# **MOMs: Improved Glycemic Control and Diabetes Self-Management** for Underserved Pregnant Patients

Megan Schellinger<sup>1</sup>, Jessica Britt<sup>1</sup>, Hannah White<sup>1</sup>, Jessica Odom<sup>1</sup>, Courtney Cart<sup>1</sup>, Daniel Pasko<sup>1</sup>, Sharon Keiser<sup>1</sup>, Sandra Weber<sup>1</sup>, Michelle Stancil<sup>1</sup>, Pamela Schult<sup>1</sup>, Casey Fiocchi<sup>1</sup>, Kathryn Hunt<sup>1</sup>, Kathleen Fincher<sup>1</sup>, Alexis Kelly<sup>1</sup>, David Londono<sup>1</sup>, Linda Perez-Cano<sup>1</sup>, Dongxu Fu<sup>2</sup>, Misti Leyva<sup>2</sup>, Timothy Lyons<sup>2</sup> 1 – Prisma Health Upstate, Greenville SC; 2 – Diabetes Free SC, an initiative of Blue Cross Blue Shield of South Carolina Foundation, Columbia, SC

### Background

Upstate MOMs (Management of Maternal Diabetes) is one of three SC programs providing comprehensive team-based prenatal care for an underserved population with pregestational and gestational diabetes.



# **Objective**

To determine if the MOMs team model improves glycemic control for participants through access to diabetes education, technology and social determinants of health (SDOH) supports.

# **Methods**

- Evaluated hemoglobin A1C values and Time in Range (TIR) at patient level baseline through third trimester.
- Assessed patient experience through surveys.

## **Results** Table 1 Participants June 2020–December

	-						
2023	Total	Type 1	Type 2	GDM	Other <sup>^</sup>		
MOMs Characteristics, % (n)	639	9.7 (62)	33.5 (214)	48.4 (312)	8.0 (51)		
<b>Race</b> , % (n)							
Non-Hispanic Black	24.4 (156)	16.1 (10)	40.7 (87)	15.7 (49)	19.6 (10)		
Non-Hispanic White	29.6 (189)	66.1 (41)	19.2 (41)	31.1 (97)	19.6 (10)		
Hispanic	39.9 (255)	11.3 (7)	33.6 (72)	47.4 (148)	54.9 (28)		
Other	6.1 (39)	6.5 (4)	6.5 (14)	5.8 (18)	5.9 (18)		
Language, % (n)							
English	70.3 (449)	91.9 (57)	75.2 (161)	64.7 (202)	56.9 (29)		
Spanish	27.9 (178)	8.1 (5)	24.3 (52)	32.4 (101)	39.2 (20)		
Insurance status, % (n)							
Commercial	16.1 (103)	38.7 (24)	14.0 (30)	14.1 (44)	9.8 (5)		
Medicaid	49.8 (318)	46.8 (29)	55.1 (118)	47.1 (147)	47.1 (24)		
Emergency Medicaid	29.9 (191)	1.6 (1)	24.2 (52)	37.5 (117)	41.1 (21)		
Maternal age, mean (SD)	30.5 (6.3)	26.4 (5.7)	30.9 (6.6)	30.7 (6.0)	31.8 (5.9)		
BMI*, pre-pregnancy	34.0 (11.6)	27.9 (8.1)	37.0 (13.2)	33.0 (9.8)	36.4(12.3)		
Gestational age- enrollment*	21.3 (17.1)	11.6 (5.7)	13.4 (8.9)	29.1 (5.5)	15.6 (5.6)		

\* Median (QR); ^Other includes suspected pregestational, maturity-onset diabetes of the young (MODY), latent autoimmune diabetes in adults (LADA).

#### ∎ **%**<sup>100</sup> 90 Ш 80 70 ange, 60 50 40 **M** 2 30 Tim $\mathbf{O}$

**Figure 1 & 2**: Baseline is prior to MOMs enrollment. \*p < 0.05 <sup>+</sup>Due to GDM screening/diagnosis, A1Cs & TIR not available in 1st trimester. **^**Other includes suspected pregestational, maturity-onset diabetes of the young (MODY), latent autoimmune diabetes in adults (LADA). **Figure 2**: TIR at 63-140 mg/dL (3.5-7.8 mmol/L); \*p < 0.05; \*\*p < 0.01

# **Results (cont.)**

10

9

8

%

SE)

Π

Ч Р Г

#### Figure 1: Hemoglobin A1C by trimester and diabetes type compared to baseline



### Figure 2: Continuous glucose monitor (CGM) TIR by trimester and type compared to baseline



#### A2GDM<sup>+</sup> Type 1 Type 2 Other<sup>†</sup>^

Surveys - CGM Benefits & Burdens							
Strongly Agree/ Agree	CGM Benefits	Strongly Disagree/ Disagree	CGM Burdens				
88.1%	Helps me take better care of my diabetes	84.4%	Painful to wear				
88.3%	Makes me feel more secure	84.3%	Takes too much time				
87.9%	Helps take care low blood sugars	84.1%	Too hard to understand CGM information				

**N=201 participant surveys** completed at 32+ weeks pregnancy. CGM questions from Messer at al 2019. doi:10.1177/1932296819832909

# **Patient Experience**

95% satisfied/	te
very satisfied	
93% satisfied/	n
very satisfied	
91% agreed/	Μ
strongly agreed	

# Conclusions

- developed healthier lifestyles.

**Acknowledgements:** Funded by BlueCross BlueShield of SC Foundation to support the goals of Diabetes Free SC.





oundation is an independent licensee of e Blue Cross Blue Shield Association



eam approach for diabetes and prenatal care

nultiple providers & services at single visit

10Ms helped me develop healthier lifestyle

•T1 and T2 participants significantly improved glycemia throughout pregnancy per patient-level HbA1C data.

• T2 participants significantly improved TIR (63-140 mg/dL; 3.5-7.8 mmol/L) through pregnancy per patient-level data. • Participants had positive engagement in diabetes technology as seen in reported CGM benefits.

• Participants were satisfied with team model and

# diabetes *Tree*sc

**Poster contact: c**ourtney.cart@prismahealth.org