Technology Solutions for Remote OB Monitoring

Maternal Care Support in Rural Georgia



Maternity Care Deserts: The Why

Georgia Rural Counties

Rural Hospital Organization Assistance Act of 2017

August 2021

https://dch.georgia.gov/sorh

Countypopulation less than 50,000

120 Total Rural Counties

Designatedrural basedon military installation exclusion clause –§31-7-94.1(c)(2)

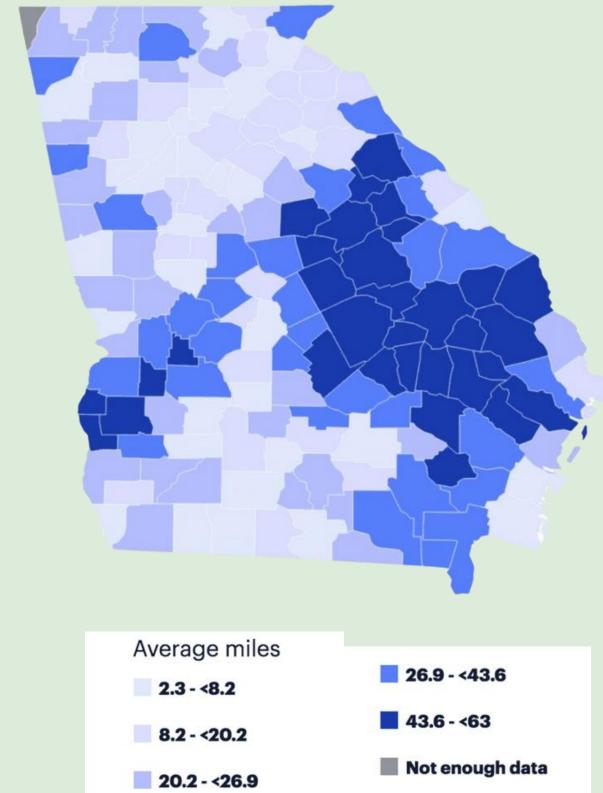
Access to Care by Rurality

3.2% of maternity care providers practice in rural counties in Georgia

No obstetric providers Fewer than 30 obstetric providers 30 - 60 obstetric providers **Greater than 60** obstetric providers

Distance to Delivering Hospital

15.8 percent of women had no birthing hospital within 30 minutes In rural Georgia, 61% of women live over 30 minutes from a birthing hospital



Why Maternal Care Support

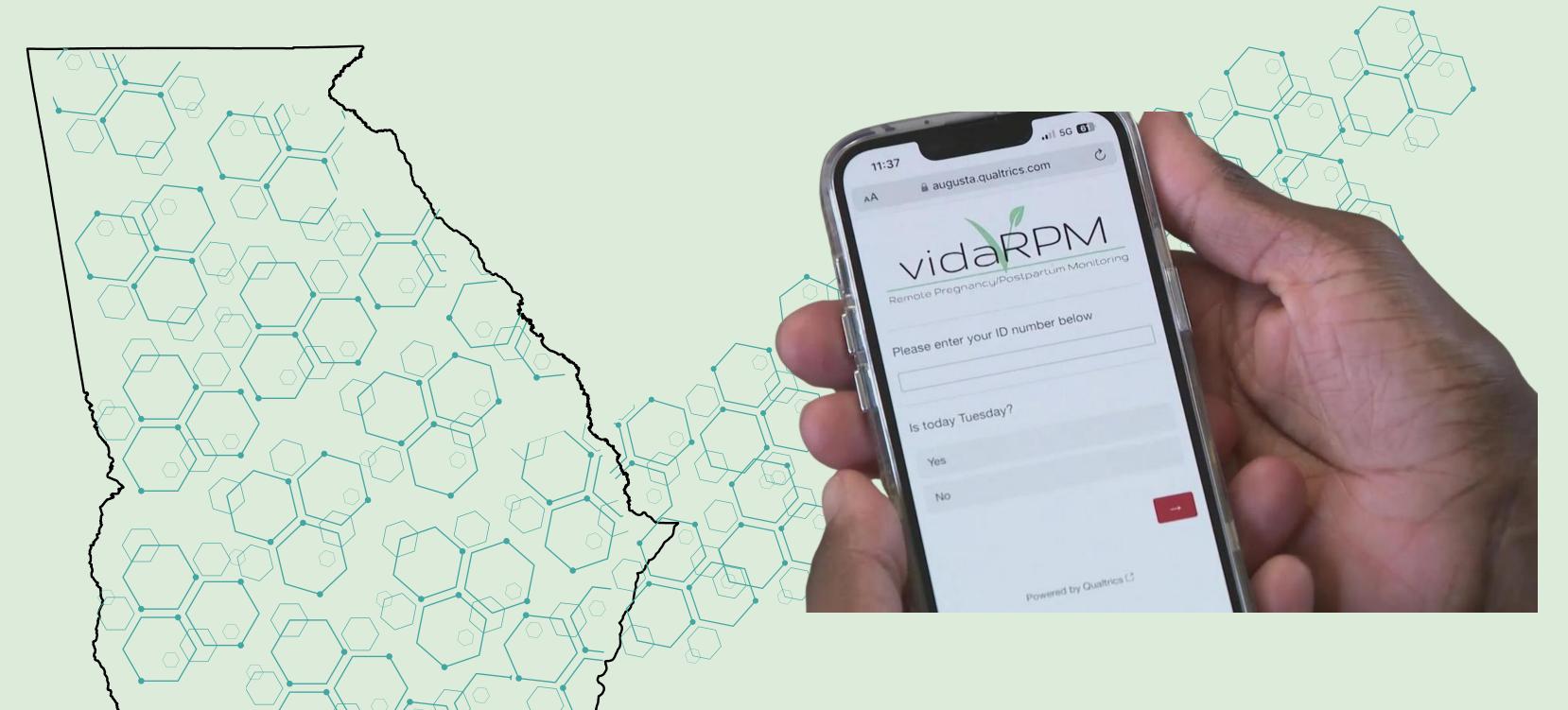
In Georgia & Beyond:

- 10% to 15% of maternal deaths are associated with preeclampsia and eclampsia
- Over 80 of the state's 159 counties have no obstetrical care
- 53% of pregnancy-related deaths happen up to one year after delivery
- Most women report not knowing about their blood pressure
- Mental health conditions account for 23% of pregnancy-related deaths
- GA Medicaid Extension
- vidaRPM



Access to Healthcare in Rural Georgia through technology

Remote Monitoring vs Remote Self-Monitoring







A recently published broadband availability map by the Georgia Department of Community Affairs shows that of the more than 507,000 homes and businesses lacking access to reliable broadband, nearly 70% of these locations are in rural parts of Georgia where residents must either travel to gain access to the high speed internet they need or use other sometimes slower and more unreliable service such as satellite internet.

this is why alternative solutions like self remote monitoring should be explored ...









vida Maternal Care Support



Care Coordination



Health Education



Self-RPM

Equipment Provision

- From pregnancy through first year of postpartum
- · Mothers equipped with:
 - Automatic upper arm blood pressure machine

8

PLAN

Vida

Maternal

Care Model

Provides remote monitoring,

care support and health

education during pregnancy &

postpartum

- Bathroom scale
- · Training on equipment usage

Risk Stratification

- Baseline risk stratification survey which includes:
 - Demographics
 - Health conditions prior & during pregnancy
 - Use of technology
 - Transportation usage
 - Social determinants of health

Care Plans

- · Based on risk assessment
- Individualized
- · Strengths & weaknesses
- · Determines needs for:
 - o Resources
 - Referrals
 - Education

Resources

- · Resource connections
- · Throughout entirety of program
- · Some of these include:
 - Food banks
 - Clothing
 - o Diapers, Car Seats, Bassinets
 - · Assistance with utilities/rent
 - Mothers connected with the

and an advantage fragmental and all

Referrals

- Direct Referrals = "Warm hand offs"
- These include:
 - o PCP & Dental
 - Cardio-Obstetrics
 - Diabetic Eye Clinic
 - Pediatrics
 - Tobacco Cessation
 - DPH programs

Remote Monitoring

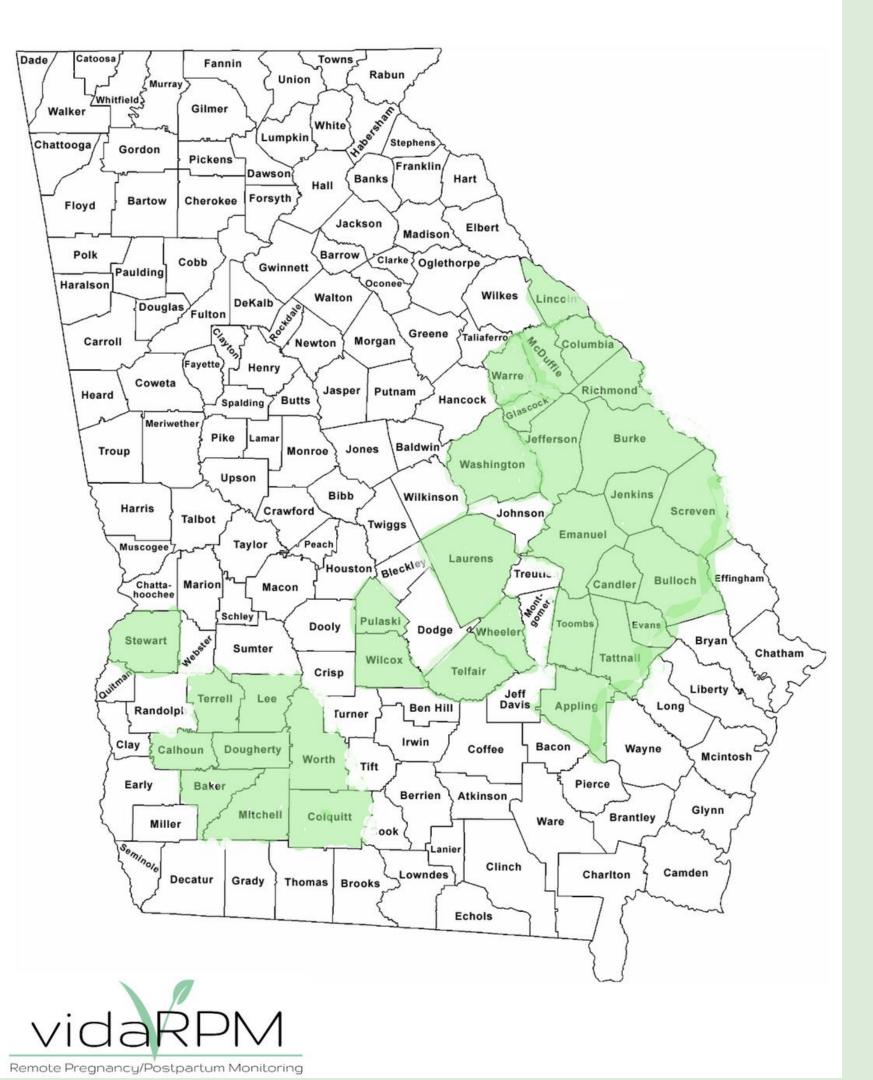
- Online logging
- Daily: blood pressure & pre-eclampsia questionnaire
- Weekly: weight and mood
- Prompted to retake if elevated
- Notifications to notify provider for elevated/high and/or symptoms
- Blood pressure logs created
- · Share log for appointments

Alerts & Check In's

- Follow up alerts for elevated/high blood pressures, symptoms and mood
- Check in's throughout program:
 - "Milestones" during pregnancy
 - Around delivery
 - Postpartum check in's
- Support groups

Education

- Health education manual
- Individual & group sessions:
 - Blood pressure
 - Healthy Lifestyle
 - Mental Health
 - Nutrition
- · Monthly newsletters & videos



Enrollment

26 rural counties

Total 345



2 & 3rd Trimester



Up to 6 months PP



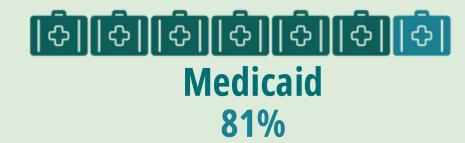
Race/Ethnicity
AA- 72% White- 22%
Hispanic/Latina-<1%
Asian-<1%



Age 18-25|39% 26-35|47% 36-45|13%



Distance to hospital 1+ hour- 18%



Risk Stratification Medical & SDOH







Tobacco use- 5%

Drug use- 9%

History of Pre-e- 10%

History of GDM- 4%

Heart Condition-2%

Depression- 15%

Anxiety- 16%

Average # of pregnancies-

3



Worry food will runout/wont last- 25%

Stressed making ends meet- 25%

Rent- 15%

Medical care- 5%

RX- **6%**

Insurance- 6%

Utilities- 17%

Childcare- 11%

Housing-15%

No internet access-8%

Rural vs. Non-Rural Participant Characteristics

	Rural	Non- Rural	p-value
Has a primary health care provider	76%	69%	
Had Previous pregnancy complications (+)	50%	29%	0.031
Previous Diagnosis			
Pre-eclampsia	7%	11%	
T1/T2 diabetes	10%	4%	
Gestational diabetes	7%	5%	
Heart Condition	5%	5%	
Pulmonary Hypertension	10%	5%	
Obesity (*)	24%	14%	0.09
Depression	24%	20%	
Anxiety	32%	23%	

Maternal Care Support

Care Team



Dr. Marlo Vernon Project Director



Jennifer Plueger Care Coordinator



Sarah Davenport
Nurse Educator



Marquetta Thomas
Patient Educator



Anne Clare Booker Nutritionist

- Nurse Education and Navigation (RN)
- Patient Educator (SW)
- Maternal Nutritionist
- Health Education Sessions
 - Virtual & Phone
 - Individual & Group
- Referrals
 - **Insurance**
- SDoH
- Healthcare
- Diabetic Eye Screenings
- Dental Care
- Cardio-OB Screeings

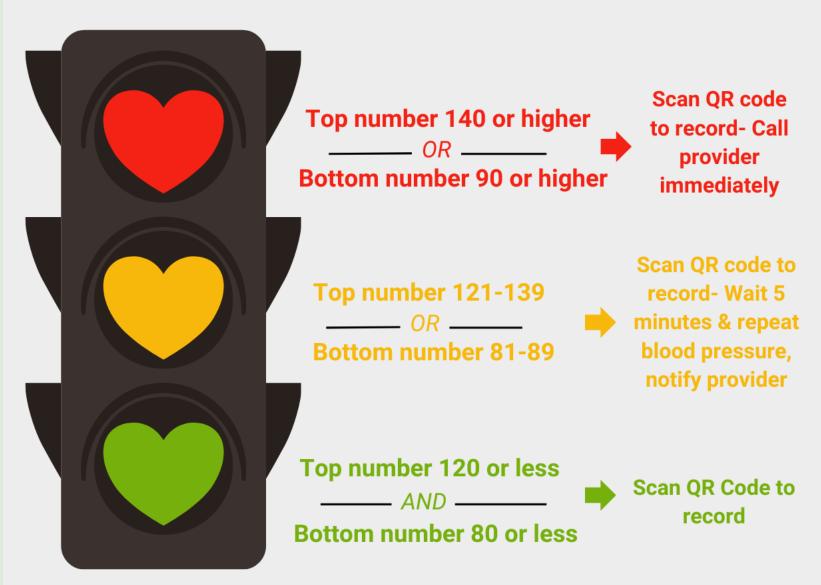


Moms KNOW Blood Pressure

Improved Self-Efficacy & Health Literacy through Remote Self-Monitoring

Scan QR Code to record blood pressure, weight & your mood!

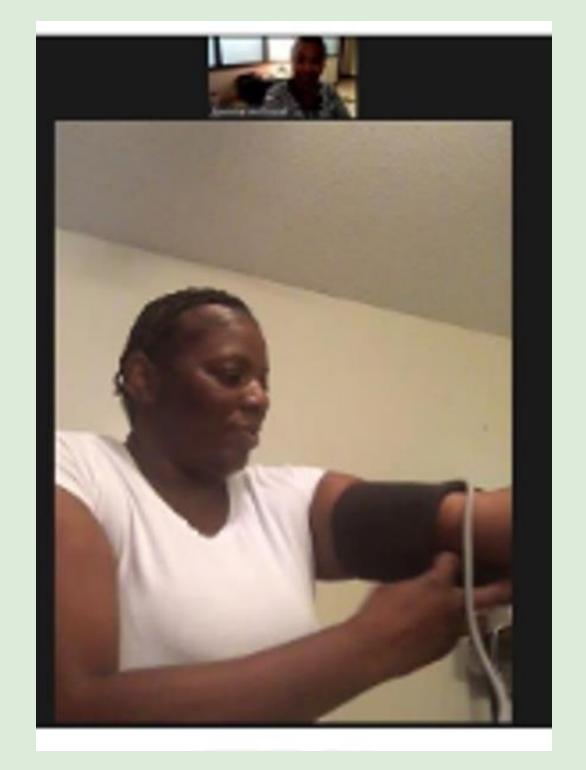






Symptoms to monitor for:

- Headaches
- Vision Changes
- Swelling
- Stomach pains
- Nausea & Vomiting











Gestational Diabetes Support

- Monitor
- Lancets
- Test Strips
- Toolkit- Education and Resource Connection
- One-on-one diabetes nutrition education support w/ Nutritionist



Health Education



Pregnancy | Postpartum

One-on-One & Group

- Blood Pressure
- Healthy Lifestyle
- Mental Health
- Nutrition

Let's Live HEALTHY Manual & Toolkits

Preparing for Delivery♥ Preparing for the Fourth Trimester♥ Diabetic Education♥ Breastfeeding♥ Baby Care/Milestones♥ Bereavement





Blood Pressure | Mood | Diabetes









Blood Pressure Alerts: 580 PHQ-2, score >3: 35

Recent Patient Reported Diagnosis



HTN	13	9%
GHTN	12	8%
Pre-E	23	15%
PP Pre-e	12	8%
DM 1/2	7	5%
GDM	8	5%
Cardiac Condition	4	3%
IOL	23	15%



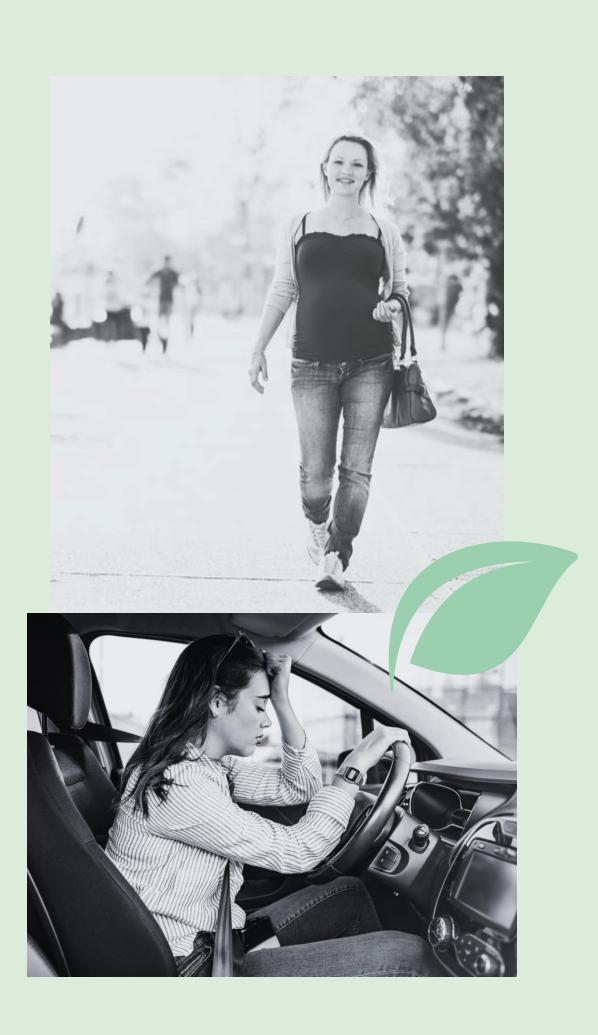
Recent Infant Outcomes

LBW- 18
Preterm-20
IUFD- 6

Gastroschisis- 2
Diaphragmatic hernia-1

Self Efficacy Responses at 6 weeks postpartum

	Not very	Somewhat	Confident
Question	confident	confident	Confident
If you had a high blood pressure, would you know what to do?	0.0%	9.6%	90.4%
Using the stoplight graphic, if a BP was in the yellow range, would you feel confident telling your care provider?	2.1%	10.6%	87.2%
Do you feel confident you can take your blood pressure?	0.0%	3.2%	96.8%
Using the stoplight graphic, if a BP was in the red range, would you know what to do next?	0.0%	4.3%	95.7%



Patient S

Patient S is a 18–25 y/o mother of 4 with history of CHTN and PreE in previous pregnancies. She was being seen in the clinic for a "discussion on her blood pressure log", but the patient came to the appointment without a log. With some more conversation, it was revealed that it was not that she was being non-compliant as she was labeled, but she had to walk to the CVS to check her blood pressure and with 4 kids at home that was hard to do often.

Patient A

Patient A is a 18-25 y/o AA mother of 6 month old. Diagnosed with PPHTN, unable to fill medication at pharmacy. Had been driving to Walmart several times a day to check her blood pressure.





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