of a heart attack has a direct impact on the type and effectiveness of the care they will receive. The sooner a person arrives to the E.D., the more effective medical intervention can be.

|                   | National Avg.         | LMH 1999               | LMH 2000               |
|-------------------|-----------------------|------------------------|------------------------|
| Pain-to-door Time | >2 Hours <sup>1</sup> | 2.5 hours <sup>2</sup> | 1.5 hours <sup>3</sup> |

### 2. Diagnosis of a Heart Attack

Symptoms of a heart attack can be confused with other health ailments, such as indigestion, muscle strain and even extreme anxiety. The first step in heart attack treatment is to confirm the patient is truly experiencing the symptoms of an attack. The first initial test is an electrocardiogram or EKG in which a person's heart rhythm is measured.

|                  | National Standard               | LMH 1999                 | LMH 2000               |
|------------------|---------------------------------|--------------------------|------------------------|
| Door-to-EKG Time | 10 minutes or less <sup>4</sup> | 8.5 minutes <sup>2</sup> | 7 minutes <sup>3</sup> |

### 3. Administering Clot-busting Drugs

Thrombolytic or clot-busting drugs can stop a heart attack in progress, which helps to prevent heart damage and saves lives. Therefore, the sooner a patient arrives at the hospital and receives the drug, the more effective the treatment will be.

|                   | National Standard               | LMH 1999 Avg.             | LMH 2000 Avg.           |
|-------------------|---------------------------------|---------------------------|-------------------------|
| Door-to-drug Time | 30 minutes or less <sup>4</sup> | 27.2 minutes <sup>2</sup> | 28 minutes <sup>3</sup> |

### 4. Medication Use to Protect the Heart

Aspirin is given both within the first 24 hours of a patient's arrival to the hospital, during hospitalization and upon hospital discharge. Aspirin has been shown to prevent further blood clotting in heart attack patients.

ACE inhibitors are given to heart attack patients when there is significant heart dysfunction due to the weakening of the heart by a heart attack. ACE inhibitors help to prevent further weakening.

Beta blockers are given to heart attack patients in order to help protect the heart from developing further complications, such as congestive heart failure. Heart attack victims are given beta blockers at hospital discharge and then daily for at least one year.

| ,  | National Avg. | State 1999 Avg. | LMH 1999 Avg.     | LMH 2000 Avg.           |
|--|---------------|-----------------|-------------------|-------------------------|
| Aspirin within 24 hours of patient arrival | *             | 87%             | 92.3%             | 100% <sup>3</sup>       |
| Aspirin at Hospital Discharge              | 78%⁵          | 86%             | 100% <sup>2</sup> | <b>99%</b> <sup>3</sup> |
| Beta Blocker at Hospital Discharge         | 49.5%⁵        | 72.6%           | 100% <sup>2</sup> | 100% <sup>3</sup>       |

\* This is a specific state initiative. A national average could not be found.

Quality Note: In November of 2000, LMH implemented a Clinical Practice Guideline for the treatment of Acute Myocardial Infarction (AMI). The guideline standardizes hospital care for an AMI patient, so patients receive the best medical practice for a heart attack based on national standards.

### 5. Inpatient Mortality for Heart Attack Patients

LMH measures mortality for all patients as well as those for specific illnesses, like heart attacks, as part of its quality program.

|                         | Nation | LMH                |
|-------------------------|--------|--------------------|
| AMI Inpatient Mortality | 12.8%7 | 11.3% <sup>7</sup> |

### **SUCCESS STORY**

### When in doubt, don't delay...

Kelley Phelps knew something was wrong, but he never dreamed he was having a heart attack.

He was getting ready to go to bed when his breathing became labored. "I told my wife, 'let's go'," he recalls. "I thought maybe I was having an asthma attack."

Within 15 minutes, Kelley arrived at the Licking Memorial Emergency Department. An electrocardiogram confirmed Kelley was having a heart attack.

"Your mind works in funny ways," he said. "When it happens, you just block out the notion that you could be having a heart attack. Lucky for me, I sought out help anyway."

Being a diabetic, Kelley said he didn't have the usual feelings of chest pressure and/or pain. "Diabetics don't always feel the pain of a heart attack."

Time is muscle when it comes to a heart attack. In order to use clot-busting drugs, individuals must come to the Emergency Department within the first few hours of symptoms.

After having angioplasty, Kelley is back on his feet. He comes to Licking Memorial's Cardiac Rehabilitation Program three times a week. "I was not in very good shape. I have a lot to do in order to become conditioned."

Kelley is taking his rehabilitation one day at a time. "I think there is something to be said for consistency rather than pushing it beyond your limits," he said.



### 6. Cardiac Rehabilitation

The LMH Cardiac Rehabilitation Program provides assistance to those in the area who have experienced a heart attack. The program provides medical oversight and heart monitoring for individuals as they exercise and strengthen their heart muscle.

|                             | # of New     | # of Cardiac Rehab. | # Who Completed |
|-----------------------------|--------------|---------------------|-----------------|
|                             | Participants | Visits              | Program         |
| Cardiac Rehab. Program 2000 | 129          | 2942                | 90              |

In 2000, LMH began measuring how Cardiac Rehabilitation is impacting the health status of participants - from their perspective. Participants are asked on a quarterly basis several questions regarding their overall well-being.

| Health Indicator                      | 2nd Quarter 2000 <sup>8</sup> |
|---------------------------------------|-------------------------------|
| % Who Stopped Smoking                 | 30% (of 39.1% who smoked)     |
| % Improved Weight                     | 36%                           |
| % Improved Quality of Life - Physical | 44%                           |
| % Improved Quality of Life - Mental   | 89%                           |
| % Increased Exercise Time             | 100%                          |

### 7. Cardiac Catheterization

Licking Memorial has a Cardiac Catheterization Lab where low-risk diagnostic testing is performed on patients suspected of having blockage in their arteries. The following are the number of unexpected events occurring for diagnostic labs, like LMH's, throughout Ohio.9

|                        | State  | LMH |
|------------------------|--------|-----|
| Mortality              | .074%  | 0%  |
| Arrhythmia             | .105%  | 0%  |
| Vascular Complications | .073%  | 0%  |
| Stroke                 | .037%  | 0%  |
| Heart Attack           | .423%. | 02% |

1 Average reported by the National Institutes of Health. 2 Based on LMH patient data from random sample of 33% of heart attack patients seen in 1999

Based on LMH patient data for heart attack patients seen at LMH between February, 2000 (last report card) and November, 2000.
American College of Cardiology and American Heart Association Guidelines for the Management of Patients with Acute Myocardial Infarction, 1999
The Dartmouth Atlas of Cardiovascular Health Care/The Center for the Evaluative Clinical Sciences, Darmouth Medical School, 1999.

6 Based on a study conducted by KePRO, a quality review organization contracted by the Federal Government to monitor the care of Medicare beneficiaries. Data pulled from July through September of 1999.

7 Based on LMH patient data from first half of 2000. Comparative data from 198 hospitals in the Midas clinical data base 8 Based on LMH Cardiac Rehabilitation data for most recent quarter data available, April through June of 2000.

9 Ohio Quality Cardiac Care Foundation (OQCCF), a peer review organization operated jointly by the Ohio Hospital Association and the Ohio State Medical Association January, 1997 - June, 2000.



### Learn the Warning Signs

by Dr. Bryce Morrice

"Your best defense in preventing a heart attack is to know the warning signs," says cardiologist Dr. Bryce Morrice. "The sooner you recognize you're having a heart attack, the quicker you can seek out medical treatment."

There are three basic signs of a heart attack:

- Uncomfortable pressure, fullness, squeezing or pain in the center of the chest lasting more than a few minutes.
- · Pain may spread to the shoulders, neck or arms.

Dr. Bryce Morrice · Lightheadedness, fainting, sweating, nausea or shortness of breath also may occur. Kelley Phelps is back on his feet in rehabilitation.

### "Lucky for me, I sought out help anyway." - Kelley Phelps

### **FAST FACTS**

- There were more than 250 patients admitted for a heart attack at LMH in 2000. Only 3 of these patients were readmitted due to the same or related condition.
- LMH is the County Training Center for the American Heart Association in Licking County.
- There were 2054 who took a cardiopulmonary resuscitation (CPR) class at LMH last year.
- Automatic Defibrillation (AED) Training began in 2000 and 34 were trained.

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