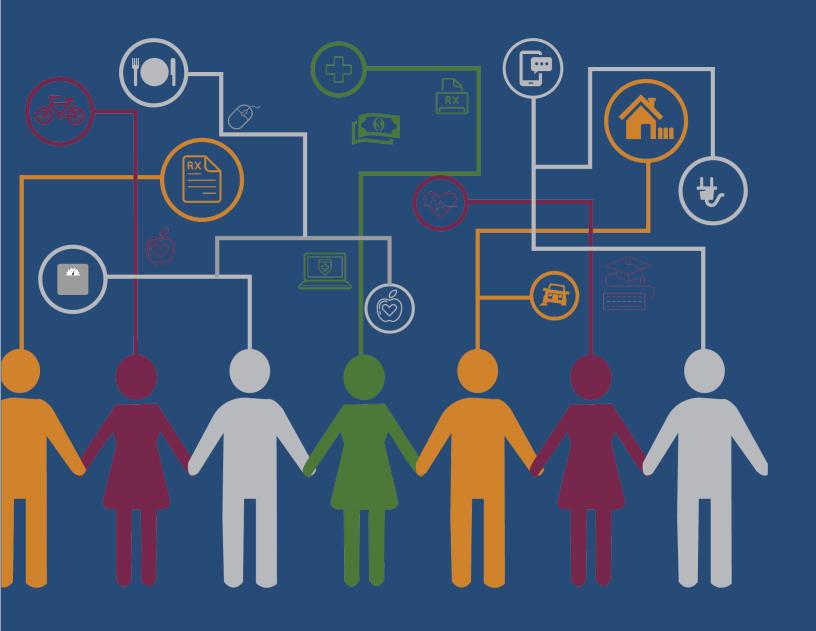


Tackling Diabetes

How a small free clinic is making a big impact



Digging Deep for Sustainable Healthy Change

I ask myself all the time: How much of an impact are we truly having here at CMC?

This same question led me and our executive team at CMC to look at our data on how we support our patients with diabetes. And I don't mean glancing at a spreadsheet. In January 2021, we pulled up a chair, made ourselves comfortable and took our time to understand our numbers better. The results we found were surprising.

assisting patients with diabetes.

Our patients receive comprehensive and holistic care including primary care, health coaching, medication assistance, and a prescription for a veggie food box from Food Share. The numbers from patients' pre and post-tests have shown some successes in controlling the disease

But was that enough?

When we dug deeper into the data, we discovered that while overall A1C levels for clinic patients with diabetes improved, this positive impact wasn't necessarily sustained over time. In addition, our Hispanic patients struggled with A1C levels above 9 -- much higher than other groups. These insights led to several breakthroughs.

After discovering these data points, we've been working to change the way we track the outcomes for diabetic patients while taking a closer look at health equity by ethnicity.

Since February, our new tracking metric is providing a more accurate picture of health for CMC patients while allowing us to determine whether they are making sustainable changes.

Our work doesn't stop there. This year we established our first patient advisory board to gather valuable feedback on how to support our patients in a more meaningful way. What we learned is that many of them need a more

collaborative support network outside of just clinical care to be successful. Which begs the question, how do we set up our patients for success in encouraging their families and friends to also adopt a healthier lifestyle? We are closing the knowledge gap to help our patients and their families to create a sustainable plan to both control their diabetes and lead a healthy life.

Our goal is for 85% of our patients with diabetes to see improvement in at least one clinical Over the years at CMC, we've had many successes indicator by December 2021, and we're so close to reaching this goal.

> This report showcases all of this important work. You'll see our key performance indicators and hear inspiring stories from several of our patients. We've also included some lessons learned so if you or someone you know is struggling with diabetes, you can share the resources.

> When you support CMC it not only impacts our patients but also their families in their journey to better health. Every donation helps us to establish a healthier Kershaw County today and for generations to come. A monthly gift to CMC will ensure those in our community struggling with this chronic condition have both the resources and support they need throughout the year.

> Join us in creating sustainable healthy change in our community. Your donations help us to help our patients. Now read on and see how you, as well as our patients, can lead healthy lives, even with

Go forward and do good,

susan Withousei

Susan Witkowski, CEO Community Medical Clinic of Kershaw County

The CMC Logic Model

From February 1, 2021 to December 31, 2021, our clinic will decrease the number of uncontrolled patients with diabetes by half.

Priorities

- Connect needed resources with an equity lens
- Provide medications and vaccines
- Increase understanding of healthy eating
- Communicate through technology
- Conduct meaningful visits

Our Resources

- Medical Director
- Nurse Practitioners
- Community Care Coordinators
- Community Health Workers
- Community Navigator •
- **Medical Assistants**
- Volunteers
- Nurses
- Spanish Translators

- Certified Diabetic Educators
- Specialists (oral health, chiropractic and pain management)
- Development Director
- Administration
- **Board of Directors**

Our Activities

Equity Lens

- Convene organizations addressing food insecurity
- Identify patient-specific food gaps
- Provide access to needed resources

Medications and Vaccines

- Provide medication resources
- Medication management
- Immunize patients for pneumovax, Tdap, and shingles

Knowledge of Healthy Eating

- Teach the skills (portions, hypoglycemic index) through a medical provider
- Encourage lifestyle change
- Show patients where to get food

Patient Engagement

- Patient Advisory Group
- Communication initiated by provider (text messages, phone calls, virtual visits, diabetes circuit training)
- Communication initiated by patient (text messages)

Meaningful Visits

- Communicate spectrum of services
- Adjust format based on patient need
- Conduct baseline measurements and distribute diabetes education packet

Our Outcomes

Long-Term Outcomes

- Increased quality of life
- Increased life expectancy

Intermediate Outcomes

- Patients managing their diabetes effectively
- Patients managing their medications effectively
- Lifestyle Changes (nutrition, exercise, mental health)

Short-term Outcomes

- Reduction in key clinical indicators (A1C, blood pressure)
- Reduction in no-shows
- Increase in patient and provider satisfaction
- Increase in the % of meaningful visits
- Achievement of goals set by patients









"You are not just a patient to them; you are somebody they really care about. They treat you like a family member, and I appreciate that. When I came in, I was broken. But when I left, I was feeling all right. I've cried in that office and the clinic staff made sure I didn't leave without getting the help that I needed."

MEET RHONDA:

cmcofkc.org/Rhonda





Complications related to diabetes

Credit: American Diabetes Association www.diabetes.org/diabetes/complications

Diabetes increases your risk for many serious health problems. The good news? With the correct treatment and recommended lifestyle changes, many people with diabetes are able to prevent or delay the onset of complications.

Complications include:

DKA (ketoacidosis) & ketones

Know the warning signs of DKA and check urine for ketones, especially when you're sick.

Neuropathy

Nerve damage from diabetes is called diabetic neuropathy. About half of all people with diabetes have some form of nerve damage.

Skin complications

Stay alert for symptoms of skin infections and other skin disorders common in people with diabetes.

Eye complications

Keep your risk of glaucoma, cataracts and other eye problems low with regular checkups.

Foot complications

Learn about neuropathy (which can cause numbness in the feet) as well as other complications.

Kidney disease (nephropathy)

Keep your diabetes and blood pressure under control to lower the chance of getting kidney disease.

Cardiovascular disease (CVD)

People with diabetes are twice as likely to have heart disease or a stroke than people without diabetes. Learn how to stay heart healthy to reduce your risk.

High blood pressure

High blood pressure—also called hypertension—raises your risk for heart attack, stroke, eye problems and kidney disease.

Stroke

Maintain target levels for blood glucose, blood pressure and cholesterol to reduce your risk of stroke.





WHAT IS DIABETES?

From the CDC

According to the Centers for Disease Control and Prevention, diabetes is a chronic (long-lasting) health condition that affects how your body turns food into energy. About 34.2 million Americans—just over 1 in 10—have diabetes. 88 million American adults—approximately 1 in 3—have pre-diabetes.

If you have diabetes, your body either doesn't make enough insulin or can't use the insulin it makes as well as it should. When there isn't enough insulin or cells stop responding to insulin, too much blood sugar stays in your bloodstream. Over time, that can cause serious health problems, such as heart disease, vision loss, and kidney disease.

Year	SC	Kershaw
2016-2018	10.1%	18.8%
2015-2017	9.4%	14.9%
2014-2016	9.3%	14.2%
Diabetes		
	SC	Kershaw
Diabetes Year 2018-2020		Kershaw 22.5%
Year	13.5%	

How CMC is making an Impact

11

Untreated, diabetes is a debilitating condition that causes more deaths than breast cancer and AIDS combined. The situation is even more dire when you consider its associated health care price tag of \$327 billion.

At CMC, we are passionate about health and wellness in Kershaw County. That's why we go to great lengths to help our patients with diabetes manage their symptoms so they can maximize their quality of life.

Here in Kershaw County, close to a quarter of CMC patients were living with diabetes as of June of 2021 and overall amount of people affected by diabetes is rising in Kershaw County -- not just with our patients.

The number of people living with diabetes is staggering: 34 million Americans have diabetes and another 88 million have pre-

diabetes. Untreated, diabetes is a debilitating condition that causes more deaths than breast cancer and AIDS combined. The situation is even more dire when you consider its associated health care price tag of \$327 billion.

We know that this battle is complicated, and we can't tackle it alone.

See the next page to learn more about how we've applied Human-Centered Design to find solutions together.





Co-Creating a Solution together

To truly understand the needs of our patients, we invited them to join our first patient advisory board.

Then, we worked collaboratively to implement a solution that allowed us to provide the most effective support to our patients.

Based on this collaboration, we cocreated a program that includes several layers of support -- not just clinical care -- which includes a community health worker, a lifestyle coach, and a patient's personal support network.

By listening to our patients, we can now offer them the right tools, such a text message check ins and custom food recommendations based on their lifestyle and circumstances.

Diabetes is a disease complicated by socio-economic factors. For example, many of our patients come to us needing assistance in many aspects of daily living, including nutrition, literacy, transportation, and housing in addition to facing health problems. That's why it's important for us to meet our patients where they are to best help them achieve long-term health.

With diabetes reaching epidemic proportions and affecting millions of lives, we can't sit idly as the this crisis grows. As a community health organization, we are determined to make a real and lasting impact, increasing both the quality and length of life for our patients while being a part of the change to help all residents of Kershaw County lead long and healthy lives.



How we track the effectiveness of our work

We conduct a well-being survey with patients to assess changes in their quality of life.

We followed up with them to offer support in making healthy lifestyle choices.

We track hospital and emergency room visits of CMC patients and determine cost-savings through one-on-one support.

We continuously monitor our patients' A1C, blood pressure and cholesterol levels in addition to progress on the achievement of individual patient goals.

We consistently use quality improvement methods to improve the effectiveness of the intervention.



CMC Partnership with FoodShare

CMC nurse practitioners can write a "Veggie Rx" prescription that can then be redeemed for a FoodShare veggie box at no cost to the patient.

Traditionally there are two ways to access a FoodShare veggie box:

- Pay for it with cash
- Use SNAP

We offer a third option.

We are part of a pilot Veggie Rx program through the University of South Carolina that sees food as medicine.

This is FoodShare's way of partnering with the medical community to better impact our health across the state.

FoodShare Kershaw County is operated by the United Way of Kershaw County, to provide fresh vegetables to our patients.



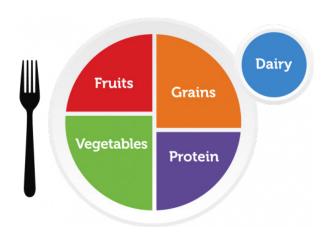
Did you know?

CMC's bilingual staff worked directly with FoodShare to translate all their applications into Spanish to allow the service to be more accessible.

Healthy Eating Tips

For a long time, the food model most of us thought of for a healthy diet was the food guide pyramid—building up a healthy diet from the bottom up with healthy grains, fruits, and vegetables. The model was around for many years, but the US Department of Agriculture (USDA) replaced it in 2010 with a new model—a simple meal plan, called MyPlate.

Learn more at myplate.gov.





Diabetic Circuit Training



What is the class?

Our nurse practitioners teach Diabetic Circuit Training classes are for clinic patients diagnosed with diabetes. It includes valuable information regarding diet, menu planning and health care instructions.



Going back to the data

While overall A1C levels for clinic patients with diabetes have shown improvement over the years, we began looking at the data from a new angle to improve outcomes. **We discovered two things:**

- 1) The pre and post test metrics that the clinic used for patients who participated in a 1-hour diabetes education class provided standard data to track a patient's progress. However, it DID NOT account for tracking a sustainable lifestyle change for the patient.
- **2)** When the data for the Kershaw County Hispanic population was examined on its own, the numbers told a bleak story. Most of the Hispanic population struggled with A1C levels above 9 -- much higher than other groups in the community.

What is A1C?

A1C is a relatively simple blood test that can tell a lot about a person's health. The test results give a picture of average blood sugar level over the past two to three months. The higher the levels, the greater risk of developing diabetes complications. The goal for most adults with diabetes is an A1C that is less than 7%.

A new way to track success

8.6

Pre-A1C

Average A1C of CMC patients who began diabetic circuit training during or after February 2021

7.6

Post-A1C

Average A1C of CMC patients three months after completing diabetic circuit training

CMC was conducting a pre-test and a post-test immediately after the Diabetic Circuit Training. Since February 2021, we have implemented a new metric to track the outcomes. Now, the post test is conducted three months after the class to learn what information actually stuck with the patient. While the scores may be lower now, it provides a more accurate picture of health for CMC patients and allows us to determine if CMC patients are making sustainable changes, as well as how the program can be tweaked for better outcomes. In addition, efforts are being made to have a translator available for Diabetic Circuit Training to provide more resources to the Hispanic population.







Non-scale victories



What is a non-scale victory?

A positive change not related to how much you weigh.

Diabetes impacts ALL parts of your body.

Non-scale victories are health improvements that result from small life changes. They may go unnoticed if you're only focused on the scale as a measure of your success.

By definition, a nonscale victory is a goal or accomplishment from weight loss that has nothing to do with the number on the scale. Unfortunately, most people obsess about their exact weight and lose sight of positive changes to their everyday lives.

After treating hundreds of patients at CMC, here are the most common NSV's we see at the clinic.

Reducing medications- This is one of the main reasons

to pursue significant weight loss. Medication can be both expensive and for some people, cause unwanted side effects.

Getting on the floor- Or perhaps getting up from the floor. This is much easier with weight loss and is rewarding when our patients are better able to play with their kids or grandkids on the floor.

Clothing size changes-

Although expensive, a wardrobe change is often needed. People celebrate no longer shopping in the plussize section or fitting into clothes they haven't worn in several years.

Snoring improvement or elimination-Losing 10% of your body weight can improve snoring and improve sleep.

Running or jogging- It is extremely difficult to run if overweight for several reasons. The stress on weight-bearing joints such as the hips, knees, and ankles makes it almost impossible to run. With health improvements, several of our patients have transitioned from walking to being able to run slowly as part of their exercise.

Increased energy- Fatigue and daytime sluggishness can improve drastically once your health improves.

Never forget that success cannot be solely measured by a scale. Shifting attention to non-scale victories and improvement in the ease of activities of daily living can be just as or even more rewarding than the numbers on the scale.

dent

CMC Success Stories

James came to CMC as a newly-diagnosed, insulin-dependent diabetic who ended up in the ER because he couldn't stay awake and was having problems seeing. Reeling from his diagnosis, the 50-year-old from Camden was overwhelmed. As a self-employed and uninsured handyman, he didn't have a doctor and didn't know where to go for help when he got sick. His symptoms



affected his ability to provide for himself.

He had an appointment at the clinic for primary care within one week of being discharged from the hospital. At the time, his A1C was 13.9% and he was in bad shape. CMC nurses equipped him with a glucometer and strips and taught him how to use it himself. He also went over a new diet plan with our nurse practitioner and connected with vision care.

Less than a year later, his A1C is 5.9% and he has not had an inpatient hospitalization since October of 2020!

The first day James came to CMC, he kept saying "I can't believe this and I don't know what to do." Our nurses walked him through finger sticks and the team took extra time to get him acclimated because he was "scared to death" after not seeing a doctor for years.

Today, James doesn't know if he would still be alive had he not connected with CMC. His life is changed and he feels better every day after being treated. He has returned to work and feels "like himself again."

Harvey is a 55-yearold from Camden who was referred to CMC through Access Kershaw. In February of 2020, he walked to Access Kershaw's office looking for a primary care doctor to help with some health issues. He



was connected to the clinic to help him manage his diabetes, which he had been diagnosed with a while back.

CMC's nurse practitioner was able to do telephone visits with Harvey to help him stay safe during COVID while getting the care he needed. We also provided him with a glucometer and strips for him to test is blood sugar at home.

In February of 2020, his A1C was 9.9%. By August of this year, his A1C was brought down to 6.5%. Getting access to medication and primary care helped him stay out of the hospital, saving tens of thousands of dollars in medical expenses.

"I'm so blessed to have received the help here," Harvey said. "I cannot thank y'all enough. If I wasn't connected with CMC I don't know where I would be today. I'm so thankful for how I'm treated as a patient and as a person when I'm here."

Have a new diabetes diagnosis?

The good news is that with medication, weight loss, healthy eating and being active this chronic disease can be controlled. However, making these lifestyle changes can be overwhelming and difficult for even the most dedicated patients.

A diabetes diagnosis is NOT a death sentence. With small incremental changes, we're here to reassure you that it is possible to reclaim your life!

Medicine can be the key to managing your type 2 diabetes. Work with your doctor to see what medicines can help you keep your blood sugar in your target range. Some people take both pills and insulin or insulin by itself. If you're starting new medicines, ask your doctor, pharmacist or diabetes educator the following questions:

What to ask your provider

- How many pills do I take?
- How often should I take them, and when?
- Should I take my medicine on an empty stomach or with food?
- What if I forget to take my medicine and remember later?
- What side effects could I have?
- What should I do if I have side effects?
- Will my diabetes medicine cause a problem with any of my other medicines?

Where to find more resources

The American Diabetes Association https://www.diabetes.org/

























Better **Health** through Better **Partnerships**

Creating sustainable healthy change in Kershaw County



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