



Carolina Diabetes
& Kidney Center

MOMs in Control: Multispecialty Pregnancy Diabetes Care in Rural SC

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PRISMA
HEALTH®

Traditional Diabetes Care in Pregnancy

- Obstetrician
- Maternal Fetal Medicine
- Endocrinology
- Separate visits, little cross-communication



Obstacles with Traditional Care

- Multiple appointments
- Time away from work
- Travel from rural areas to urban areas
- Direct and indirect costs



Scope of the problem

- 7-10% of pregnancies complicated any type of DM
- 86% of cases are GDM
- Type 2 DM incidence climbing
- Greatest RF's (age, obesity) increasing significantly
- Rural south rich in RF (AA, Hispanic, obese)



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Objectives

- Who we are
- Our goals
- Patients we serve
- Services Provided

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MOMs in Control

- A collaborative partnership between Carolina Diabetes & Kidney Center and Prisma Health
- Part of a larger BlueCross initiative in collaboration with the BlueCross Foundation



MOMs in Control:

Team-based management of maternal diabetes

Providers

- Dr. Berry Campbell
- Dr. Lilavivat
- Makala Smith, MS, RDN, CDCES, BC-ADM

Nurse Navigator

- Julia Kimsey, MSN, RNC-OB

Sonographer

- Delaine Barefoot

- Medical Assistants, front desk staff, and leadership from CDKC & Maternal Fetal Medicine at 2 Medical Park in Columbia



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MOMs in Control

- Joint clinic 2nd and 4th Wednesday
- DM education 1st and 3rd Wednesday
- Follow-up visits as often as weekly & as needed
- MFM telehealth visits 1st and 3rd Wednesday
- Frequent telehealth calls



Short-term Goals

- Safe pregnancy and healthy baby
 - Improve glycemic control (A1C & Time in Range)
 - Decrease fetal, infant, and delivery complications
 - macrosomia
 - neonatal hypoglycemia
 - fetal abnormalities
 - fetal demise
 - FGR
 - Birth injuries
 - NICU admissions
 - Cesarean sections
 - ?Preeclampsia?
 - Reduce unplanned maternal hospital admissions



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Long-term Goals

- Long term risks of GDM, diabetes, and other associated complications
- Increase participation of women with GDM in diabetes prevention program postpartum.
- Increase screenings for high-risk obstetric patients through in-clinic fundoscopic examination, depression screening, referral to mental health care, and increased patient surveillance with less patient burden.
- Increase establishment of postpartum primary care and continuation of endocrine specialty care in a resource poor population.



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Patient Population

- Pregestational T1DM
- Pregestational T2DM
- Newly diagnosed GDM
- Women at high-risk for developing DM

Other Study Goals

- Demonstrate enhanced outcomes with tight control
- Demonstrate enhanced compliance from joint approach in rural setting
- Demonstrate effect of CGM on patient buy-in, compliance, and control
- Compare follow-up rates after delivery compared with historic controls
- Encourage early pregnancy screening in HR patients



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High Risk for DM

HIGH RISK (meets one or more factors)

- Obesity (prepregnancy BMI ≥ 30 kg/m²)
- High-risk race/ethnicity (Hispanic/Latino, Native/Alaskan American, Asian American, Non-Hispanic Black, Pacific Islander)
- Chronic hypertension
- Insulin resistant (PCOS, metabolic syndrome)
- First-degree family member with DM
- History of GDM in the prior pregnancy
- History of macrosomia
- Hyperlipidemia/triglyceridemia
- History of cardiovascular disease
- Prediabetes, impaired fasting glucose, impaired glucose tolerance
- HIV on protease inhibitors
- Chronic steroid use
- History of bariatric surgery



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Glycemic Control

Glycemic Targets

Trimester	Fasting (mg/dL)	PP (mg/dL)	A1C (%)	CGM (%TIR)	CGM (% Below)
1 st	<90	<120 (1 hour)	<6.0	75%	<5%
2 nd	<90	<120 (1 hour)	<5.7	75%	<5%
3 rd	60-75	<120 (1 hour)	<5.0 w/o hypo	75%	<5%



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Services we provide

<ul style="list-style-type: none">• Maternal-Fetal Medicine Consult	<ul style="list-style-type: none">• Individualized follow-up diabetes and obstetric care
<ul style="list-style-type: none">• Endocrine Consult	<ul style="list-style-type: none">• Glucose meter instruction
<ul style="list-style-type: none">• Co-management of diabetes during pregnancy and postpartum by endocrine and MFM	<ul style="list-style-type: none">• Insulin injection instruction
<ul style="list-style-type: none">• Nutrition counseling by registered dietician	<ul style="list-style-type: none">• Insulin pump prescription and management
<ul style="list-style-type: none">• Group diabetes education by RD, CDE and endocrinologist (2-hour class)	<ul style="list-style-type: none">• Continuous blood glucose monitoring
<ul style="list-style-type: none">• MFM Ultrasounds	<ul style="list-style-type: none">• Remote patient monitoring
<ul style="list-style-type: none">• Peer to peer consults	<ul style="list-style-type: none">• Food Share SC Partner
<ul style="list-style-type: none">• Spanish interpreter services by phone	<ul style="list-style-type: none">• Care coordination and patient support by RN Navigator





MOMs in Control: Sumter

- First Joint Clinic: Sept 9, 2020
- 12 full joint clinic days to date
- 18 – avg follow-up visits per clinic day
- 11 – avg new patients per month
- <5% no-show rate

- 76 patients seen to-date (through April 8)
 - 55% AA
 - 34% Caucasian
 - 8% Hispanic
 - 18% type 2
 - 8% type 1
 - 74% GDM



- 58 MFM ultrasounds completed
- 14 GDM classes with 72% participation rate
- 7 IRIS exams completed (started mid-March)
 - 1 moderate case of retinopathy identified and referral to retina specialist made
- 50 boxes of fresh produce and fruit provided to patients



FoodShare SC

- Partnership increases access to fresh fruits and vegetables
- First box free
- Subsidized cost for subsequent orders to incentivize healthy eating habits



www.FoodShareSC.org



Helpful Tips for Referrals

At time of referral...

- Lancets, strips, and meter sent to patient's pharmacy
- Patient encouraged to check BG 6-7x daily: fasting, before meals, and 1 hour after meal
- Blood sugar and food logs given to patient, along with target goals



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When is the best time to make a referral?

ANYTIME after diagnosis but the earlier in gestation, the more useful for the patient and her pregnancy



Which patients do I refer?

- Pregestational DM, GDM, or high-risk for DM
- Patient noncompliance
- Transitioning on to pharmacotherapy
- You believe the patient can benefit from a different perspective and possibly approach

Future Study Direction

- Enhance DM care with focus on preconception consultation
- Increase clinic time with MFM using telehealth visits
- Expand/enhance care using community health worker
- Create similar clinic at Richland campus

Questions?



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