

# Quality Report Card

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EMERGENCY CARE

## Telestroke Network Provides Local Access to Stroke Care

In one minute of having a stroke, over one million irreplaceable brain cells are lost. The amount of time that the brain is deprived of oxygen can cause brain damage or death, and it is imperative that a person with stroke symptoms be immediately transported to the nearest hospital to begin treatment. While smaller hospitals may not have specialized stroke care staff on-site, the advancement of telemedicine, high-resolution imaging, and digital communications has made it possible for telestroke technologies to improve the speed and quality of care for stroke patients.

The telestroke network brings the expert stroke care of large hospitals to smaller, more remote facilities, allowing physicians and specialists to view and examine a suspected stroke patient through the use of virtual health technology. They can also review imaging and recommend the appropriate treatment for the patient.

Licking Memorial Hospital (LMH) participates in a stroke treatment model that incorporates the use of telehealth medicine, with a “hub and spoke” framework of care. “Hub” hospitals are those with advanced expertise and the capacity to treat patients with complex strokes. “Spoke” hospitals, such as LMH, are often smaller regional hospitals and those in remote locations. Hub hospitals provide stroke treatment through specialized telemedicine equipment to stroke patients in the spoke hospitals. This allows many more stroke patients in Ohio to remain in their local hospital and receive high-quality treatment from local specialists in collaboration with experts from the larger hub hospitals.

Patients presenting to a spoke hospital with neurological symptoms that are suspicious for a stroke will be evaluated by nursing staff and physicians. When stroke-like symptoms are confirmed, the stroke network is activated, and an on-call specialist from the hub hospital is alerted immediately. Within minutes, the specialist can connect from anywhere via virtual health technology to the regional hospital care team. They can see and talk with the patient and family and view the patient’s brain scans from the spoke hospital’s emergency department. Once the exam and tests are completed, the specialist and care team will determine if the patient can remain at the spoke hospital

for treatment or if the patient should be transferred to the hub hospital.

As of February 2020, there were 11 hub hospitals and 127 spoke hospitals serving Ohio residents. According to the Ohio Department of Health, nearly 97 percent of Ohioans live within a 30-minute drive to a hub hospital or spoke facility that is affiliated with the Ohio Coverdell Stroke Program, a data-driven quality improvement program for stroke treatment that provides quality improvement resources to emergency medical service providers, hospital stroke teams, and other healthcare providers to deliver high quality stroke care to Ohioans.

A stroke can happen to any person despite their age, race, or gender. There are risk factors that can increase the chance of a stroke, such as uncontrolled high blood pressure, high cholesterol, and previous stroke or heart attack. Other risk factors include diabetes, obesity, and smoking.

Stroke is a medical emergency. The acronym B.E.F.A.S.T is an easy way for people to remember the early symptoms of stroke:

- Balance problems
- Eye and vision problems
- Facial drooping
- Arm numbness or weakness
- Slurred speech
- Time to call 911

Symptoms of a stroke may last only a few minutes, and even if symptoms disappear, it should still be considered a serious medical emergency. A medical assessment is important to identify the cause of the warning sign and if the person is in need of additional treatment.



# Patient Story – Richard Amore



As a member of Toastmasters International, Richard Amore enjoys teaching others the art of public speaking, telling stories, and performing stand-up comedy. He often uses his real-life experiences to entertain audiences, especially the story of how he met his wife. Richard was working at Owens Corning when a coworker told him she had a friend who might enjoy going out on a double date. However, the friend declined the double date because she had never met Richard before and did not know him. Determined to prove himself a worthy date, Richard went to the young lady's house and knocked on the door.

"I drove up and down State Route 79 a few times to build-up the courage to approach the door. I introduced myself, and Carol let me into the house," Richard shared. "After spending an hour talking to her and her mother, I said, 'now that you know me – how about that date?'"

The two married a short time later and spent 53 years together. Richard began working for Carol's father, and later purchased Helmick's Exterminating from the Helmick family. Carol became a nurse and was employed at Licking Memorial Hospital (LMH) for a number of years. After earning her master's degree and becoming a Nurse Practitioner, she received a position at a Columbus cancer hospital.

In 2021, Carol passed away due to complications from triple bypass surgery. Three weeks later, Richard began experiencing his own medical issues. As he stood to walk his dog, he became lightheaded, vomited, then passed out. When he regained consciousness, Richard dialed 911. Emergency Medical Technicians performed a quick exam, but could not determine what may have caused Richard's sudden illness. They

transported him to the Licking Memorial Emergency Department (ED). Upon arrival at the ED, nursing staff implemented protocols to determine if Richard was experiencing a heart attack and performed an electrocardiogram (EKG). The ED physician, Terrill D. Burnworth, D.O., reviewed the EKG, ordered blood tests, and consulted Cardiologist Hassan Rajjoub, M.D. At first, the testing was inconclusive as to whether Richard had experienced a heart attack or an aneurysm.

"As I was waiting for more test results, the monitors detected a cardiac event. I felt no pain in my chest, just some numbness in my jaw, but the staff issued an emergency code for a STEMI," said Richard. An ST-elevation myocardial infarction (STEMI) describes a heart attack in which the artery that carries blood from the heart to the rest of the body is blocked. "I was so thankful that Dr. Rajjoub was there with me. He saved my life that day. I had no idea how dangerous a STEMI can be. It is often called a widow-maker."

Richard was quickly moved to the catheterization laboratory where staff members prepared him for an angioplasty – a procedure used to open blocked coronary arteries. A long, thin catheter is inserted into a blood vessel in the arm or groin, then guided to the blocked coronary artery. The catheter contains a tiny balloon that is inflated at the narrowed area of the heart artery, and a stent – an expandable metal mesh coil, is placed in the opening. Dr. Rajjoub discovered several blockages and informed Richard that he would also need bypass surgery once he was stabilized.

"I told my son, 'I have heard great things about Dr. Rajjoub and his expertise in heart care. I trust him to make good decisions about the next steps in my recovery,'" Richard said. He was told that he would be staying at LMH for three days for monitoring. However, there were concerns about Richard's blood pressure, and Dr. Rajjoub suggested immediate action be taken. Richard was transported to a Columbus hospital for bypass surgery.

After the surgery and initial recovery, Richard returned home. It was suggested that he undergo cardiac rehabilitation; however, Richard was suffering from spinal stenosis – a narrowing of the spaces within the spine, which can put pressure on the nerves that travel through the spine. Richard had postponed a scheduled surgery for the condition because of his wife's bypass surgery, and was now waiting to fully recover from his own heart procedures.

Not long after his return home, Richard once again visited the ED. When he realized he had accidentally sat down on his cat, Richard moved too quickly and fell out of the chair. He could not stand to get off the floor, so he called 911. A computerized tomography (CT) scan revealed he had broken the third bone down in the lumber region of his back. Richard underwent surgery on the broken bone and had the spinal stenosis repaired. With care for his back issues, Richard is now able to participate in cardiac rehabilitation and is working to increase his strength.

In April, Richard made a stage appearance in the Active•Senior Game Show hosted by Licking Memorial Health Systems, winning several prizes. "It took a lot of will power to climb the stairs to the stage, but I was excited to be part of the show. I never turn down an opportunity to be in front of an audience," Richard shared.

Richard has faced several other challenges since his back surgery, including a second heart attack, and issues with his medication; however, he continues to work to stay active and maintain his wellbeing and weight. After graduating high school, Richard weighed over 420 pounds. He was proud when he lost 240 pounds, and determined to remain active. He volunteered for ski patrol and as a paramedic for many years. Still active with his business, Richard is happy to work with his son, Mike, who serves as a service manager for Helmick's Exterminating. Richard also enjoys spending time with his granddaughters, Sydney and Addyson, and his son, Paul.

# Emergency 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 to benchmark measures. Then, we publish the information so you can draw your own conclusions regarding your healthcare choices.

**1.** During 2021, there were 50,734 visits to the Licking Memorial Hospital (LMH) Emergency Department (ED).

	LMH 2019	LMH 2020	LMH 2021	Goal
Median length of stay in the ED for all patients*	194 min.	192 min.	218 min.**	Less than 201 min.
Median length of time from arrival until seen by a physician*	21 min.	16 min.	27 min.**	Less than 28 min.
Median length of stay in the ED for patients discharged home*	175 min.	167 min.	204 min.**	187 min. <sup>(1)</sup>
Median length of time from the ED physician's decision to admit a patient until the patient arrives in their Hospital room	81 min.	98 min.**	75 min.	120 min. <sup>(1)</sup>
Percentage of patients who are in the ED for more than 6 hours	5.3%	4.6%	8.9%**	7.8% <sup>(2)</sup>

*\*LMH data represented on this table reflect nearly 100 percent of all ED visits, while goals reference Centers for Medicare & Medicaid Services hospital comparative data, which use a small sampling of all U.S. emergency department patients.*

*\*\*In 2020 and 2021, admittance times were affected by an increase in patient visits and the need to test patients for COVID-19.*

**2.** LMH operates three Urgent Care facilities: Licking Memorial Urgent Care – Pataskala, Licking Memorial Urgent Care – Granville, and Licking Memorial Urgent Care – Downtown Newark. Patients are encouraged to visit Urgent Care rather than the ED when they have illnesses and injuries that are not life-threatening, but need immediate attention, such as ear infections, minor fractures, and minor animal bites. Urgent Care visits usually require less time and offer lower costs than visits to the ED. During 2021, there were 18,141 visits to Licking Memorial Urgent Care – Granville, 7,885 visits to Licking Memorial Urgent Care – Pataskala, and 20,230 visits to Licking Memorial Urgent Care – Downtown Newark.

	LMH 2019	LMH 2020	LMH 2021	Goal
Urgent Care – Downtown Newark time to see physician	12 min.	18 min.	44 min.*	Less than 30 min.
Urgent Care – Downtown Newark median length of stay	44 min.	54 min.*	68 min.*	Less than 60 min.
Urgent Care – Granville time to see physician	9 min.	12 min.	30 min.*	Less than 30 min.
Urgent Care – Granville median length of stay	36 min.	41 min.	46 min.*	Less than 60 min.
Urgent Care – Pataskala time to see physician	14 min.	13 min.	31 min.*	Less than 30 min.
Urgent Care – Pataskala median length of stay	44 min.	44 min.	52 min.*	Less than 60 min.

*\*In 2020 and 2021, length of stay times were affected by an increase in patient visits and the need to test patients for COVID-19.*

**3.** Emergency angioplasty restores blood flow in a blocked heart artery by inserting a catheter with a balloon into the artery to open the vessel. The procedure has been proven to save lives during a heart attack and is most effective when performed within 90 minutes of the patient's arrival to the ED to minimize irreversible damage from the heart attack.

	LMH 2019	LMH 2020	LMH 2021	Goal
Median time to opened artery	55 min.	58 min.	60 min.	61 min.
Percentage of patients with arteries opened within 90 minutes	99%	98%	99%	96%
	LMH 2019	LMH 2020	LMH 2021	National <sup>(1)</sup>
Median time from arrival to completion of EKG	5 min.	3 min.	3 min.	7 min.

**4.** Patients who are seen in the ED and return home sometimes can develop further problems that warrant a return to the ED. A high number of patients who return to the ED within 24 hours after being seen can possibly signal a problem with patient care and the ED's ability to accurately diagnose and treat a patient's condition. For this reason, LMH measures the rate of patients who return to the ED within 24 hours to ensure correct condition management. LMH sets an aggressively stringent goal for this, as listed below.

	LMH 2019	LMH 2020	LMH 2021	Goal
ED patients who return to the ED within 24 hours of discharge	1.4%	1.5%	0.9%	Less than 2%

Emergency Care – How do we compare? (continued on back)



Check out our Quality Report Cards online at [LMHealth.org](http://LMHealth.org).

**5.** A high rate of patients who return to the Hospital within 72 hours after an ED visit and are admitted can possibly signal a problem with patient care. These cases are very heavily reviewed and scrutinized, and LMH sets an aggressively stringent goal for this indicator, as listed below.

	LMH 2019	LMH 2020	LMH 2021	Goal
Patients admitted to the Hospital within 72 hours of ED visit	0.6%	0.6%	0.4%	Less than 1%

**6.** For personal reasons, some patients may elect to leave the ED prior to completing any recommended treatment. Doing so can place the patient at serious health risk. As a measure of ensuring patient safety, LMH measures the percentage of patients who elect to leave the ED prior to completing their treatment.

	LMH 2019	LMH 2020	LMH 2021	Goal
ED patients who leave before treatment is complete	5.0%	3.6%	2.2%	Less than 3%

**Data Footnotes:** (1) *Hospitalcompare.hhs.gov national benchmarks.* (2) *Comparative data from the Midas Comparative Database.*

\*LMH data represented on this table reflects nearly 100% of all ED visits, while goals reference CMS hospital comparative data, which uses a small sampling of all U.S. emergency department patients.

## Recognizing the Signs of Sepsis

Sepsis is the body's overwhelming and life-threatening response to an initial infection of microbes that can be bacterial, viral, or fungal. The first infection may occur any place on the body – internally or externally. Sepsis most often results from infections that start in the lungs, urinary tract, skin, or gastrointestinal tract. The initial infection may be serious, such as pneumonia or meningitis, or it may result from a minor issue, such as a finger cut or a case of the flu.

Sepsis affects 1.7 million adults in the United States and results in nearly 270,000 fatalities in the U.S. each year. Individuals who are at a higher risk of sepsis include adults ages 65 or older, people with weakened immune systems or who have chronic medical conditions such as diabetes, lung disease, cancer or kidney disease, individuals with recent severe illness or hospitalization, and sepsis survivors.

Quick diagnosis and treatment is the key to surviving sepsis. The national public awareness campaign, "It's About TIME," was an initiative launched in 2018 by Sepsis Alliance to educate the general public about the most common symptoms associated with sepsis and provide them with knowledge to suggest sepsis to their provider when they arrive at the emergency department.

The acronym TIME stands for:

- Temperature – higher or lower than normal
- Infection – individual may have signs and symptoms of infection
- Mental decline – patient is confused, sleepy, or difficult to rouse
- Extremely ill – severe pain or discomfort

Sepsis should be considered a medical emergency similar to a heart attack or stroke, and immediate action must be taken to treat this serious condition. Individuals who suspect that they or another person may have sepsis should seek medical care immediately.



Visit us at [LMHealth.org](http://LMHealth.org).

Please take a few minutes to read this month's report on **Emergency Care**. You'll soon discover why Licking Memorial Health Systems is measurably different ... for your health!

The Quality Report Card is a publication of the LMHS Public Relations Department. Please contact the Public Relations Department at (220) 564-1561 to receive future mailings.

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