

Licking Memorial Health Systems Quality Report Card

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DIABETES CARE



Food Insecurity Contributes to Negative Health Outcomes

Food insecurity is a major public health concern in the United States. The lack of access to affordable, nutritious food is associated with increased risk for chronic health conditions such as obesity, heart disease, and diabetes. Research shows that food insecurity in all its forms is a major risk factor for type 2 diabetes. People who face food insecurity are two to three times more likely to develop type 2 diabetes than those who have consistent access to food.

There are two types of food insecurity. Persistent food insecurity occurs when individuals experience persistent hunger, malnutrition, and other health problems associated with inadequate access to nutritious foods. Transient food insecurity is more common and usually caused by temporary economic hardship, such as job loss or health-related issues.

Type 2 diabetes is a chronic health condition that occurs when the body does not use insulin properly. Insulin is a hormone produced by the pancreas that helps glucose, or blood sugar, enter cells to be used for energy. Blood glucose is the body's main source of energy and comes from two sources: the liver and food consumption. When the body is unable to produce enough insulin or cannot use insulin well, which is known as insulin resistance, it causes glucose to remain in the blood, resulting in high blood sugar, or hyperglycemia.

Several factors can lead to hyperglycemia, such as eating too much, physical inactivity, stress, illness, certain medications, and poor medication management for diabetes. Symptoms of hyperglycemia may include frequent urination, increased thirst, feeling weak or unusually tired, and blurred vision. The longer a person's blood sugar level remains high, the more likely they are to develop serious symptoms.

A healthy, balanced diet is an essential component to managing diabetes. Consuming nutritious foods in managed portion amounts and at consistent times helps people with diabetes lose weight, lower cholesterol, decrease blood pressure, and increase energy. According to the U.S. Department of Agriculture (USDA), a healthy diet should include a variety of fruits and vegetables, whole grains, fat-free or low-fat dairy products, lean protein-rich foods, such as fish, poultry, eggs, legumes, nuts, seeds, and healthy oils.

Food deserts are neighborhoods and communities that have limited access to affordable and nutritious foods, particularly fresh produce. These areas are often found in low-income neighborhoods and rural communities. The USDA defines food deserts as regions where people live more than one mile from a supermarket in urban neighborhoods, or ten miles away in rural areas. This often leads to people shopping for their groceries at

convenience marts or dollar stores that may not contain fresh produce and healthier food options, causing individuals to purchase inexpensive, readily available foods that do not have the nutritional value needed for a healthy diet. Poor eating habits can have a negative impact on individuals with diabetes and lead to serious complications, including cardiovascular disease, kidney, eye, or nerve damage, foot problems, slow healing of wounds, and increased risk of infection.

To help combat food insecurity in Licking County, Licking Memorial Health Systems (LMHS) recently partnered with the Food Pantry Network (FPN) of Licking County to open the FPN Market, which occupies the LMHS building at 131 McMillen Drive in Newark. The Market offers eligible customers a grocery-style shopping experience with a selection of food items including fresh produce, dry goods, dairy, and meat products. The Market is open Monday through Friday, from 11:00 a.m. to 4:00 p.m., and customers are welcome to visit once per week. The extended hours allow customers to visit during a time that best fits their schedule.

LMHS also provides a Fruit and Vegetable Prescription Program for eligible participants and their families to maintain a balanced diet by offering a prescription to redeem free, fresh fruits and vegetables at the Licking Memorial Hospital Main Street Café. From June through September, participants may choose to

Food Insecurity (continued on back)



Patient Story – Justin Wolfinger

Justin to the Licking Memorial Medication Therapy Clinic.

For Justin Wolfinger, the past few years have brought challenging health issues, and discovering that he had diabetes became an added hurdle on his journey to healing. In 2022, just before Thanksgiving, Justin was experiencing heavy coughing when he felt a pop on his left side. Later, he noticed a great deal of discomfort in the area when inhaling and feared he had broken a rib. During a visit to an emergency room, X-rays were taken, and the treating physician informed Justin that he had sustained internal bruising and suggested that the muscle around the ribs would heal on its own.

Justin was raised on a farm and spent most of his early life in Fairfield County. After moving to Licking County, he attended Central Ohio Technical College and The Ohio State University at Newark to learn electrical engineering. After many years in Information Technology, he felt he wanted to do more to help people. Justin had accepted a position at an adult daycare facility. He tried to continue to work after the injury he sustained, but the pain worsened.

After visiting other area hospitals, Justin made an appointment with Charles L. Geiger, D.O., at Licking Memorial Family Practice – Tamarack. Dr. Geiger ordered laboratory testing including an A1C test, a blood test that measures glycated hemoglobin, or blood sugar. Test results reflect the average blood sugar level of the past two to three months and can be utilized to diagnose diabetes. Target levels for A1C vary based upon age and other factors; however, the goal for most adults is less than 5.7 percent. Justin's A1C results showed his blood sugar level was over 11 percent. Dr. Geiger prescribed medication to lower his A1C and referred

The Medication Therapy Clinic assists patients taking diabetes medications to create a treatment plan to manage care and offer education about the correct dosage, the importance of close supervision by a healthcare team, and the signs and symptoms of complications from the medication. Clinical pharmacists, nurses, and dietitians with specific knowledge and training in diabetes work together with the patient to reach personal goals for better health. A variety of methods for monitoring and reporting glucose levels are also offered to the patients.

Reducing his A1C level became critical to Justin's treatment for the pain in his side. Further exams revealed that Justin had fractured several of his ribs. Due to the diabetes, it was harder to heal such injuries. Working with a physical therapist also was not helpful in the healing process. It was determined that Justin would require surgery to repair the damage; however, the surgery was not possible as long as Justin's A1C was so high. His care team wanted Justin to reduce his A1C to lower than 8 percent.

Working with the staff at the Medication Therapy Clinic, Justin began utilizing a continuous glucose monitor (CGM), a device with a sensor that automatically estimates blood sugar levels throughout the day and night. The pharmacists assisted in managing medications, and a dietitian worked with Justin to modify his diet. After his blood sugar levels were properly managed, Justin was able to receive surgery.

"I learned so much from everyone at the Medication Therapy Clinic. I began consuming healthier proteins, more fruits and vegetables," Justin shared. "It did not

take long to lower my A1C with their help, and the lifestyle changes have been more than beneficial. It was lifesaving. I would not have been able to undergo the surgery necessary to repair my ribs. I believe they saved my life."

During the surgery, the surgeons discovered that pieces of the broken bones from Justin's ribs were stabbing into his lungs. He received bone grafts and titanium rods to repair a number of the ribs. Since the surgery, Justin has continued to monitor and manage his blood sugar and is now able to maintain an A1C of 6.1 percent. Justin is grateful for the LMHS staff and his mother, Darlene, for driving him to his many appointments.

"I was so impressed with the way everyone treated Justin. They were kind and worked diligently to determine the underlying causes of his coughing and pain," Darlene shared. "You could just tell they were concerned about him. Even if he did not have an appointment, if a staff member thought of something that could help him, they would call him personally and discuss their ideas with him. It was so nice to witness their dedication to Justin."

In addition to the staff of the Medication Therapy Clinic, Justin also wanted to share his gratitude to the numerous other specialists for their assistance during the past few years. The staff of Licking Memorial Pulmonology worked to assist with Justin's breathing issues including sleep apnea. Members of the Hematology/Oncology Clinic also assisted in searching for underlying causes of Justin's coughing.

Diabetes 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. Much of the care that patients with diabetes receive takes place in the outpatient or physician office setting. The physician offices of Licking Memorial Health Professionals (LMHP) measure the most critical indicators for diabetes care.

	LMHP 2021	LMHP 2022	LMHP 2023	National
LMHP patients with diabetes having HbA1C test	86%*	77%	78%	88% ⁽¹⁾
LMHP patients with diabetes receiving eye exam	41%*	52%	51%	58% ⁽¹⁾
LMHP patients with diabetes having foot exam	47%*	71%	73%	80% ⁽²⁾
				LMHP Goal
LMHP patients with diabetes having lipid profile	84%*	85%	88%	90%
LMHP patients with diabetes having microalbuminuria test	64%*	70%	73%	85%

2. The hemoglobin A1C (HbA1C) test is a simple lab test that shows the average amount of sugar (also called glucose) that has been in a person's blood over an extended period of time. While having the testing done is important, the test results (or outcomes) indicate how well the physician, in collaboration with the patient, is managing the disease. The goal for most people with diabetes is 7% or less.

	LMHP 2021	LMHP 2022	LMHP 2023	National ⁽¹⁾
LMHP patients with diabetes with HbA1C less than or equal to 7%	43%*	50%	53%	38%

3. People with diabetes are at high risk for heart disease. An elevated LDL ("bad") cholesterol test reveals if an individual has unhealthy fat levels, which increase the risk for heart disease – a very serious complication of diabetes. An LDL level of 100 milligrams per deciliter (mg/dL) or less is considered best for heart health.

	LMHP 2021	LMHP 2022	LMHP 2023	National ⁽¹⁾
LMHP patients with diabetes with LDL less than or equal to 100 mg/dL	71%*	80%	77%	48%

4. The Community Case Management (CCM) program at Licking Memorial Hospital (LMH) provides services to people with diabetes in the community including the Diabetes Self-Management Education & Support program. The American Diabetes Association recommends that a person with diabetes should have an HbA1C blood test at least every six months to monitor glucose levels. LMH staff members work closely with patients and their physicians to ensure that this test is performed as recommended in order to manage each patient's condition better.

	LMH 2020	LMH 2021	LMH 2022	LMH Goal
Diabetes Self-management Education & Support participants who obtained an HbA1C test	100%	100%	98%	Greater than 85%

*Due to COVID-19 restrictions throughout 2020 and 2021, some patients were unable to obtain regular testing or attend in-person appointments.

Data Footnotes:

(1) Average of reported Commercial, Medicare, and Medicaid/HEDIS measures.

(2) National Committee for Quality Assurance – NCQA Diabetic Recognition Program

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receive tokens once per week to shop at the Canal Market District Farmer's Market in Downtown Newark to purchase fresh fruits and vegetables. This healthy eating initiative is currently offered to the following patients:

- Breast cancer patients who have completed treatment and received a survivorship care plan
- Patients who have stage 1 or 2 chronic kidney disease with prediabetes or diabetes and obesity with a BMI of 40 or greater

Licking County Transit offers a Deviated Fixed Route service for Licking County residents to provide greater access to transportation. The Main Street Route (Red Line) contains a stop at the FPN Market as well as several LMHS medical facilities. The 21st Street Route (Blue Line) offers a variety of stops along 21st Street in Newark, and the Granville Route (Green Line) provides access to the Granville area. All three lines connect at a central hub located at 1717 West Main Street.

A Healthy Diet Can Prevent Diabetes

Research shows that type 2 diabetes can be delayed or prevented by losing weight, following a healthy diet, and paying attention to portion sizes. Consuming nutritious foods that are high in fiber, are a good source of lean protein, and low in added sugar helps to maintain healthy weight and blood sugar levels. The following dietary changes are suggested to lower the risk for type 2 diabetes:

- Eating fiber-rich foods including fruits, vegetables, whole grains, nuts, and legumes helps control blood sugar levels and promote weight loss.
- Whole grains such as brown rice, whole wheat pasta, and oats are linked to a reduced risk of type 2 diabetes.
- Avoid foods and drinks that are high in saturated or hydrogenated fats, sodium, and added sugars, such as sugary beverages, cakes, cookies, candy, and snacks. Instead, choose water, coffee, or tea and more fruits and vegetables.
- Select lean proteins such as chicken or turkey without the skin. Beans and low-fat dairy products are also good sources of protein.
- Consume healthy fats. Unsaturated fats promote healthy cholesterol levels and cardiovascular health. Foods that contain healthy unsaturated fats include nuts and seeds, fatty fish such as salmon and tuna, and liquid oils such as olive, sunflower, and canola.



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

Please take a few minutes to read this month's report on **Diabetes Care**. You will 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) 564-1572 to receive future mailings.

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