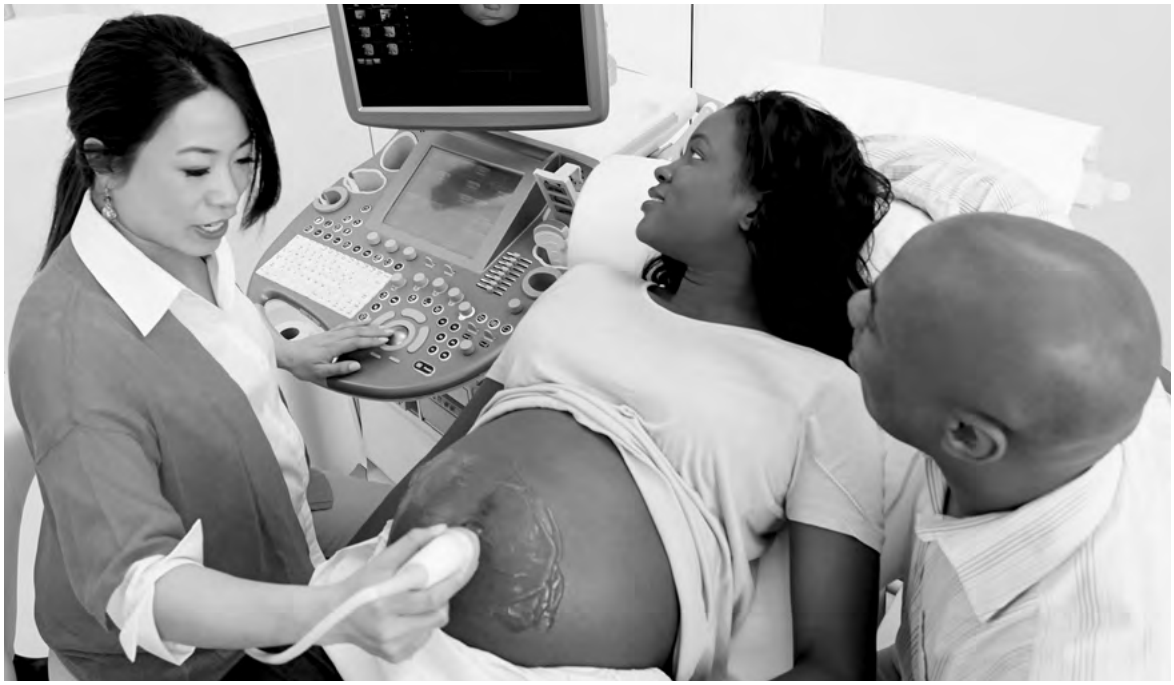
BIRTH EQUITY EDUCATION PROJECT

REIMAGINING PERINATAL CARE



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PREPARED AND PRESENTED BY:
MICHIGAN COUNCIL FOR MATERNAL AND CHILD HEALTH

Perinatal health refers to issues affecting women before (prenatal), during and after childbirth (postpartum).

INTRODUCTION

Perinatal healthcare is the care a woman receives before, during and after delivery.

Prenatal care is the widely used routine source of preventive care, pregnancy education, and support for expectant families in the United States, but the delivery of this care has remained largely unchanged since the 1930s. As a result, standard prenatal care delivery presents barriers to younger individuals, people of color, those living in poverty, individuals where English is their second language, and other marginalized groups (22). Currently, prenatal care focuses on medical interventions such as prenatal screening and managing chronic conditions, without consistent focus on mental health and social determinants of health. Women are generally recommended identical care regardless of risk or their individualized needs and preferences. This one size fits all model has failed to prevent adverse health outcomes such as preterm birth and maternal morbidity, particularly among racial-ethnic minority, low-income and rural women.

To be responsive to women and families, perinatal care must include strategies that address access to services, identification of risk, linkage to appropriate levels of care, adherence to and continuity of care, and efficient use of resources. Maximizing healthy outcomes requires identifying and addressing structural, financial and cultural barriers to care (2). In addition, support and education during this critical period empowers pregnant women and their families to actively engage in their health.

Successful perinatal healthcare delivery systems that provide comprehensive patient and family-centered approaches and deliver culturally and linguistically appropriate care increase the chances for equitable treatment and healthy outcomes.

REIMAGINING PERINATAL CARE

THE ISSUE

Trends in maternal and infant mortality in the U.S. demonstrate that the current model of perinatal care is not working for everyone.

The U.S. experiences higher maternity costs and serious racial disparities in birth outcomes (6), as well as unacceptably high rates of maternal and infant mortality compared to other high-income countries (1).

- Pregnancy-related mortality in the U.S. has risen from 7.2 deaths per 100,000 live births in 1987 to 17.3 deaths per 100,000 live births in 2017 (4). Michigan's pregnancy-related mortality rate was 17.5 from 2011-2016 (9).
- The racial and ethnic disparities in pregnancy-related mortality are staggering at 41.7 deaths (per 100,000) for non-Hispanic Black women, 28.3 deaths for non-Hispanic American Indian or Alaska Native compared to 13.4 deaths per 100,000 live births for non-Hispanic White women.
- Infant mortality rates in 2018 in the U.S. were 5.7 deaths per 1,000 live births.In Michigan the 2018 rate was 6.6 per 1,000 live births (8, 10).

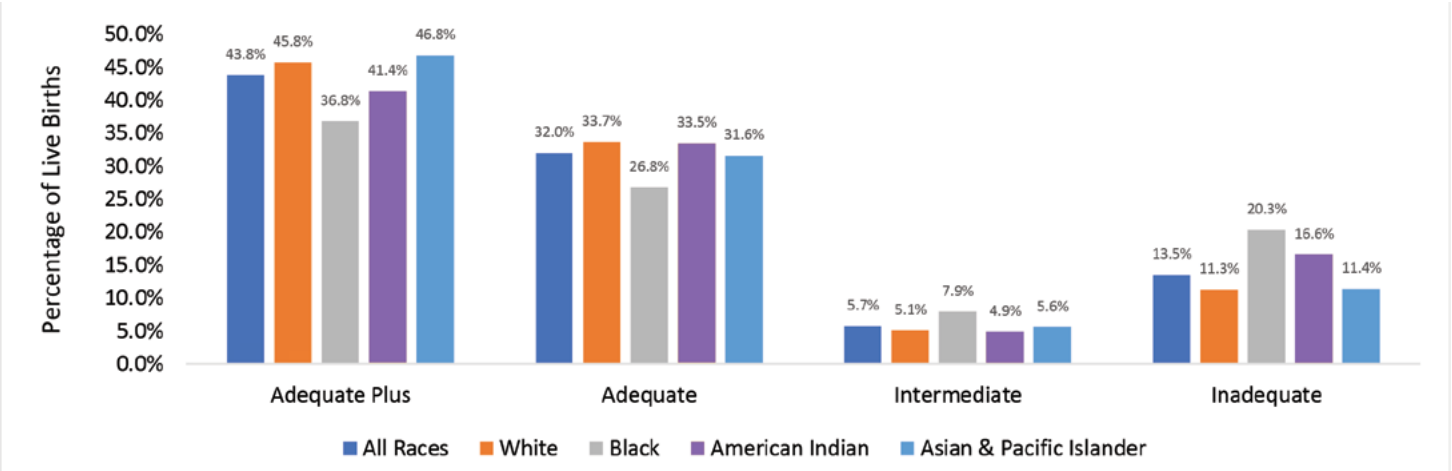
Data from the 2019 Michigan Department of Health and Human Services, Division for Vital Records and Health Statistics, Live Birth File, indicated:

- Black mothers had 1.8 times higher inadequate prenatal care as compared to White mothers.
- American Indian mothers had 1.5 times higher inadequate prenatal care as compared to White mothers.
- Asian and Pacific Islander mothers had similar inadequate prenatal care as compared to White mothers.

These perinatal health statistics have worsened or, at best, stayed the same during the last 10 years with gaps between White and Black women increasing. Leading causes of pregnancy-related death in Michigan are infection or sepsis, hemorrhage, and thrombotic pulmonary/other embolisms (4). Transitioning to a more patient centeredness approach for perinatal health delivery may impact the aforementioned health outcomes. The variability in racial and ethnic death rates are due to access and quality of care and prevalence of chronic disease, structural racism and implicit bias (5, 6). Stress caused by the experience of racism over the life course and discrimination during perinatal care drives high rates of adverse birth outcomes across all income groups, even in the absence of medical or social risk factors (14).

In recent years, hospitals and health systems have increasingly focused on implementing safety protocols to treat pregnancy and birth complications and promote birth equity, but these changes clearly have been insufficient to close gaps in maternal mortality between women of color and White women (6,9). Newer models of perinatal healthcare delievery that are more responsive to individual needs are an important step in promoting equity. Reimaginingperinatal care is imperative to improve birth outcomes and ensure optimal health for parents and infants.

Figure 1. Kotelchuck Index by Maternal Race, 2019



Note: percentages do not total to 100 percent because cases with missing Kotelchuck Index data are not included in these figures.

PROMISING CARE MODELS

Birth Detroit

Birth Detroit was created in response to the rising numbers of Black maternal mortality and morbidity and demonstrates how to improve birth equity by providing multiple options for women and families. Birth Detroit opened in fall of 2020 and currently offers two clinic days, alternative hours for care, provides safe and accessible childcare, partners with local home visiting providers, and connects to other local resources. Active engagement with the woman's partner and family is welcomed and encouraged.

Birth Detroit is currently providing perinatal care with plans to become a freestanding birth center with care provided in the midwifery and wellness model (19). The birth center follows a framework called the JJ Way®, a holistic maternity care model that was designed by midwife Jennie Joseph. Birth centers following this model provide high quality prenatal and postnatal care, birth services and support, and educational and social support services to women regardless of their choice of delivery site, practitioner or ability to pay (20).

Birth centers are an integrated part of the healthcare system and are guided by principles of prevention, sensitivity, safety, appropriate medical intervention and cost-effectiveness (18).

Recent research has demonstrated that women who receive care in birth centers have had positive health outcomes and that Black women had lower preterm birth rates and better low birth weight rate percentages (20).

CenteringPregnancy®

Another innovative approach to perinatal healthcare delivery is CenteringPregnancy®. CenteringPregnancy® is an evidence-based model of group healthcare that combines a health assessment with interactive learning and community building to support positive health behaviors, drive better health outcomes, reduce racial disparities, and address the complex social determinants of health. The model, which follows the American College of Obstetricians and Gynologists (ACOG) and American College of Nurse-Midwives (ACNM) practice guidelines for visit schedules and curriculum for routine prenatal care, brings women with similar due dates out of the exam room and into a group setting.

CenteringPregnancy® involves a shift in prenatal care and changes the workflow of a clinic. The model requires up-front investment in facilitator training and supplies and a dedicated comfortable space that is consistently available. Most initial start-up and some ongoing expenses have largely been grant-funded for many locations in Michigan, and enhanced payments for individual prenatal care have typically proven inadequate for long-term sustainability (16).

In CenteringPregnancy®, women learn from healthcare providers and one another in a safe and supportive community environment (15). Evidence shows CenteringPregnancy® positively impacts health outcomes and reduces racial

Table 1. Birth Outcomes for Michigan Medicaid and CenteringPregnancy®, 2016-2019

Birth Outcomes, Michigan Medicaid and CenteringPregnancy®, 2016-2019	Michigan Medicaid Population N = 186,502	Michigan Medicaid Population (Black) N = 57,962	CenteringPregnancy® Patients N = 533	CenteringPregnancy® Black patients N = 207
Preterm Birth (<37 weeks GA)	11.4%1	14.6%1	7.7%2	9.7%2
Low Birth Weight (≤2,499 g)	10.6%1	14.9%1	7.5%2	12.1%2
Breastfeeding Initiation*	78%3	75.1%3	78.3%2	69.8%2
NICU Admission	8.7%1	11.2%1	4.7%2	4.9%2

1 Michigan Department of Health and Human Services, Division for Vital Records and Health Statistics, Michigan Live Birth File, 2016-2019

2 Michigan data represents site reported data from a subset of CenteringPregnancy® practices, 533 patients across seven sites (accredited and non-accredited sites).

3 Michigan Department of Health and Human Services, Michigan Pregnancy Risk Assessment Monitoring Survey, 2016-2019

**These are slightly different questions between PRAMS and CenteringPregnancy®*

disparities in birth outcomes. Compared to traditional care, studies show CenteringPregnancy® lowers the risk of preterm birth including the disparity gap in preterm birth between Black and White women, increases breastfeeding rates, and improves both visit adherence patient satisfaction (15). Moreover, the model tackles provider burnout as providers report higher satisfaction and better connection with their patients in CenteringPregnancy® groups. Michigan's CenteringPregnancy® sites are reporting higher rates of healthy weight, full-term babies (Table 1).

"CenteringPregnancy® is an evidence-based model of group healthcare that combines a health assessment with interactive learning and community building to support positive health behaviors, drive better health outcomes, reduce racial disparities, and address the complex social determinants of health."

Examples of Statewide CenteringPregnancy® Implementation

Seven states have enhanced reimbursement for CenteringPregnancy® with South Carolina providing the greatest reimbursement rates. The state provided a $30 additional payment per visit up to $150 during the course of prenatal care, and at least one health plan provided an additional $30 per visit per patient up to $300 with an additional $175 bonus for each patient attending five or more group visits (17). Their results showed the investment was worthwhile. CenteringPregnancy® participation reduced the risk of premature birth by 36% with every premature birth prevented resulting in average cost savings of $22,667. CenteringPregnancy® also reduced the rate of low birthweight by 44%, saving an average of $29,627, and reduced the risk of a NICU stay by 28%, with average savings of $27,249. South Carolina estimated a savings of nearly $2.3 million after a state investment of $1.7 million solely on immediate medical care savings. The additional payments were not made contingent on the model achieving improved health outcomes but doing so could produce substantial additional revenue for providers (16).

Michigan Medicine: Prenatal Care Redesign and Stay Home, Stay Connected

Prior to the COVID-19 pandemic, researchers at the University of Michigan, Michigan Medicine, began thinking of prenatal care redesign. They completed a survey of women's prenatal care delivery preferences, and how to meet those needs while promoting health and wellness (3). They found women's preferences for prenatal and postpartum care delivery differed from the traditional number of visits and amount of contact between visits, and there was a greater

acceptability of remote monitoring and alternative models, including telemedicine and home visits (11). The majority of women indicated they desired fewer in person, in office prenatal visits and preferred contact with the care team between visits. Most women felt comfortable monitoring their weight, blood pressure, and fetal heart tones at home. Finally, it was indicated that women desired at least two postpartum visits, the first within three weeks after discharge, and not waiting until the typical singular six-week postpartum appointment (11).

Based on the survey results and the impending COVID-19 pandemic, maternity care providers at Michigan Medicine initiated a new prenatal care delivery model. The framework was designed to have four in-person visits with four virtual visits interspersed (13). Additionally, the Stay Home, Stay Connected program was launched. This provides small group sessions for patients of similar gestation age with a maternity care provider and a larger group session with behavioral health specialist that acts as a supplementary education and social support program. This innovative prenatal care model acknowledges that medical risk is dynamic and medical needs may change throughout the pregnancy.

The model focuses on utilizing a team of professionals that can be engaged based on the patient's needs and includes various screenings and management of services. Important components of prenatal care include monitoring maternal blood pressure and the baby's growth and development, which presented a challenge in the rapid deployment of the model. There is ongoing work with the payer community for coverage of home devices to assure patient safety.

Michigan Medicine, along with other OB/GYN providers, continue to adopt and adapt this model to continuously improve care delivery. For example, a recent adaptation allows patients to select in-person or virtual care, as well as their preferred methods of education and support, has been implemented. Utilizing telemedicine services while still prioritizing patient safety and access to care helps promote equitable healthcare delivery.

WHAT MAKES THESE PROGRAMS SUCCESSFUL?

These three models—Stay Home, Stay Connected, CenteringPregnancy® and Birth Detroit—offer new, modernized paradigms and options to provide more appropriate perinatal care with a focus on promoting birth equity and preventing poor maternal/infant outcomes. Although the models differ in scope and emphasis, they have three features in common that make them innovative as an alternative approach to the perinatal status quo.

✔ **Each model focuses on equity**

The models aim to increase access to high-quality healthcare that serves all women and families while acknowledging individual experiences and values. All three models help families navigate the existing health system and overcome obstacles to accessing care.

✔ **The programs provide support through patient and relationship centered care**

Birth Detroit focuses on employment of trusted community members, collaboration with community stakeholders and longer appointment times as central to its success. CenteringPregnancy® promotes connections between providers and peers through open group sessions. Michigan Medicine supports patient education and support through a combination of in-person and virtual visits, online education and virtual group sessions with a model built from patient feedback.

✔ **All programs empower families with education**

The innovative Michigan Medicine prenatal care model, as well as CenteringPregnancy® teaches mothers to take vital signs, manage health complications and provide information on early warning signs. Integral to Birth Detroit is building personal connections through authentic engagement that includes the family.

SUMMARY

Innovative perinatal healthcare delivery is essential for building trust and meeting women and families where they feel most comfortable. Successful care models must address racism and other drivers of inequity, demonstrate a willingness to embrace a full continuum of maternity care workforce, and maintain data collection that illuminates disparities to support birth equity.

Flexible payment models are necessary as the development of tailored prenatal care expands. Working with policymakers and payers to tailor the payment system to reward valuable care is imperative. Moreover, traditional fee-for-service payment models do not typically reward the added value that these programs can achieve. Aligning emerging value-based payment models that reward providers for better outcomes with group prenatal care is an opportunity to make group prenatal care financially sustainable. States and other payers are adopting a multitude of value-based payment strategies in an effort to control costs in their Medicaid programs, improve health outcomes in specific areas, and respond to federal priorities. Some states are using their contracts with Medicaid health plans to encourage shifting toward value-based payment.

There is ample opportunity to add additional perinatal healthcare delivery systems that are equitable and accessible to Michiganders. These three models provide evidence that there are more possibilities than the traditional perinatal medical model and they should be considered when promoting equitable birth outcomes.

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