OCTOBER 2021

TRANSFORMING HEALTHCARE IN MISSOURI PART V

Policies & Partnerships to Advance Pregnancy Outcomes

Center for Health Economics and Policy
INSTITUTE FOR PUBLIC HEALTH AT WASHINGTON UNIVERSITY

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EXECUTIVE SUMMARY

Maternal and infant health is a critical problem for Missouri and the rest of the United States. While many other health metrics have improved in the US in recent decades, outcomes for mothers and infants have worsened. Maternal mortality rates in Missouri and nationally have been rising in recent years; Missouri's rate (32.6 per 100,000 live births) exceeds the national average (20.7 per 100,000). Furthermore, a striking disparity exists, as Black women in Missouri are more than 3 times as likely as White women to die from pregnancy-related causes.

The Medicaid program has great potential to address these poor outcomes, given that over 38% of births in Missouri are covered by Medicaid. Moreover, Medicaid expansion is now in effect in Missouri, which will provide coverage to hundreds of thousands of new enrollees. Missouri Medicaid covers pregnancy and delivery for women up to 196% of the Federal Poverty Level (FPL) from their first pregnancy-related appointment until 60 days after birth. The FPL in 2021 is $17,420 for a family of two people. Prior to expansion, only women with incomes below 38% FPL would have had access to Medicaid coverage before and after their pregnancy. However, the new expansion will cover adults with incomes below 138% FPL continuously. This will substantially narrow, but not eliminate the group of new mothers who will remain covered for only 60 days after birth to those with incomes between 138% and 196% FPL. The mothers with incomes of 138% FPL and below should remain covered by Medicaid unless their income increases.

This meeting convened managed care organization representatives, clinicians, program leaders, advocates, and other stakeholders in Missouri pregnancy care. These attendees heard from presenters and panelists who shared information on models of pregnancy care that are known to be effective. Attendees discussed these models and other ideas of interest that may advance quality care for pregnant women in Missouri. This paper seeks to succinctly summarize those ideas and, where applicable, to describe the programs in Missouri that are successfully implementing them in some form. One key goal is to articulate the areas of concern across stakeholders within the present system and to document levels of agreement and support for specific solutions to those challenges.

The most frequently endorsed solutions are as follows:

- Support more comprehensive treatment for mental health and substance use disorders
- Extend postpartum coverage from 60 days to 1 year
- Include doulas, midwives, Community Health Workers, and nurses on care teams
- Reimburse for care delivered by interdisciplinary care teams
- Develop value-based reimbursement strategies
- Bundle payment for parts of the pregnancy and delivery rather than continuing to pay on a fee-for-service basis to allow flexibility in care
- Develop a shared community referral system to better connect and avoid duplicate programs for pregnant women
- Advance a hub model to refer patients more efficiently to address social determinants of health

INTRODUCTION

Format of the Event

In August 2021, the Center for Health Economics and Policy at Washington University's Institute for Public Health hosted **Transforming Healthcare in Missouri Part V: Policies & Partnerships to Advance Pregnancy Outcomes**, a virtual event intended to generate innovative ideas for improving maternal and infant healthcare in Missouri. The event was the fifth in the Transforming Healthcare in Missouri (THM) series of stakeholder events to generate policy dialogue and solutions. Participants were divided into small groups and tasked with discussing innovative ways of delivering and paying for pregnancy-related care, with an emphasis on Medicaid. Potential solutions fell in to the following three categories:

- Coverage and Reimbursement
- Care Delivery and Workforce
- Data and Analytics

The event convened a diverse group of individuals and organizations —providers, managed care leaders, urban and rural hospitals, FQHCs, community organizations, a health foundation, researchers, and policymakers—whose mission and work involves pregnancy, childbirth and the postpartum period. This paper summarizes the ideas generated.

During the session, stakeholders discussed ideas, innovations, and models that have been proven to strengthen coordination of care for pregnant women, reduce disparities in birth outcomes, and improve payment systems to effectively incentivize quality care. To provide background on the topic, attendees heard from Washington University's Dr. Ebony Boyce Carter, MD, MPH as well as from panelists from three states who presented their innovative models for maternal healthcare delivery and payment. The panelists discussed topics such as bundled payment models, freestanding birth centers, pregnancy medical homes, provider pregnancy management programs, and community care hubs for directing individuals to available services. These panelist contributions are highlighted in subsequent sections of this paper.

Participants were invited on the basis of their organizations' engagement with pregnant women covered by Missouri Medicaid and therefore formed a representative group of stakeholders with interest in advancing pregnancy outcomes in Missouri Medicaid. The goal of the program was to foster a sense of collaboration across these various stakeholder groups as they had the opportunity to discuss policies to advance pregnancy outcomes and identify areas of common ground and agreement around potential policy change. The policies and other innovations that garnered support from stakeholders are described below. We hope that the priorities identified at this convening can be considered for implementation to improve pregnancy outcomes in the near future.

Setting the Context: Current State of Maternal/Infant Health in Missouri and Nationally

Maternal mortality has increased every year since the 1990s in the United States, making the United States unique among developed countries.[1] In the St. Louis region alone, preterm delivery rates vary widely with north St. Louis City and St. Louis County experiencing the worst rates.

A women's place of residence plays a substantial role in determining pregnancy outcomes in the United States. **Large cities and rural areas** have the worst rates of maternal mortality. For White women, maternal mortality is worst in rural areas. For Black women and other women of color, maternal mortality is worst in metropolitan and micropolitan areas. [2] These differences are important to understand so that policy can precisely target those with the most need in a particular geography.

Missouri has particularly poor maternal and baby health outcomes. Overall **maternal mortality in Missouri** is substantially higher than the national average, and severe **racial disparities exist.** The rate for Black women in particular is about four times the national average, with 65 maternal deaths per 100,000 live births (see Figure 1). In addition, 82% of pregnancy-related deaths in Missouri were deemed preventable in 2018.[3] Mental health conditions were the leading cause of pregnancy-related deaths, accounting for 50% of deaths. Moreover, substance abuse contributed to 54% of deaths.

> *"As a high-risk obstetrician caring for predominately Black women in St. Louis, I can tell you that patients are terrified. Black patients will drive hours to see me as a Black physician. They are terrified that pregnancy—a time that should be filled with joy and promise—will bring personal peril and death for them or their baby. These statistics are well publicized in the popular press. Black patients are seeing and living the story behind these statistics every day and they are justifiably scared." - Ebony Boyce Carter, MD, MPH*

The **life course approach** to pregnancy helps to explain how these deaths are attributed to pregnancy after the process of birth has ended (see Figure 2). Women who are at heightened risk of adverse outcomes prior to becoming pregnant can have those risks exacerbated by their pregnancy. This leads them to experience conditions such as preeclampsia, gestational diabetes, and other difficulties during their pregnancy. Despite these individual issues seemingly resolving after pregnancy, these women leave pregnancy with significantly higher risk of developing further health issues in the years that follow. This life course approach suggests that policy should focus more attention and resources on the time periods before and after pregnancy in order to address pregnancy-related health disparities.

Nationally, Medicaid covers more births than any other insurer with 45% of births — and 66% of births to Black mothers. Therefore, **transforming Medicaid policy** has substantial potential to impact pregnancy outcomes, particularly for mothers who are most vulnerable to poor outcomes. However, pregnant women on Medicaid in Missouri are 4 times greater to die than those on private insurance.[1] The innovative ideas discussed below may be part of a solution that eliminates these disparities and leads Missouri to much improved pregnancy outcomes.

[1] GBD 2015 Maternal Mortality Collaborators. Global, regional, and national levels of maternal mortality, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016 Oct 8;388(10053):1775-1812.
[2] Luke AA, Huang K, Lindley KJ, Carter EB, Joynt Maddox KE. Severe Maternal Morbidity, Race, and Rurality: Trends Using the National Inpatient Sample, 2012-2017. J Womens Health (Larchmt). 2021 Jun;30(6):837-847.
[3] Missouri Department of Health and Senior Services. (2021). Missouri Pregnancy-Associated Mortality Review, 2018 Annual Report. Retrieved from: https://health.mo.gov/data/pamr/pdf/annual-report.pdf

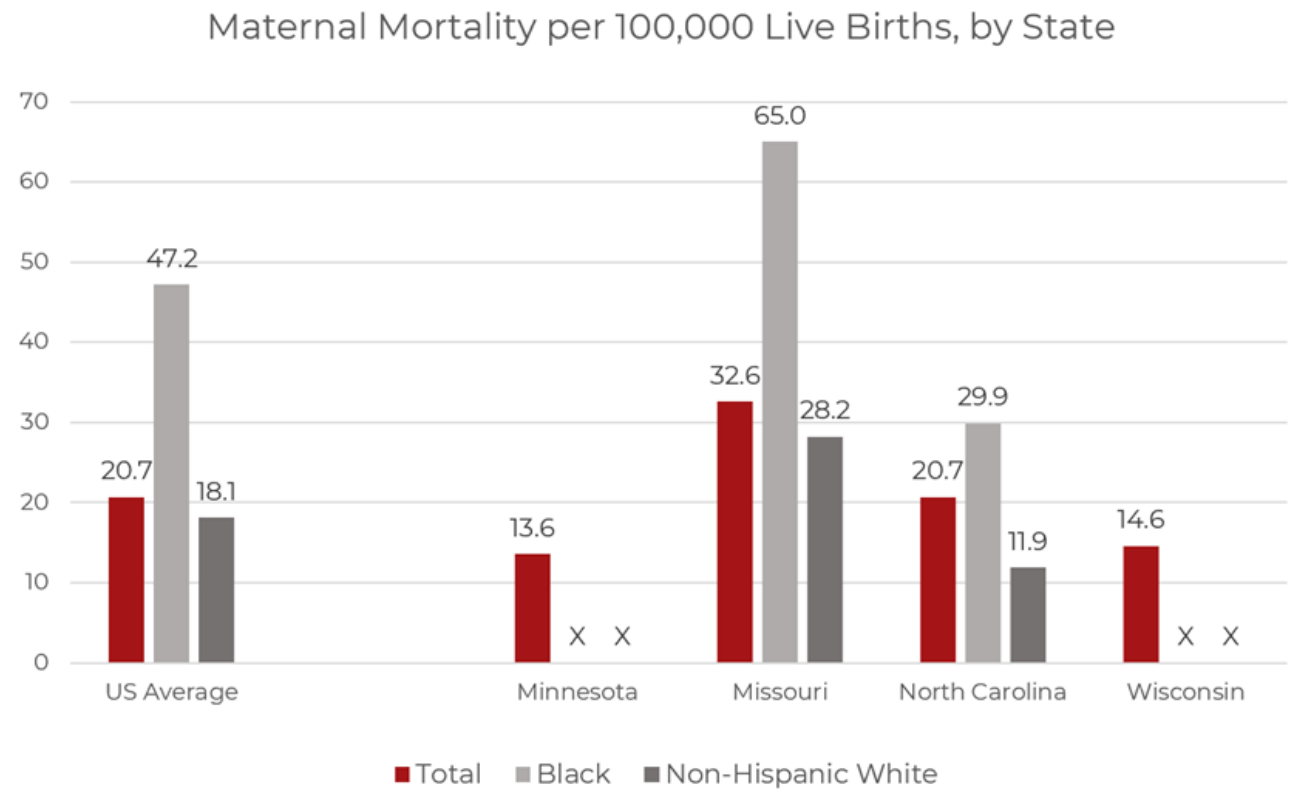


Figure 1: Maternal mortality per 100,000 live births by state. Missouri, North Carolina, Minnesota, and Wisconsin are included because those states were represented at the meeting by attendees and panelists. X's mark where data are unavailable.

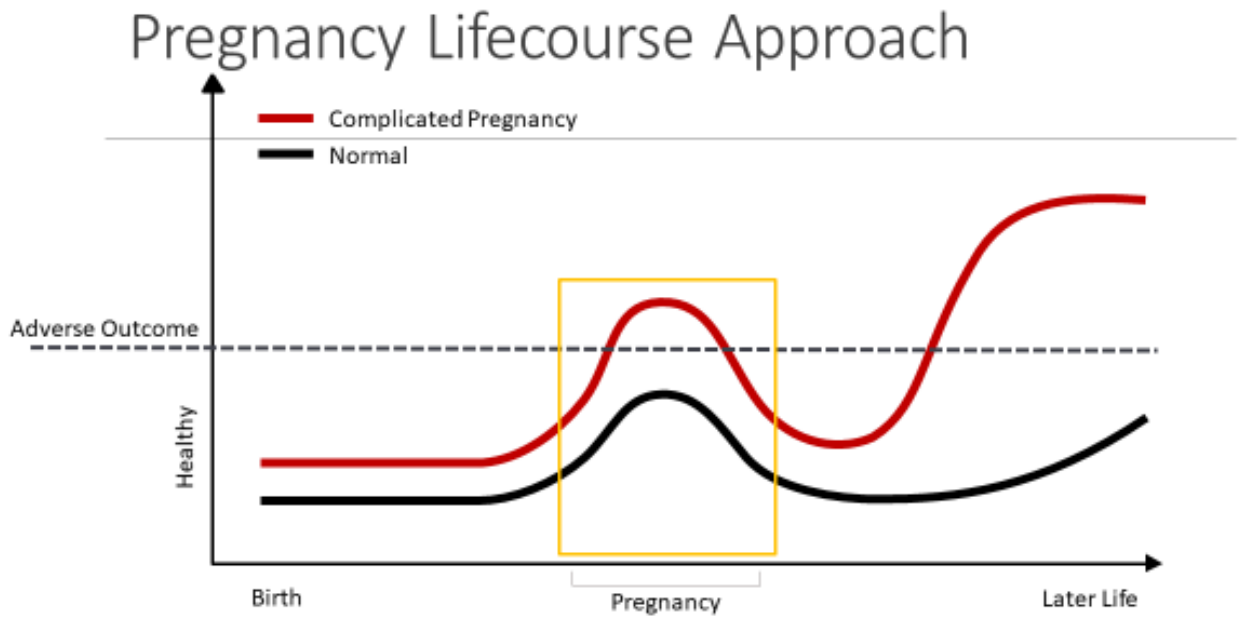


Figure 2: Women who are at heightened risk of adverse outcomes prior to becoming pregnant can have those risks exacerbated by their pregnancy. Courtesy of Ebony B. Carter, MD, MPH.

Panel Summary

Panelist: Steve Calvin, MD

Founder & Medical Director at The Minnesota Birth Center and the BIRTHBUNDLE®

Steve Calvin is board-certified in OB/GYN and Maternal-Fetal Medicine. He is the founder and medical director of the Minnesota Birth Center, and is a strong supporter of pregnancy care for low-risk mothers that is provided by nurse midwives in birth centers and hospitals. He also developed the BirthBundle® to pay for comprehensive pregnancy, birth and postpartum care for a single price. He is currently in year two of an appointed four-year term on the US HHS Secretary's Advisory Committee on Infant Mortality (SACIM)."

The BirthBundle. The Birth Bundle in Minnesota is an innovative model for paying for pregnancy, birth, and postpartum care. It is a coordinated model of clinical care in which a single price is paid for all care associated with the pregnancy, delivery, and the postpartum period.

Freestanding Birth Centers. At the Minnesota Birth Center, a team of Certified Nurse-Midwives, nurses and sonographers provide care, with a medical safety net built in for healthy mothers who experience complications during pregnancy and birth. The birth center has referral relationships with private physicians and the Allina Health network, as well as relationships with doulas and lactation consultants. There is evidence for the effectiveness of freestanding birth centers, most notably from the CMS StrongStart study, which showed that patients cared for by midwives in a birth center have improved a number of outcomes ranging from a lower incidence of pre-term birth, to fewer NICU admissions, to higher patient satisfaction. At the core of the midwifery-led model are the ideas of partnership and relationship-based care, and empowerment for the patient, both of which build trust with patients and lead to better outcomes.

A bundled payment is a logical payment structure coupled with a midwifery-led birth center model. A bundled payment affords the flexibility necessary to cover care delivered by doulas

Among the barriers to this program is the low reimbursement rate provided by Medicaid.

MINNESOTA BIRTH CENTER

BirthBundle

Panel Summary

Panelist: Kathryn Menard, MD, MPH

Medical Director, North Carolina's Pregnancy Medical

Dr. M. Kathryn Menard, MD, MPH is a Distinguished Professor of Obstetrics and Gynecology, Division of Maternal and Fetal Medicine the University of North Carolina's School of Medicine where she served for fourteen years as the Director of the division of Maternal Fetal Medicine, and Director of the Center for Maternal and Infant Health. In addition to her duties at UNC, she serves as Medical Director of the North Carolina's Pregnancy Medical Home through Community Care of North Carolina, a statewide program that supports Medicaid beneficiaries and their care providers in access to high quality maternity care. She also serves on NC's Maternal Mortality Review Committee and the Maternal Health Task Force.

Panelist: Kelly Crosbie, MSW, LCSW

Chief Quality Officer, North Carolina Medicaid

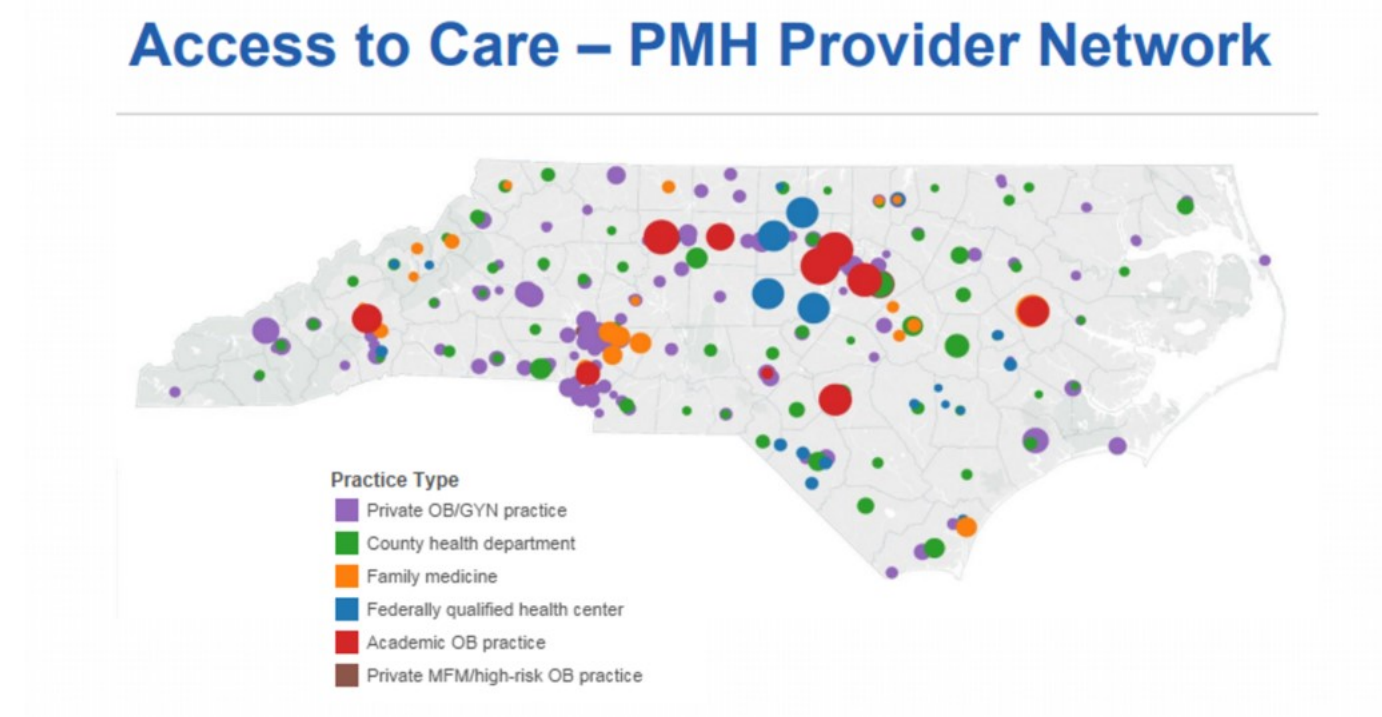
Kelly Crosbie is the Chief Quality Officer at the Division of Health Benefits (NC Medicaid). She is responsible for overseeing all Quality Programs aimed at improving health outcomes, promoting health equity, paying for value, and addressing medical and non-medical drivers of care. She also directs all Care Management and Population Health Delivery programs including Advanced Medical Homes (AMH), Complex/ Transitional Care Management, High-Risk Pregnancy Care Management, Care Management for At-Risk Children, Long-Term Services and Supports (LTSS) Care Management, and Health Homes for Individuals with Behavioral Health, Substance Use Disorders, and Intellectual and Developmental Disabilities.

Community Care
OF NORTH CAROLINA

North Carolina Pregnancy Medical Homes, now Pregnancy Management Program (PMP)

North Carolina's pregnancy medical homes and Pregnancy Management Program seek to make pregnancy services more accessible to women and improve care coordination and standardization among providers. PMP is not opt-in; all providers are enrolled with incentives to hit particular benchmarks set by the program through contracting terms and incentive payments for the completion of the terms. These terms include use of appropriate care pathways, completion of a standard risk-screening tool for initial visits, decreasing cesarean delivery, ensuring comprehensive post-partum visits, and decreasing the rate of pre-39-week gestation births. The program, which has been in operation since 2011, is now funded through a global fee-for-service model within the managed care program North Carolina rolled out in July 2021.

The local health department is the care management vendor for pregnant women. The risk screening tools are sent to the local health department, which then determines the risk level and appropriate care for pregnancies. Health plans will report out prenatal, low birth weight, and postpartum care data to the North Carolina Medicaid division of health benefits in order to measure quality care. Health plans are given targets for each of these metrics that are specific to rurality and racial disparity. North Carolina attributes its successes to both data sharing and meaningfully convening pregnancy providers to address issues and improve quality.



Panelist: Abby Mestad, MPH, CPH

Operations Manager for Great Rivers HUB, Wisconsin

Abby received her Bachelors of Public Health and Community Health Education from the University of Wisconsin- La Crosse and continued on to receive her Masters of Public Health from Saint Louis University in Missouri. She has been with Great Rivers HUB since May of 2019 and enjoys her role of building relationships with Community Health Workers, stakeholders, and community members to enhance the care and address systems change in the La Crosse area. Abby's strong passion for working with families and advocating for healthy minds, bodies, and spirits for people of all socioeconomic status has made her the professional she is today.

The Great Rivers Hub in Wisconsin is an implementation of the national Pathways model. This hub aims to connect individuals who leave the health system to the community-based resources and social services available to them, based on their need. The hub model allows individuals develop trust with the Great Rivers Hub for communicating their needs rather than expecting them to understand how to connect themselves with the various agencies that might be able to serve them. Great Rivers Hub partners with community health workers to make these connections accessible to individuals in the context of their community. For example, once Great Rivers Hub employed a Hmong community health worker, they saw a 300% increase in referrals from the Hmong community in La Crosse. Community health workers are assigned to families rather than individuals so that care coordination can be holistic for households.

Rather than fee-for-service, partner agencies are paid for outcomes. Great Rivers Hub does a comprehensive risk assessment every 30 days with individuals in their program. Using this assessment, the hub connects individuals to partner agencies to address the reported risks. After an agency takes on a client from Great Rivers Hub, they can expect to be paid after the next risk assessment takes place. Great Rivers Hub uses a braided funding model involving dollars from health plans/Medicaid, grants, health systems, and community investment to flow to the partner agencies through the hub.

GREAT RIVERS HUB

STAKEHOLDER IDEAS SYNTHESIZED

Attendees were provided background materials before the event. After panelist presentations, attendees were divided into breakout groups with a facilitator, provided with a grid of policy solutions, and asked to evaluate policy solutions based on feasibility, effectiveness, and cost. This section highlights the ideas from those breakout groups. The section below summarizes key takeaways which are enumerated in the tables that follow.

Most Frequently Endorsed Ideas Among Stakeholders

The most favored ideas from the event were brought up and reinforced by several stakeholders in the separate breakout groups. This section will highlight those ideas and give context for their support.

Support for mental health and substance use disorders for Missouri mothers is essential, as these are some of the leading causes of maternal mortality in the state. Missouri has been approved for a 1115 waiver to extend coverage of postpartum treatment of substance abuse disorders, which will provide limited benefits for substance use treatment.[1] However, many participants felt that comprehensive Medicaid coverage should **extend beyond the current timeframe of 60 days post-partum** to all pregnant women for 1 year because the adverse health outcomes contributing to maternal mortality often occur after the current 60-day coverage period. Although Missouri Medicaid expansion will allow mothers with incomes below 138% of the Federal Poverty Level (FPL) to stay enrolled in Medicaid indefinitely, this 60-day coverage period will apply to mothers whose incomes are between 138% and 196% FPL. (It should be noted that these women are typically eligible for low-cost coverage through the Health Insurance Marketplaces, but they may not be aware of this option; furthermore, it is not as comprehensive a form of coverage.)

Attendees from several sectors of pregnancy care supported **the integration of doulas, midwives, community health workers, and nurses** into care teams. Stakeholders shared the goal of identifying ways in which Missouri Medicaid could reimburse these integrated teams that include non-traditional personnel. Attendees were appreciative of the successes and challenges for integrated care teams in Minnesota shared by Dr. Steve Calvin. Also on the topic of reimbursement, attendees supported a value-based payment system and bundled payments for pregnancy and deliver. Value-based payment systems can support outcome-based payments. This payment system can incentivize providers using the model presented by the panelists from North Carolina, Dr. Kate Menard and Kelly Crosbie. Moreover, **bundled payments** can allow payment models to reflect time spans longer than the 9-month pregnancy and support flexibility in how care is delivered by interdisciplinary teams.

Lastly, attendees were in favor of applying the **hub model** presented by Abby Mestad from Wisconsin in the Missouri context. This hub model is used to refer patients to community-based services to address the social determinants of health. The hub relies upon integration with community health workers, who are the most capable of communicating information and connecting clients with the social services available in their cultural and geographical context. Further, the hub model works best alongside a bundled, value-based payment system that reimburses interdisciplinary care teams for positive outcomes achieved.

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[1] Examining the 12-Month Postpartum Medicaid Coverage Option for Missouri . Missouri Foundation for Health. September 2021. https://mffh.org/wp-content/uploads/2021/05/Postpartum-coverage.pdf

Coverage and Reimbursement

The following tables will outline the ideas that multiple breakout groups discussed. These sections will also highlight pertinent challenges that attendees discussed. Blank boxes represent spaces where attendees did not name challenges. Ideas that were not discussed across multiple breakout groups are listed in the appendix section of this report.

Table 1: Coverage and Reimbursement

Concept	Explanation	Challenges named
Reimburse for care delivered by APRNs, doulas, community health workers, and midwives	Integration of interdisciplinary care teams will improve health outcomes alongside birth satisfaction scores	1. Doulas may operate most effectively outside of the strict confines of a provider NPI number 2. Individuals who become high-risk need to be transitioned into physician-led care. 3. Medicaid payments will require particular credentialing.
Include home visiting services in reimbursement model	Home visiting services make integrated care more accessible for vulnerable pregnant women.	
Implement value-based reimbursement models that can support interdisciplinary teams	Incorporating outcomes into payment structures will incentivize quality care and incorporate the strengths of diverse care teams	These value-based models need to be sustainable beyond a temporary funded grant model.
Bundle payments for pregnancy to incentive team-based care models to provide flexibility to innovate and center pregnancy	Bundled payments incentivize the shift to a team-based care model which focuses on whole pregnancies rather than the current patchwork reimbursement model with no central focus	1. Bundled payments should not limit scope of practice for non-clinical team members to a provider's NPI number 2. Malpractice insurance needs to be reworked to cover each entity within the care team
Extend post-partum coverage to 1 year for Medicaid pregnancies	Current coverage period is 60 days, which is too short to affect many pregnancy outcomes	

Care Delivery and Workforce: (Mental Health, Care Coordination and Referrals, Scope of Practice, and Models of Care)

Table 2: Mental and Behavioral Health

Concept	Explanation	Challenges named
Address gap in mental health and substance use services	Mental health and substance abuse are leading causes of maternal deaths in Missouri	
Screen and refer mothers into behavioral health services and follow up on referral to ensure the connection was made	Many referrals do not lead to the mother receiving behavioral health services because of a disconnect in the system	

Table 3: Care Coordination and Referrals

Concept	Explanation	Challenges named
Adopt a hub model for referrals to address social needs of mothers. Hub should be regional and/or community-specific	Care coordination hubs make connections to community-based services efficient because mothers can develop trust with one entity for all referrals rather than reach out on their own	1. It is difficult to integrate the many MCOs, systems, data capabilities, and policies into a single hub 2. Creating a hub for Medicaid patients alone may lead to stigma 3. Funding for a statewide hub referral model is unknown 4. There are urban/rural differences in community care networks
Connect and coordinate resources between clinical and community-based organizations to avoid parallel and duplicate efforts	In the present system, resources and programs are often duplicated by different care centers, leading to unnecessary competition for mothers seeking services	

Table 4: Scope of Practice

Concept	Explanation	Challenges named
Tailor care delivery models for rural areas such that APRNs, doulas, community health workers, and midwives can work up to the scope of their licensure/training	Scope of practice laws that limit non-physician health workers to a physician's direct oversight lead to fewer resources in rural areas because	Chart review requirements and other limitations can be difficult to circumvent
Allow doulas and midwives to work and receive reimbursement outside of a provider NPI number	Doulas and midwives are shown to be effective coaches and navigators of healthcare systems, and limiting their scope to a providers NPI number may limit their effectiveness	Pregnancies that become high-risk need to be transitioned to a specialized care team

Table 5: Models of Care

Concept	Explanation	Challenges named
Approach pregnancy with a life course lens: focusing on pre-pregnancy health, the pregnancy period, post -partum, and inter-conception care	Poor pregnancy outcomes come from challenges that develop outside of the nine months a woman is pregnant	
Advance a group model of prenatal care	Prenatal care in groups can provide a support system, a sense of shared experience, and promote peer-to-peer learning	
Integrate doulas into care teams	Doulas often improve birth outcomes and mother satisfaction with pregnancy	1. Doulas are not currently reimbursed by Missouri Medicaid 2. Current birth providers who treat high-risk pregnancies are resistant to models of pregnancy care led by non-physicians
Implement an anti-bias training for providers who are part of the pregnancy process	Black women report racial bias as a significant barrier to quality pregnancy care.	

Table 6: Data and Analytics		
Concept	Explanation	Challenges named
Share data to leverage existing care-management tools available from MCOs	Information is currently stored in-house for organizations, leading to gaps in care and the need for pregnant individuals to repeatedly share their story	1. HIPAA-protected information is stored alongside non-HIPAA-protected information, making sharing to non-HIPAA certified stakeholders difficult 2. Information will need to be stored in a central location or directly shared between organizations
Connect EMRs to CMS-enabled HIEs so that providers/organizations can work directly with MCOs	Currently, paperwork is often faxed between individual organizations; HIEs offer a more efficient system	Barriers to storing information at the state level will need to be addressed

SELECTED PROGRAMS UNDERWAY IN MISSOURI

The ELeVATE program in St. Louis and Kansas City

The EleVATE program, led by Ebony Boyce Carter, MD, MPH at Washington University School of Medicine, seeks to elevate voices, address depression and toxic stress, and advance equity in group prenatal care. This program began in 2016 as a partnership between community workers and health care teams, was piloted as a group prenatal, behavioral health, and health equity program with positive results in 2018, and is now supported by a 5-year National Institute of Mental Health grant to study the model across 9 Missouri sites.

The clinical trial began in May of 2021 and is currently recruiting participants. The clinical trial is looking for differences in perinatal depression and birth outcomes between a group of pregnant women who receive 10 2-hour group counselling sessions and a group of pregnant women who receive the one-on-one services with physicians that are standard in the healthcare system. The obstetric clinician-led group counselling session will involve pregnancy and infant-care related content as well as behavioral health strategies for managing depression, labor pain, and daily frustrations in life. This clinical trial seeks to understand if group counselling sessions lead to better maternal and child health outcomes. If so, this program will be a model for how to design such programs.

Their model for care seeks to implement community-led partnerships in prenatal care to enhance anti-oppressive practices and trauma-informed care. Their trainings develop strategies health care teams and communities to combat the trauma, depression, and stress that result from racism. This approach broadens the culture of medical practice to include community-led perspectives in the design of innovative solutions and increases shared accountability in promoting changes in the practice of care.

Strong Start

Strong Start is a national program launched in 2013 that is active in Kansas City and St. Louis. This program aims to test innovative pregnancy services that are not reimbursed by Medicaid to address the clinical, behavioral, and psychological contributors to poor pre-term birth outcomes. Strong Start implements many ideas brought up by stakeholders at THM-5. Initial pregnancy appointments trigger case coordination requests for mothers. Care coordination is led by a social worker and a nurse navigator, who call the patient and visit the patient's home. A life course approach is taken through coordination of post-partum and interconception care. Through these initiatives and more, Strong Start lowers rates of poor maternal and child health outcomes as well as pregnancy-related health expenditures.

Healthy Blue's Doula Pilot Program

Healthy Blue Missouri partners with doula organizations and their community partners across Missouri to deliver care to Healthy Blue members and families. Their goal through these partnerships is to support and guide birthing people through the pregnancy, labor, birth, and postpartum periods to improve health outcomes, reduce disparities, and improve pregnancy experiences. Currently, their partners include The Doula Foundation in Springfield, Uzazi Village in Kansas City, and Jamaa Birth Village in St. Louis. They are collaborating with It Takes a Village to expand doula services to their members in the Bootheel region of Missouri. Through each of these initiatives, Healthy Blue provides support to train additional doulas to meet their communities' needs. Their support for doula services aims to promote the overall inclusion of doulas into healthcare teams so that the gains doulas bring to health equity, pregnancy experiences, and health outcomes can be realized across Missouri.

PROGRAMS UNDERWAY IN MISSOURI

Rural Maternity and Obstetrics Management Strategies (RMOMS)

RMOMS is a national program supported by the Health Resources and Services Administration (HRSA) with two locations in Missouri. St. Francis Medical center leads the effort in the Bootheel, which serves six Bootheel counties and 30,000 women of reproductive age. Meanwhile, a new RMOMS program has just been funded at Missouri Highlands in Ellington. Providers within the Bootheel Missouri RMOMS network include a large FQHC, School-based clinics, dental clinics, six county health departments, home visitation programs, technical assistance, and behavioral health agencies. These stakeholders provider prenatal, labor, delivery, and postpartum services through shared information and referral programs to coordinate care effectively. The Bootheel RMOMS program serves women with private insurance (36%) and Medicaid (64%). No uninsured women are reported to be served. RMOMS experience shows that greater collaboration between providers leads to more service utilization and improves outcomes for pregnant women.

CONCLUSION AND CONSIDERATIONS

Transforming Healthcare in Missouri Part V brought many stakeholders for pregnancy care in Missouri together to discuss how to best innovate and bolster the systems and services that Missouri offers to pregnant women. Missouri's high rates of maternal mortality and poor infant health outcomes are motivating these stakeholders to propose changes to the present system. Because Black women and rural women face the greatest barriers to accessing quality pregnancy care, this meeting focused on ideas, policies, and programs that can target those populations most effectively. Attendees heard from four leaders in pregnancy care from Minnesota, North Carolina, and Wisconsin. These leaders shared the models of care they had worked on and related pregnancy outcomes in their states. Attendees then discussed how these models could be applied to the Missouri context.

Importantly, there are many initiatives to advance pregnancy care in Missouri that attendees agreed are promising, but for which policy changes are needed to fully capitalize on that work. As the attendees were widely representative of the stakeholders for pregnancy care in Missouri, their collective agreement on these ideas shows the clear potential for making substantive change to Missouri Medicaid's programs and policies surrounding pregnancy without undue friction among managed care organizations, clinicians, hospitals, program leaders, community organizations and others. Next steps should include the design of more detailed versions of the policies identified as priorities by the attendees, panelists, and presenters at this meeting for the purpose of gathering public comment. Implementation of those policies that are broadly endorsed should follow. Missouri's pregnancy outcomes need to improve significantly, and we need to continue to build consensus on our approach to this difficult problem.

	Coverage and Reimbursement	Care Delivery and Workforce	Data and Analytics
Short-Term (<2 years)	Home-Visiting Services Midwifery Services Doula Services Freestanding Birth Centers Services for High-Risk Subpopulations Services for women of reproductive age (e.g. contraception, prenatal vitamins, smoking cessation) Education to Enrollees COVID-19 Flexibilities, including Telehealth **Payment Reform** • Reimbursement for doulas/midwives • Value-based payments to providers	Models of Care Delivery • Group prenatal care- Centering Pregnancy Monetary Incentives for Members Substance Use Disorder Programs Integrating Mental Health • Screening, Referral & Treatment Provider Bias & Trauma-Informed Training Emphasis on chronic disease prevention pre-pregnancy Provide resources for prevention of intimate partner violence	Advisory Councils Maternal Mortality Review Committees Maternal Health Research AIM Bundles
Medium-Term (2-4 years)	Postpartum Coverage Expansion Telemedicine for Pregnancy • Broadband improvements • Interstate counseling compact participation Expand use of prenatal bundle	Enhancing Obstetric Workforce by Increasing Ancillary Providers Quality Improvement Programs Pregnancy medical homes	Enhancing Data Collection Race-Stratified and Geographically-Stratified Data by Health Plan Encourage capturing the social determinants of health (e.g. coding z-codes) Utilize a referral platform to address SDOH and ensure full data interoperability
Long-Term (5+ years)	Expand payment bundle to include delivery Shared savings models with clinical and social risk adjustment	Enhancing Obstetric Workforce by Increasing OB/Gyn Provider Numbers in Shortage Areas	

● = policy changes requiring legislative approval

Appendix Table 1: Policy and program goals for Coverage and Reimbursement, Care Delivery and Workforce, and Data and Analytics of pregnancy care over short, medium, and long-term time horizons. Breakout groups were presented these tables and asked to comment and add to the list.

APPENDIX

The appendix contains the complete list of policy ideas considered in the breakout discussions.

Coverage and Reimbursement

- Reimburse for care delivered by APRNs, doulas, CHWs, midwives, including home visits for pregnancy care.
- Fund value-based payment models sustainably, rather than through temporary grants.
- Bundle payment to incentivize a team-based care model where teams can work outside of a provider's NPI.
- Center pregnancy in the reimbursement model, rather than centering individual services.
- Utilize a non-onerous credentialing process to ensure payments can be made to non-medical workers.
- Address transportation as a significant barrier to care.
- Incentivize connections through the mental health referral process through making payments at steps such as initial referrals, appointments attended, and follow-up to mitigate failed referrals.
- Reallocate current spending to focus more on prevention (e.g. preventing a preterm birth), rather than large payment to a hospital for treating a preterm infant.
- Introduce payment reform to reduce NICU stays.
- Account for malpractice coverage in payment models that use doulas and midwives.
- Set more stringent quality standards for MCOs in their contract language.
- Align the incentives of hospitals with those of providers and payers so that hospitals are encouraged to prevent hospitalization.

Care Delivery and Workforce

Mental Health

- Address the gap in mental health and substance use services.
- Integrate mental health providers in hospital pregnancy settings.
- Intake and refer pregnant patients into behavioral health.

Care Coordination and Referrals

- Utilize a hub model for referrals to address social needs – specific and tailored to the needs of a region/community.
- Consolidate care management services to address health holistically.
- Develop processes to understand why referrals go uncompleted (transportation, childcare, etc.).
- Avoid duplicative and excessive case management.
- Connect and coordinate resources between the clinic and community to avoid parallel or duplicate efforts.
- Bridge the post-partum visit gap by connecting with doulas.
- Communicate with patients in the way they prefer to increase show-rates for postpartum care.
- Create a bridge back into primary care after delivery – ensure that PCP knows about any adverse outcomes from the pregnancy.

Scope of Practice

- Tailor care-delivery models for rural areas.
- Allow APRNs, CHWs, and midwives to work up to their scope of license.
- Connect family practitioners in rural areas to interdisciplinary medical teams.
- Utilize home visiting programs.

Models of Care

- Promote group prenatal care.
- Take a life course approach to pregnancy: focus on pre-pregnancy, post-partum, and inter-conception care.
- Support alternate care models, such as midwife-led primary maternity care.
- Expand of telehealth capacity.
- Promote and support team-based models.
- Integrate doulas into care teams.
- Build on StrongStart program in St. Louis and Kansas City.
- Develop and institute an anti-bias training for providers.

Data and Analytics

- Organize an advisory council of stakeholders who can respond to new data.
- Utilize mixed methods research so that patient experiences can be captured.
- Examine the natural experiment due to COVID: what have we learned from expanding coverage from 6 weeks postpartum to a year?
- Leverage existing data collection/analytic tools from the MCOs.
- Avoid asking moms the same questions multiple times, as this can compound trauma.
- Complete HIPAA forms for MCO members to give permission to share data with partner organizations/providers.
- Help providers see the resources that are available to a patient through EMR notes.
- Connect EMRs to CMS-enabled HIEs so that providers can work directly with MCOs.
- Collect measures on qualitative pregnancy outcomes, not just medical outcomes.
- Collect measures broken down by demographics to identify disparities.
- Collect data on team-based care.
- Include quality metrics from multiple care providers who are reimbursed through the bundle payment to understand lapses in care.
- Garner state support for a closed-loop referral system.

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