

STONES ACROSS THE *water*

I ALONE CANNOT CHANGE THE WORLD, BUT  
I CAN CAST A STONE ACROSS THE WATERS  
TO CREATE MANY RIPPLES.





Commonly attributed to Mother Teresa, these words remind us that a small ripple, created by a singular event like casting a stone, can have wide and distant effects.

Diabetes Free SC (DFSC) is working to create a ripple effect across the Palmetto State in the fight to end diabetes. While we are not the first or only one to cast a stone, we are generating new energy and already producing positive effects through collaboration and alignment with those who share our vision.

Our impact is already being felt by expectant moms whose A1C levels were brought under control for a healthier pregnancy and delivery. By men and women who are filling “prescriptions” for fresh foods and vegetables in concert with traditional medications like insulin, statins or blood pressure meds. And by schoolteachers learning how to create and deliver programs to help their students become more physically active and teach them healthy habits, creating ripple effects that will last to adulthood.

# ADVANCING HEALTH EQUITY

The COVID-19 pandemic has shed light on the glaring health inequities facing people of color in our nation and in South Carolina. It is not the only health crisis, however, that affects people of color at a disproportionately and alarmingly higher rate.

The prevalence of diabetes is higher in Black South Carolinians than it is in white South Carolinians. More than 16 percent of Black residents are affected by the disease compared to about 11 percent of white residents. Not only is diabetes more prevalent in Black communities in South Carolina, it is also more deadly. Information from the South Carolina Department of Health and Environmental Control (DHEC) shows the mortality rate among Black residents with diabetes is more than twice as high as it is among white residents with diabetes.

The racial inequities in the presence and severity of diabetes are largely explained by inequities in social determinants of health, such as access to affordable, comprehensive health care; healthy foods; stable

housing; jobs that pay a livable wage; and a safe environment for physical activity. Communities of color in South Carolina have been marginalized in all these areas. Addressing these inequities is key to defeating diabetes.

DFSC is committed to advancing health equity for communities of color in our state. There is much work to be done to tackle the systemic issues at the root of the health inequities that affect the lives and health of many South Carolinians.

In every component of our work, we are committed to thinking, planning and acting in a way that intentionally fights racial inequities. We are steadfast in addressing the social determinants of health that result in an enormous burden of diabetes for communities of color across South Carolina.



# STRATEGIC INITIATIVES

At DFSC, our efforts are aimed in three strategic directions that guide all our work. By defining these directions, we can engage with and support targeted programs with potential for statewide scale. Taking a “long view” of the diabetes epidemic, our work has a major focus on early interventions to prevent diabetes and to prevent its complications, always incorporating efforts to mitigate inequities.

Our strategic directions are as follows:



## **STRATEGIC DIRECTION 1: IMPROVING PREGNANCY OUTCOMES AND THE HEALTH OF WOMEN WITH, OR AT RISK FOR, DIABETES**

### **Management of Maternal (MOMs) Diabetes Program**

For a developing baby, the first nine months of life in the womb are critically important, laying a foundation for lifelong health. Diabetes in pregnancy places both mother and baby at risk, not only during the pregnancy and at childbirth but throughout life. Accepted standards of care for a pregnant woman with diabetes require a team-based, multidisciplinary approach. At present in South Carolina, adverse outcomes of pregnancy by any measure, including maternal and infant mortality, are three to four times more frequent among Black women than among white women. Overall, South Carolina ranks 47th in the nation for maternal mortality, and unfortunately, maternal mortality in the U.S. is the highest among developed nations.

To address these problems and with funding from the BlueCross® BlueShield® of South Carolina Foundation, two multidisciplinary prenatal programs have been funded, each for three years, to provide comprehensive, coordinated, proactive care to pregnant women who have diabetes:

- Prisma Health® Upstate (Greenville)
- Prisma Health Midlands and Carolina Diabetes and Kidney Center (Columbia and Sumter)

Both programs emphasize innovative integrated care, convenience for patients and the use of new technologies to achieve high-quality care. At each location, the staff includes maternal-fetal medicine specialists, endocrinologists, nutritionists, diabetes educators, patient navigators, retinal screening specialists, biostatistical specialists, telemedicine specialists and a behavioral health specialist. Team-based care enhances communication among providers and, by consolidating visits, enhances feasibility for patients. Each program is supported by clinical staff and administrators from participating clinical departments. Telemedicine services extend reach to rural and under-resourced communities.

### **Gabrielle, a MOMs Program “Graduate”**

Twenty-six-year-old Gabrielle learned from a home test kit that she was pregnant with her first child. She followed up with blood work at the lab. When she received a phone call with those results, the first thing she was told — before even confirming her pregnancy — was that her A1C was too high. Gabrielle admits she did not know at that time that an A1C test reflects average blood sugar levels over the previous few weeks.

Gabrielle was referred to an endocrinologist — and soon found herself in the first class offered by the “MOMs in Control” diabetes program in Sumter. Gabrielle remembers being terrified during one of the presentations, imagining everything that could possibly go wrong with her pregnancy. She was quickly reassured. She was started on insulin flex pens right away. Additional treatment would be determined once the type of diabetes she had was confirmed.

On January 7, less than four months from her due date of May 1 — Gabrielle found out she had Type 1 diabetes. With this definitive diagnosis, she was put on continuous glucose monitoring and then an insulin pump. This led to big improvements. With the help of a diabetes educator

at the clinic, she learned how to calculate her meds and monitor her progress. Her A1C went from 7.4 percent down to 5.4 percent. Best of all, Gabrielle delivered a healthy 5-pound, 4-ounce baby boy she named Maxwell! Mother and baby are both doing well.

The encouragement she received at “MOMs in Control” has fueled her excitement to learn more about her diabetes. Gabrielle says she loved learning about diabetes and was “obsessed” with monitoring her numbers! She said the “MOMs in Control” program was definitely beneficial to her and Maxwell’s health, and she is grateful for the program!

#### **The Ripple Effect: Results to Date**

- Seventy-five percent of moms with Type 1 diabetes and 87 percent of moms with Type 2 diabetes have had an A1C less than 6 percent at delivery, compared to the baseline estimate of 20 – 50 percent.





## Collaborating With Perinatal Community Health Workers To Address Diabetes

South Carolina has a strong and growing network of community health workers serving women while they are pregnant and postpartum. These efforts are critical in addressing South Carolina's dangerously inequitable birth outcomes. Community health workers (CHWs) seek to improve outcomes among women and their families by providing meaningful relationships, support and education. Organizations doing this work in our state have long and successful histories of community engagement, positive effects on birth outcomes and collaborative efforts to improve the quality of care for women in our state.

As DFSC considered opportunities to improve birth outcomes for women with diabetes, it made natural sense to support deployment of more community health workers. By doing this, we can build a workforce that addresses critical needs, provides training and resources specific to diabetes prevention and care, and creates stronger interdisciplinary clinical care.



DFSC collaborates with the Center for Community Health Alignment to provide support to:

- Family Solutions at the South Carolina Office of Rural Health.
- Accountable Communities at Prisma Health Upstate.
- Midlands Healthy Start at Prisma Health Midlands.

### The Ripple Effect: Results to Date

Partnerships have been developed, and we begin 2022 by training and deploying new community health workers to help serve women with or at risk for diabetes before, during and after pregnancy.

## STRATEGIC DIRECTION 2: REDUCING LIFELONG RISK OF DIABETES IN CHILDREN

### School Wellness

Until about 1980, Type 2 diabetes was almost never seen in people under 40 years of age. Since then, however, an increasing number of younger people have been affected.

The increase has been driven, in large part, by changes in environments and norms related to diet and exercise. Overwhelming evidence shows the earlier the intervention to address the problem, the better. The healthier the environment and lifestyle during childhood and youth, the lower the risk of diabetes in adulthood.

Children spend more time at school than anywhere else other than home. Schools, therefore, provide a unique opportunity for partnerships focused on the child's social, psychological, physical and intellectual development. To make sure children across South Carolina can experience healthier environments, DFSC is working with two complementary organizations that focus on school-based wellness:

- Alliance for a Healthier Generation
- Medical University of South Carolina Boeing Center for Children's Wellness

Both organizations work with public school districts across the state. Funding from the BlueCross BlueShield of South Carolina Foundation in support of this DFSC initiative has provided each with three years of funding to address policy, systems and environmental challenges.

The overall goal is to increase opportunities for physical activity and healthy eating, thus reducing the risk for diabetes and other chronic diseases in adulthood. Uniform outcome metrics have been defined, and data will be collected and analyzed to monitor progress.

### The Ripple Effect: Results to Date

Eighteen school districts serving 167,666 children have joined the programs.



"Wellness has always been a priority at Battery Creek, as we love to 'sharpen our saws.' This initiative gave us the focus, structure and framework to help support these ongoing efforts to ensure wellness in body, mind and spirit for all Battery Creek Community Members."

Denise Lessard, Principal at Battery Creek High School





## STRATEGIC DIRECTION 3: PREVENTING DIABETES AND ITS COMPLICATIONS IN ADULTS

### FoodShare SC

Food insecurity is associated with an increased risk for diabetes. For those with diabetes, it also impairs ability to practice self-management and healthy behaviors. In fact, research shows diabetes risk is 50 percent higher in households with food insecurity compared to those without. Adults experiencing food insecurity are two to three times more likely to have diabetes than those who are not, even controlling for other factors, such as income, employment status and lifestyle factors. People with food insecurity often cannot afford necessary medications and health care.

DFSC is addressing nutrition insecurity and nutritional quality by providing five years of support to FoodShare SC with funding from the BlueCross BlueShield of South Carolina Foundation.

FoodShare SC is expanding South Carolinians' access to fresh fruits and vegetables through a produce box distribution program. FoodShare hubs are now operative in 19 counties, up from seven prior to DFSC support.

FoodShare SC hubs form a network across the state increasing access to fresh produce, especially for South Carolinians who participate in the Supplemental Nutrition Assistance Program (SNAP). People purchasing a food box with SNAP can receive matching funds through South Carolina's Healthy Bucks program. An estimated 54 percent of South Carolinians are income-eligible for SNAP. DFSC also supports FoodShare's efforts to pilot a produce prescription program. Branded as "Veggie Rx," this program aims to provide fresh fruits and vegetables to patients with diabetes, as prescribed by their care team.

#### The Ripple Effect: Results to Date

- Nineteen counties currently have active FoodShare SC hubs, up from seven when the initiative first started.
- January — August, 55,511 food boxes have been distributed compared to 31,560 in the same time period in 2020.
- Veggie Rx has served more than 100 patients.





“Working as a CHW on the Diabetes Free SC project is an exciting opportunity for me to help my community. I have always had the desire to give back and try to find ways to do so. Working on this project will help me complete my mission. I am also able to learn and practice different techniques to help my 9-year-old son with his Type 1 diabetes. It makes our bond even stronger.”

Melanie Fajardo, CHW

## Community Health Workers

Community health workers are trusted members of the community who empower their peers through education and their connections to health and social resources. CHWs are nonclinical members of patient care teams. Their support of individuals with or at risk for diabetes is key, enabling access to essential components of health care, and educating patients about diabetes, its complications, and the steps necessary to preserve and optimize health. Over a three-year period beginning in 2021, DFSC will support the work of CHWs in a diabetes-focused care model in communities across the state. Five federally qualified health centers (FQHCs) are participating in the initiative with the aim of improving diabetes prevention and management:

- Affinity Health Center (York County)
- Beaufort-Jasper-Hampton Comprehensive Health Services (Beaufort, Jasper and Hampton counties)
- CareSouth Carolina Inc. (Dillon and Lee counties)
- HopeHealth Inc. (Florence County)
- Tandem Health SC (Sumter County)

This project is being funded by the BlueCross BlueShield of South Carolina Foundation and coordinated by the Center for Community Health Alignment, which also provides ongoing training and technical assistance to each FQHC.

### The Ripple Effect: Results to Date

We are building capacity by investing in the growth of a CHW workforce in FQHCs and by providing specific training and resources related to diabetes prevention and management.

We have developed a strong evaluation framework across all participating partners that sets the foundation for meaningful analysis of clinical outcomes, cost effectiveness, quality of life measures and improvements in the provision of care to people with diabetes.

## SOUTH CAROLINA SURGICAL QUALITY COLLABORATIVE DIABETES INITIATIVE

The South Carolina Surgical Quality Collaborative Diabetes Initiative (SCSQC Diabetes Initiative) aims to optimize the health of people who have diabetes, or who are at risk for diabetes, in advance of planned surgery. Four hospitals have committed to the initiative, which was funded in the summer of 2021:

- McLeod Medical Center, Florence
- Medical University Hospital, Charleston
- Piedmont Medical Center, Rock Hill
- Regional Medical Center, Orangeburg

Specialist teams at each location will provide a “pre-habilitation” service, optimizing blood sugars and metabolic health and addressing any complications of diabetes prior to admission. In this way, the risk of problems during and after surgery will be minimized. The pre-habilitation team will evaluate each patient’s needs, home and social support systems, and psychological well-being and will develop a future management plan to ensure that improvements in health are sustained over time.

While diabetes is commonly known to lead to complications such as heart disease, strokes, amputations, kidney

damage and blindness, less well known are risks associated with surgery. Not only are people with diabetes more likely to need surgery, they often have multiple underlying diagnoses that can negatively impact surgical outcomes and recovery. Our new program will improve surgical outcomes in the short term and the patient’s health in the long term.

The SCSQC Diabetes Initiative aims to improve surgical outcomes for people with diabetes and prediabetes and, in the process, increase each individual’s understanding of diabetes to improve long-term health and quality of life.

Working in different contexts and with different partners, these programs will improve health outcomes and quality of life for people living with diabetes. By emphasizing innovation and person-centered care, we are strengthening our efforts to align action against diabetes and engage South Carolinians to live healthier lives.

### The Ripple Effect: Results to Date

We are collaborating with leadership from the Surgical Quality Collaborative to plan evaluation and implementation frameworks with the goal to implement the program in hospitals in 2022.





## SCREENING FOR DIABETES IN DENTAL CLINICS

While the known prevalence of prediabetes and diabetes is concerning enough, another major problem is the number of people who are unaware they have an issue with their blood sugar. An estimated 127,000 people in South Carolina have diabetes but are unaware. Hundreds of thousands of others are unaware of having prediabetes. Asymptomatic diabetes or prediabetes can do “silent damage” to the body over decades, leading to dangerous complications and poor health outcomes. That is why increased access to screening for diabetes is so critical. Early detection enables people to receive appropriate care and resources to manage their condition and live a healthy life.

DFSC is working with Affinity Health Center to promote access to diabetes screening. Affinity is an FQHC in Rock Hill providing high-quality, comprehensive care and support services to patients; these services include an onsite dental clinic. The dental clinic and medical clinic work together to ensure care is coordinated seamlessly for patients. Affinity is taking this coordination one step further by providing A1C tests for their adult patients in the dental clinic.

It is a convenient way to screen individuals and identify their risk for prediabetes or diabetes. By conducting these tests in the dental clinic, people who have elevated blood glucose but are unaware can be identified and referred for appropriate care.

### **The Ripple Effect: Results to Date**

We have developed a partnership with Affinity Health Center to pilot this approach. We will continue to learn from the effort and plan to extend the model to other FQHC dental clinics in 2022.

# ALIGNING FOR ACTION

DFSC believes in building relationships that align efforts behind a common goal. We are proud to participate in and support collective goals.

DFSC has formed working partnerships with groups and programs across South Carolina that align with and support our strategic directions. We thank our partners for their commitment and dedication and for working with us to address the challenges of diabetes in our state.



- Core for Applied Research and Evaluation
- Harvard Center for Health Law and Policy Innovation
- South Carolina Birth Outcomes Initiative — Access and Care Coordination Work Group
- South Carolina Hunger Benefits Coalition









“The intentional establishment of partnerships has been the hallmark of Diabetes Free SC since the initiative began. Collaborating with South Carolina organizations that are focused on improving health and well being and advancing health equity ensures that we are all working together to leverage resources and avoid duplication of efforts.”

Noreen O'Donnell  
Program Director  
Diabetes Free SC

## South Carolina Institute of Medicine and Public Health (SCIMPH)

To win the fight against diabetes in South Carolina, we must work to address social determinants of health and find opportunities to engage with and inform partners at all levels. One of these partners is SCIMPH, a nonpartisan, nonprofit organization working to inform policy and to improve health and health care delivery.

In 2021, at a meeting of its Health Policy Fellows Program, SCIMPH chose to emphasize social determinants of health. One initiative will provide education and resources to members of the General Assembly concerning issues related to health and health care in South Carolina.

Given the major burden diabetes places on health and economic outcomes in our state and its intersections with so many social determinants of health, DFSC was invited to outline its priorities and initiatives. In collaboration with BlueCross BlueShield of South Carolina's Government Affairs division, DFSC Program Director Noreen O'Donnell

made a presentation to the Health Policy Fellows on the statewide impact of diabetes, how diabetes is influenced by social determinants of health, and how DFSC and its partners can address these challenges.

### ■ Publications

### ■ Presentations:

- SCIMPH
- Chronic Disease Symposium
- South Carolina Office of Rural Health
- South Carolina Alliance for Health, Physical Education, Recreation and Dance
- BCBS Inservice
- Alliance for a Healthier South Carolina
- Healthy Palmetto Leadership Council
- Empower 2021: A Midlands Healthy Start Event
- 2021 Diabetes Fall Symposium for Primary Health Care Professionals

IN MATTERS OF STYLE, SWIM WITH THE CURRENT.  
IN MATTERS OF PRINCIPLE, STAND LIKE A ROCK.

Thomas Jefferson





DFSC is creating change driven by collaboration. We need others to join us, sharing best practices and promising programs. Alignment is crucial if we are to scale smartly, avoid inefficiencies and redundancy, or worse, fail in the face of such an enormous challenge.

Yet, we come back to what started it all, our vision to win the fight against diabetes. This is not a lofty dream. It is not an unattainable goal. We've only begun, and we believe that the ripple effects of our work can lead to waves of change across South Carolina, reducing the burden of diabetes on individuals and their families, and removing inequities.



diabetes*free*sc

BlueCross BlueShield of South Carolina and the BlueCross BlueShield of South Carolina Foundation  
are independent licensees of the Blue Cross Blue Shield Association.

214104-11-2021