



Licking Memorial Health Systems

1320 West Main Street
Newark, Ohio 43055

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

You'll soon discover why Licking Memorial Health Systems is measurably different ... for your health!

Visit us at www.LMHealth.org.

The Quality Report Card is a publication of the LMHS Public Relations Department.

Please contact the Public Relations Department at (740) 348-1572 to receive future mailings.

The articles contained in this publication should not be considered specific medical advice as each individual circumstance is different. Should you need medical advice, consult your physician. Entire publication copyrighted 2013 Licking Memorial Health Systems. All rights reserved.



Quality Report Card

Licking Memorial Health Systems

(740) 348-4000 (phone) • www.LMHealth.org



Volume 14, Issue 7

July 2013

Health Tips – Ways to Reduce Sodium in Your Diet

Most Americans consume too much sodium in their diets, increasing their risk for high blood pressure, heart attack and stroke. Many physicians recommended that in general, healthy adults should consume no more than 1,500 mg of sodium per day (1/2 tsp. table salt equals 1,200 mg). Here are five tips to help you reduce the amount of sodium in your diet:

1. Limit the amount of processed foods you consume. Canned soups and vegetables, deli meats, salad dressings, tomato sauce, breakfast cereals, bakery goods and many other common foods contain unhealthy, high levels of sodium.
2. Choose low sodium versions of goods at the grocery. Many canned products have reduced sodium options. Be sure to read the labels to ensure the sodium levels are within your desired range.
3. Ask for nutritional guides at restaurants to learn about the sodium content of each dish. Most restaurant meals contain high levels of sodium. Choose fresh salads, or request entrées with no salt.
4. Use sodium-free spices and flavors to replace salt in your home-cooked meals. Many individuals find that lemon juice makes an excellent salt substitute.
5. Salt is an acquired taste. After reducing your sodium intake for a couple of weeks, you may find that you actually prefer foods with less salt!

Stroke Care – How do we compare?

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 healthcare choices.

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

1 Patients who suffer a stroke may be at risk for repeat strokes in the future. It is important that while patients are hospitalized, they receive education about reducing their risk and responding to another stroke in the future. This indicator shows the percentage of patients who had this education noted in their records as being completed.

	LMH 2010	LMH 2011	LMH 2012	National ⁽¹⁾
Stroke education	90%	95%	96%	94%

2 Beginning rehabilitation as soon as it can be done safely can help improve recovery for stroke patients. Rehabilitation may include physical therapy, occupational therapy and/or speech therapy.

	LMH 2010	LMH 2011	LMH 2012	National ⁽¹⁾
Patients evaluated for rehabilitation services	88%	97%	99%	99%

3 Ideal management of a patient who has suffered a stroke includes starting the patient on a blood-thinning medication (such as aspirin) while in the hospital. These medications should also be continued after the patient is sent home from the hospital. These medications can help prevent another stroke, however in some cases, they may pose a higher risk for patients and should not be used. Stroke patients are also at higher risk for developing blood clots, also known as venous thromboembolism (VTE). To help prevent this from happening, stroke patients should also receive protective medications, known as “prophylaxis,” to reduce the potential of blood clot formation.

	LMH 2010	LMH 2011	LMH 2012	National ⁽¹⁾
Eligible patients receiving blood-thinning medication	97%	98%	98%	95%
Patients with blood-thinning medication at discharge	100%	99%	100%	100%
Patients with VTE prophylaxis by second day	90%	99%	98%	100%

4 Patients with atrial fibrillation are at higher risk for suffering strokes. Due to an inefficient heartbeat, blood clots can form in the heart and then travel to the brain, leading to stroke. These patients should receive long-term blood-thinning medication to help prevent these clots from forming. LMH tracks the percentage of patients with atrial fibrillation who were discharged on a blood-thinner, as appropriate.

Another significant risk factor for stroke is high cholesterol. Stroke patients with high cholesterol should receive cholesterol-lowering medications (called statins) to take after discharge to help lower the risk for more strokes. LMH tracks the percentage of stroke patients with high cholesterol who were receiving statins at discharge.

	LMH 2010	LMH 2011	LMH 2012	National ⁽¹⁾
Atrial fibrillation patients on anticoagulation therapy	100%	100%	100%	100%
Patients with statin medication	91%	97%	100%	95%

5 Licking Memorial Health Professionals (LMHP) office-based physicians use evidence-based measures in order to provide excellent, quality care to patients. The American Stroke Association and American Heart Association recommend the use of blood-thinning medication in order to prevent clots from forming and to improve blood flow. It is also recommended to have an annual LDL cholesterol test.

	LMHP 2010	LMHP 2011	LMHP 2012	National ⁽²⁾	Goal
LMHP coronary artery disease patients seen, and are receiving blood-thinning medication	92%	93%	93%	greater than 80%	greater than 90%
LMHP coronary artery disease patients seen who have had an annual LDL test	91%	92%	93%	greater than 80%	greater than 90%

Data Footnotes: (1) Comparative data from the Midas Comparative Database. (2) American Heart Association/American Stroke Association/National Committee for Quality Assurance Heart/Stroke Recognition Program.

Patient Story – Danny Brookover

When Danny Brookover awoke in the middle of the night on Halloween 2012, he thought, “Oh, no – not again.” He was trying to walk to the bathroom, but had to lean against the wall for support. He went back to bed for more sleep, but when morning came, he told his wife, Sally, “I think that I have had another stroke. I better go to the hospital.”

Just four months previously, Danny had suffered his first stroke at the age of 59. After spending the Fourth of July with family, he returned to his work as a concrete truck driver with unexplainable symptoms. He had driven his car to work into the wrong entrance, his speech was slurred, and he stumbled while he walked. Danny’s coworkers recognized that he needed medical attention and sent him to a hospital. “I did not have any pain – I just lost my balance and could not walk or talk right,” Danny recalled.

He received a CT scan of his brain, which identified an area of damage on his right side. Mourad Abdelmessih, M.D., of Mid-Ohio Neurology, examined Danny and confirmed that he had suffered an ischemic stroke on the right side of his brain that was caused by a blockage in the carotid artery. Danny began to take Plavix® to prevent a buildup of plaque and reduce his risk of future strokes.

Danny noticed some lingering effects from the stroke in July. His right arm tended to curl up, one side of his face drooped, and his speech was difficult to understand. Throughout the next four months, those side effects began to subside, until he awoke that Halloween night, and he realized that he was experiencing the same loss of balance he had in July.

Sally took Danny to the Emergency Department at Licking Memorial Hospital (LMH). Another CT scan of his brain revealed that a second stroke had occurred, this time on the left side of his brain, and he was admitted to LMH. Danny was visited by Linquan Sun, M.D., of Licking Memorial Neurology in his patient room before being discharged to his home several days later.



Danny Brookover (right) and his wife, Sally (left), enjoy their home in southwestern Coshocton County as he recovers from a stroke. The Brookovers have learned the importance of going to the hospital immediately when a stroke occurs so that “clot-buster” medications may be used to limit the stroke’s neurological damage.

Even though Danny was not feeling well, he was impressed by the staff’s attention to detail. “They made sure I was warm, and they came in and checked on me all the time. They took great care of me,” he said.

In December 2012, Danny returned to LMH and Howard L. Reeves, D.O., performed surgery to clear the plaque buildup from his right carotid artery. In January 2013, a similar procedure was performed on his left carotid artery.

The family history is an important indicator of a patient’s risk for stroke, and Danny knows that he is fortunate to have survived. “My grandfather died of a stroke in his 60s, and my dad died of a heart attack at the age of 67,” Danny explained. “I do not want to go through this again,

so I know that I need to take my prescriptions, see my doctor regularly and keep an eye on my blood pressure. Most importantly, if I start feeling symptoms again, I know to go to the hospital immediately so that they may be able to reverse the stroke damage with ‘clot-busting’ drugs that can be used only within four and one-half hours from when the stroke first began.”

As he recovers from the strokes, Danny has some difficulty with walking and uses a cane to steady his balance. Dr. Sun advised him that his mobility is likely to continue improving for up to one year after a stroke, so Danny is hopeful that he will be able to enjoy his favorite outdoor activities again soon.

“Clot-buster” Medication Can Limit Stroke Damage if Given Within Four and One-half Hours



Linquan Sun, M.D.

Stroke is the fourth leading cause of death in the U.S., responsible for one of every 19 fatalities. Although it occurs most frequently in older adults, stroke can affect adults and children of any age. In the U.S., a stroke occurs every 40 seconds, and every 4 minutes, stroke causes a death. Although these facts from the Centers for Disease Control and Prevention are grim, the good news is that thrombolytic

drug therapy is very effective at limiting a stroke’s physical consequences in cases where the patient arrived at the Emergency Department (ED) within the treatment guideline requirements to administer the drugs within four and one-half hours – sooner is even better.

A stroke results from an interruption of blood flow to the brain. Ischemic strokes account for nearly 90 percent of all strokes and are caused by a blocked blood vessel. A hemorrhagic stroke occurs when a blood vessel bursts in the brain. A third type of stroke, transient ischemic attack (TIA), is frequently called a “mini stroke.” Although the symptoms of a TIA may subside after just a few minutes to a few hours, the event is often followed later by a more severe ischemic stroke if left untreated.

“Many patients want to take a ‘wait-and-see’ approach when they experience symptoms of a stroke, but there is no time to spare,” explained Linquan Sun, M.D., of Licking Memorial Neurology. “A stroke can be deadly, or can cause a range of severe permanent disabilities. In the Emergency Department, we can often administer intravenous thrombolytic drugs that are commonly referred to as ‘clot-busters.’ For every minute that blood flow to the brain is interrupted during a stroke, an estimated 2 million brain cells are destroyed. Thrombolytic drugs help to prevent further damage during an ischemic stroke by breaking up the arterial blood clot to restore the blood flow quickly, and in some cases, they can even help to reverse some neurological damage.”

An important condition of thrombolytic drug therapy is that the medication can be used only within four and one-half hours after the patient’s symptoms first began. “Unfortunately, we have had patients with stroke symptoms who delayed coming to the ED and arrived just at the four and one-half hour time span, expecting that they could receive thrombolytic drugs. They did not take into account that the ED staff needs time to make an assessment, conduct a CT scan and determine whether thrombolytic drugs would be the best treatment option for them. Their delayed arrival limited their treatment options,

and as a result, their outcomes were not as favorable as they could have been.”

Some individuals are at higher risk of suffering a stroke.

Elevated risk factors include:

- Gender (higher risk for men)
- Age
- Family history of stroke
- High blood pressure
- Smoking
- Diabetes
- High cholesterol
- Heart disease
- Birth control pills
- Cocaine use
- Alcohol abuse
- Head injury
- Bleeding disorders
- Pregnancy

The risk of stroke can be reduced by making healthy lifestyle changes, including:

- Exercising for at least 30 minutes most days of the week
- Following a diet that is high in fiber and low in saturated fats
- Quitting smoking
- Controlling blood pressure
- Controlling diabetes
- Controlling cholesterol levels
- Losing excess weight
- Limiting alcohol consumption (fewer than two drinks per day for men, no more than one drink per day for women)

Do you know the symptoms of stroke?

Common symptoms of a stroke include:

- Numbness or weakness of the face, arm, or leg – especially on one side of the body
- Confusion
- Difficulty understanding
- Trouble speaking
- Vision difficulties in one or both eyes
- Difficulty with walking
- Loss of balance
- Loss of coordination
- Dizziness
- Severe headache with no known cause