BIRTH EQUITY EDUCATION PROJECT

FINANCE & PAYMENT INNOVATION

Improving Equity in Perinatal Care and Maternal and Infant Outcomes

SEPTEMBER 2021

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Understanding the strengths and weaknesses of payment reforms for perinatal care, costs, and outcomes—including their impact on equity.

INTRODUCTION

While the U.S. spends approximately $111 billion per year on perinatal (prenatal, birth and newborn) care, maternal and infant health outcomes are among the worst of any high-income nation and racial disparities continue. Efforts to improve outcomes generally focus on coverage, health care delivery systems and payments. Many innovations and ideas have emerged in recent years.

This brief will help stakeholders concerned with maternal and infant health in Michigan understand the strengths and weaknesses of payment reforms for maternity or perinatal care, costs, and outcomes, including their impact on equity. The role of Medicaid and the beneficiaries it covers are emphasized, including Michigan data and examples from other states' efforts. This work is based on information from published studies, efforts of federal and state agencies, and national expert recommendations. Maternal Child Health (MCH) leaders inside and outside of government can use this information to support the design and development of any proposed perinatal payment reforms.

THE ISSUE

Medicaid's Role in Improving Maternal and Infant Health Outcomes

Medicaid is the largest payer for maternity care in the United States and finances nearly half of births in Michigan.

Medicaid covers a greater share of births in rural and urban areas, among teen mothers, women of color, and those with lower levels of educational attainment—all are groups who are more likely to have lower incomes. With expansion of Medicaid to additional low-income adults, the continuity of coverage has increased for women before, during and beyond pregnancy. In 2021, states have a new option to extend postpartum coverage from 60 days to one year following a Medicaid financed birth. With state appropriations in place, Michigan is preparing to extend Medicaid postpartum eligibility from 60 days to 12-months continuous coverage to increase access to necessary medical and behavioral health care services. Yet coverage is only one piece of the picture for improving maternal and infant health outcomes.

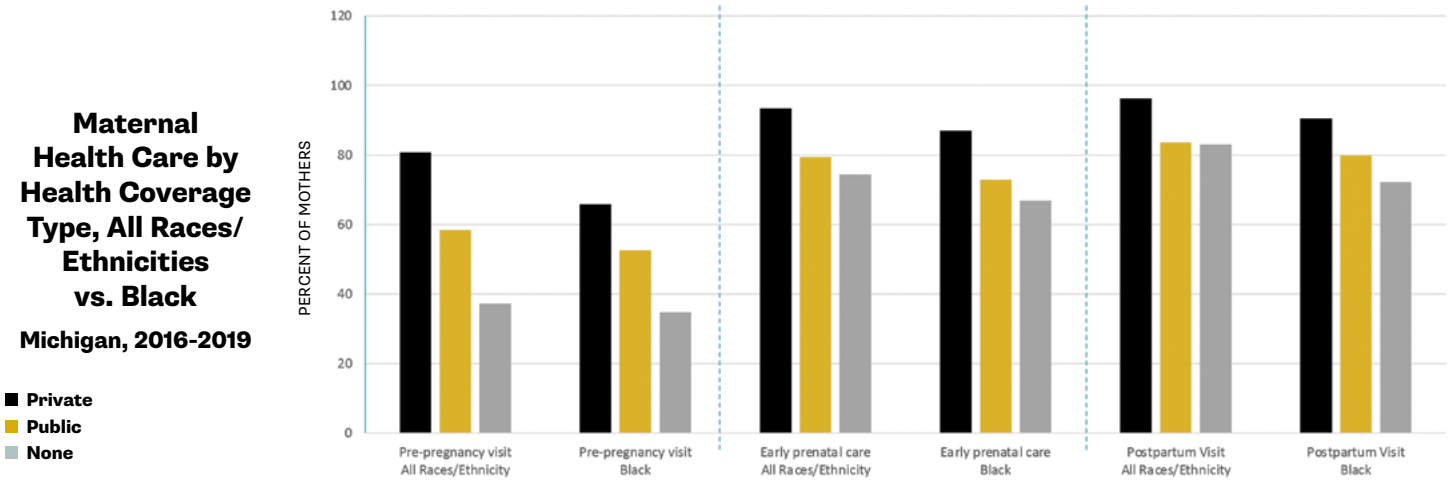
Disparities in maternal and infant health outcomes continue, with Black/African American and American Indian/Native American families experiencing significantly greater likelihood of maternal (pregnancy-related) mortality and infant mortality and serious health conditions among those who survive. Eliminating such disparities will require changes in health and health care.

Health care delivery systems and payment approaches are continually changing in both the public and private sectors. States have wide latitude to adopt health system and payment reforms under Medicaid. The Medicaid and CHIP Payment and Access Commission (MACPAC) and Mathematica report that initiatives to improve maternal outcomes across states (including 50 states, the District of Columbia and Puerto Rico) include: changes in benefits (47), education and outreach to beneficiaries or providers (44), eligibility and enrollment (43), payment reforms (41) and managed care contracting (40).

Nationwide, managed care is the predominant approach to structure financing and services in Medicaid. In Michigan, as in the majority of states, Medicaid contracts with managed care organizations (MCOs), referred to as Medicaid Health Plans (MHP), and requires most beneficiaries to enroll with those plans. Thus, the performance of MCOs matters. In 32 states, MCOs are required to report on Healthcare Effectiveness

Maternal Health Care by Health Coverage Type, All Races/ Ethnicities vs. Black

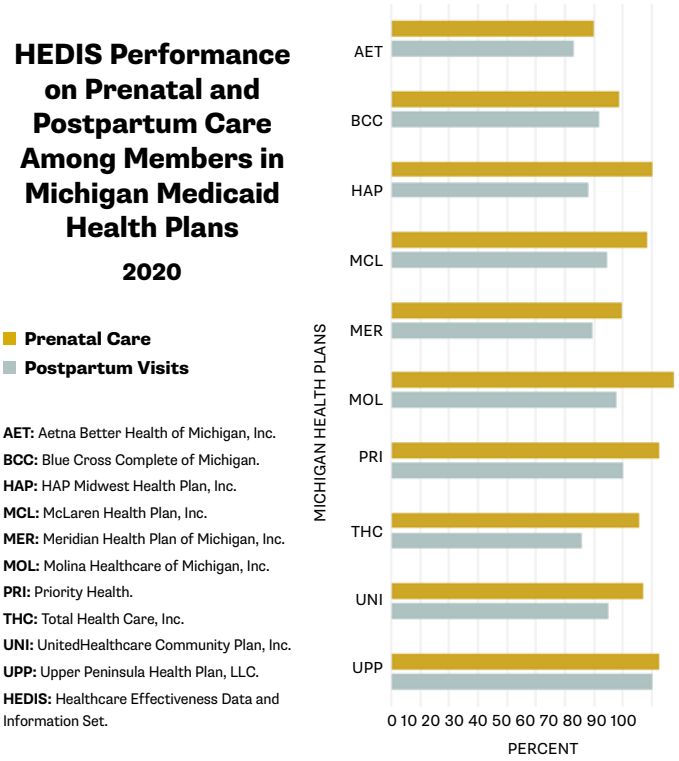
Michigan, 2016-2019



Data and Information Set (HEDIS) measures for prenatal and postpartum care. The figure below shows recent data for MHPs, with variations in performance on prenatal and postpartum visit measures. Given the elevated risks for adverse pregnancy outcomes among Black/African American and American Indian/Native American women in Michigan, it is important to be aware of the distribution of beneficiaries by race and ethnicity across health plans. These variations reflect the size of the population enrolled in the plan, and the geographic range of plans, particularly the extent to which covered populations live in urban or rural areas. Health plans that serve a greater share of Black, Indigenous and People of Color (BIPOC) may need to adopt additional strategies for ensuring equity in access and care and for improving maternal and infant health outcomes to eliminate disparities.

HEDIS Performance on Prenatal and Postpartum Care Among Members in Michigan Medicaid Health Plans

2020



AET: Aetna Better Health of Michigan, Inc.
BCC: Blue Cross Complete of Michigan.
HAP: HAP Midwest Health Plan, Inc.
MCL: McLaren Health Plan, Inc.
MER: Meridian Health Plan of Michigan, Inc.
MOL: Molina Healthcare of Michigan, Inc.
PRI: Priority Health.
THC: Total Health Care, Inc.
UNI: UnitedHealthcare Community Plan, Inc.
UPP: Upper Peninsula Health Plan, LLC.
HEDIS: Healthcare Effectiveness Data and Information Set.

What Do Studies and Experience Tell Us About Payment Reform?

While definitions and terms vary, the types of alternative payment models currently in use can be defined into three broad categories:

- **Pay-for-performance:** Typically use fee-for-service payments with incentives linked to performance. The payments may be linked to improved quality, efficiency, or coordination of care based on defined metrics.
- **Alternative payment models:** Generally refers to payments with shared savings or other incentives for providers to meet quality and cost metrics, including bundled payments.
- **Global payments:** Also known as population-based payments, they include an entire population and continuum of care. Typically offer a single payment for a comprehensive set of services for specific conditions or populations and expects providers to meet quality metrics. Some MCOs, accountable care organizations (ACOs), and patient-centered medical homes (PCMH) use this approach.

The term value-based payments (VBP) has become widely used to describe payment and delivery approaches that move away from traditional fee-for-service payments. Such arrangements typically use a combination of payment and system delivery reforms. VBP is designed to set priority and accountability on quality, outcomes and value, rather than volume or cost of care. Value is often defined in terms of cost savings; however, it may have different meaning for payers, providers and consumers of health care services. For example, high-value maternity care should be equitable, patient-centered, culturally responsive and respectful, and yield improved

"Payment reforms and alternative payment models often focus on saving money rather than enhancing access to and quality of care."

outcomes. This requires a focus on access and quality, using an array of providers and effective approaches, as well as shared decision-making with the birthing person.
Payment reforms and alternative payment models often focus on saving money rather than enhancing access to and quality of care. States learned with some MCOs that per member payments can be an incentive to deliver less, not more, services in order to reduce costs and maximize profits. ACOs take broader responsibility for outcomes but focus with less detail on specific types of services.

Bundled payments are one frequently discussed payment model, designed to incentivize the providers involved collectively in an episode of care to deliver quality and appropriate care at a lower cost. Typically, bundled payments are an alternative payment model characterized by the following features:

- Paying providers for bundles of services rather than for each individual service.
- Services that fall within each bundle—episode of care—vary by condition or procedure.
- Providers assume accountability for the quality and cost of care delivered in an episode.
- Providers that keep costs low or achieve metrics may share a portion of resulting savings, but those that exceed the target(s) may incur financial penalties.

What Has Been Learned About Payment Reforms for Maternal and Infant Health?

Payment reforms are one way for states to reduce health care costs while incentivizing high-quality perinatal care and aiming for improved maternal and infant outcomes. Yet, the assumptions and approaches used to shape payment reforms matter. Does it focus on costs, quality and outcomes? Does it support evidence-based strategies and the full perinatal workforce? Is the payment sufficient to stimulate recommended care across the perinatal period?

The Health Care Transformation Task Force, with support from The Commonwealth Fund, convened a cross-sector group of experts and created the Maternal Health Hub. Their framework is designed to promote equity and value in maternity care that focuses through the primary drivers of change defined as: creating a culture of health equity, delivery in a value-based system, and using public policy to enable change. Strategies to create a culture of health equity are: addressing structural racism, bias, and cultural competency, workforce development, and equity focused quality and safety initiatives. For a value-based system, strategies focus on: shared decision making, services for physical and social needs, using the full complement of perinatal workers (e.g., doulas, midwives, nurses and physicians), measurement and value-based/alternative payment approaches. The public policy drivers include: comprehensive coverage across the life course, reimbursement that supports the full workforce, and federal/state partnerships to improve policy implementation.

Medicaid and Bundled Payments for Perinatal Care

The great majority of Medicaid beneficiaries are already in managed care, so the bundled payments may yield fewer returns than Medicare or commercial plans. This is particularly true of women of childbearing age and children, who are among the most likely of Medicaid beneficiaries to be enrolled in managed care. Moreover, most states already pay for maternity care in Medicaid and CHIP using a bundled payment for some services provided during the perinatal period, including prenatal care, birth/delivery, and/or postpartum care. In addition, since average costs are higher for Medicaid beneficiaries and for pregnancy, the payments and incentives for providers in bundled payment arrangements may not be sufficient and the approach may actually result in more limited access.

At the same time, Medicaid agencies in some states have had success in reducing unnecessary procedure utilization and episode costs for perinatal care. The National Academy for State Health Policy and states themselves have reported on some examples of using bundled payments for perinatal episodes of care.

- **Arkansas:** In the Payment Improvement Initiative, the Medicaid C-section delivery rate dropped 6.7% from 2012-2015. The delivering provider was responsible for the perinatal/non-NICU episode 40 weeks before to 60 days after a birth. Payments were risk-adjusted and high-performing providers shared savings.
- **Tennessee:** Using a State Innovation Model (SIM) grant, the Tennessee Medicaid program initiative used primary care transformation, bundled payments for episodes of care, and long-term services and supports. The perinatal episodes of care (from 280 days prior to 60 days after a birth) had quality measures linked to financial incentives and additional quality measures for monitoring purposes only. In Tennessee, costs for perinatal episodes of care were reduced by more than $11 million after the first year—a 3.4% drop in perinatal costs.
- **Minnesota:** C-section rates decreased among both Black and White people following Minnesota Medicaid implementation of a blended payment rate for uncomplicated births.

Experts and agencies have raised concerns that bundled payments triggered by a birth/delivery and not tied to performance on quality metrics results in having providers receive payment regardless of whether the woman had adequate prenatal visits or a postpartum visit. Some states have devised new system and measurement approaches to ensure prenatal and postpartum visits are measured and monitored for quality. Three states provide illustrative examples.

- **Louisiana:** Unbundled postpartum care to create incentives for completed visits. Used fee-for-service with payment linked to quality measures (postpartum visit and LARC insertion) Resulted in higher performance on postpartum HEDIS hybrid measure.
- **North Carolina:** Used fee-for-service linked to quality metrics (incentive payment for postpartum visit content). Established the pregnancy medical home (PMH) model. PMH providers received incentive payment for postpartum visit if it was completed within 60 days of delivery and included depression screening using a validated tool, reproductive life planning, and referral for ongoing primary care. Resulted in more outreach, appointments, and postpartum visits.
- **Ohio:** Alternative payment model on a fee-for-service structure linked to quality metrics (rate of HIV screening, Group B streptococcus screening, C-sections, and postpartum visits). Episode-based payments, with perinatal episode from 280 days before through 60 days after delivery, with delivery being the 'trigger' event. Risk adjustment. Also set out a four-part quality measure for postpartum visits.

The importance of specific measures is underscored by these examples. They looked beyond the unnecessary C-sections as a high-cost procedure toward primary care and the medical home. Including but looking beyond the number of visits, they focused on key types of screening in prenatal and postpartum visits as one indication of quality. In addition, some states found that for certain elements of perinatal care (e.g., postpartum visits), the strategy that worked to improve performance was unbundling payments.

The promise of alternative payment models is that they incentivize care coordination and stimulate the use of high-value care and discourage the use of low-value care by increased provider accountability. Yet for perinatal care, some studies find savings but not improvements in care. Published evaluations and states' data from alternative payment initiatives for maternity care found some evidence of improved health outcomes and positive effects on perinatal expenditures/costs. High-quality evaluation studies or conclusive evidence of positive effects on perinatal outcomes have not been published.

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Concerns have been raised that value-based, global, and bundled payment models for maternity care —which contain total spending around a target price for all pregnancy-related services—could further disincentivize providers from taking Medicaid patients. Some alternative payment approaches might reduce access to high value and effective services for Medicaid beneficiaries such as doula care, lactation supports services, care coordination or birth center services.

Notably, in this review of other studies, nothing about bundled payments and alternative payment arrangements has been shown to improve equity in access or outcomes for BIPOC having babies. It is clear that payment reform alone will not address the issues of bias, unequal treatment, or institutional racism in the health care system.

Design Details Matter for Payment Reform Approaches

When designing payment reform approaches, consideration should be given to factors such as gathering stakeholder perspectives, building data infrastructure, and fitting within the regulatory and policy environment. The following list contains some frequently used recommendations to consider:

- episode definition (prenatal, labor and birth, postpartum care)
- episode timing (e.g., 40 weeks before and 60 days after birth)
- patient population (low risk, high risk, mixed)
- services (all medical services or all related services)
- provider group design (e.g., who is in the care team, provider mix)
- patient engagement (e.g., provider selection, shared decision making and care planning)
- accountable entity (e.g., provider entity able to accept risk)
- payment flow (e.g., upfront FFS or prospective)
- episode price (e.g., reflect utilization and cost history)
- type and level of risk assumed
- quality metrics (sufficient to differentiate care process and outcomes)

So much depends on the metrics, data and definitions of quality that are built into payment reforms. Kozhimannil and others have written about important considerations related to measurement within perinatal payment reforms, calling for payers/states to: augment quality

metrics with patient-reported satisfaction; use quality metrics aligned with Alliance for Innovation on Maternal Health (AIM) safety bundles and Women's Preventive Services Initiative (WPSI); use cost data on prenatal care provided by midwives or birth centers to inform rates, define low-risk patient populations based on criteria endorsed by the American College of Obstetrics and Gynecology (ACOG) and Society for Maternal Fetal Medicine (SMFM); include doula care during pregnancy, birth, and postpartum within the list of services in a maternity care bundle; and collect and make publicly available data on costs and outcomes, particularly for Medicaid and by race-ethnicity.

Lessons for Changing Practice Not Just Payments

Many experts, federal agencies and national organizations have made recommendations for changes in the health care system that could improve maternal and infant health outcomes and reduce disparities for BIPOC and women living in poverty. It is clear that savings in Medicaid will only be achieved by improving equity and outcomes. Many experts have called for greater emphasis on innovations and alternatives in maternity care shown to advance equity. The Commonwealth Fund calls for:

1. **Expanding and improving reimbursement** for providers such as doulas and midwives, freestanding birth centers, and community-based organizations who have helped to reduce adverse maternal and infant outcomes.
2. **Incentivizing health systems and providers** to adopt innovations and evidence-based models of care such as group prenatal care, enhanced prenatal care, birth centers, and pregnancy medical homes.

Considering these and other related recommendations, one must ask:

How could payment reforms help to advance these health care transformation and system change strategies across the continuum of perinatal care?

How might alternative payment approaches help enhance prenatal care strategies?

Many experts have called for renewed attention to access to and the content and quality of prenatal care. The CMS "Strong Start for Mothers and Newborns Initiative" tested and evaluated new approaches and enhanced prenatal care models, finding that prenatal care delivered at birth centers or in group care reduced costs and improved outcomes. It also found variations in pregnancy medical homes, care coordination, and prenatal care with enhanced support for non-medical needs.

> ***"Many experts and studies have recommended expanding both the use of birth centers as a source of prenatal care for women with low medical risk and the use of doulas, home visitors, and community health workers to provide support and care coordination during pregnancy."***

Many experts and studies have recommended expanding both the use of birth centers as a source of prenatal care for women with low medical risk and the use of doulas, home visitors, and community health workers to provide support and care coordination during pregnancy. The future of prenatal care should include continued support for implementation of effective innovations in enhanced prenatal care such as those demonstrated through Strong Start, Michigan's Maternal and Infant Health Program (MIHP), and other effective strategies. It also would use evidence to redesign prenatal care, particularly with respect to adjusting the number and content of visits based on risk assessment.

These types of innovative models are described in the Birth Equity Education Project (BEEP) Brief: Reimagining Perinatal Care. The highlighted models—Stay Home, Stay Connected, CenteringPregnancy,® and Birth Detroit—provide evidence that there are more possibilities than the traditional perinatal medical model that should be considered when promoting equitable birth outcomes. They offer new, modernized approaches with a focus on promoting birth equity and preventing poor maternal and infant outcomes. For example, Michigan's CenteringPregnancy® sites are reporting higher rates of healthy weight, full-term babies. Although the models differ in scope and emphasis, common features that make them innovative as an alternative approach to the perinatal status quo are: each model focuses on equity, provide support through patient and relationship centered care, and empower families with education.

The BEEP Doula Services for Improving Birth Outcomes Brief also provides examples of doula programs in Michigan and addresses payment structures to better ensure doula services are more accessible and affordable to Michigan

All Michigan Birthing Hospitals | Outcome Measures | Severe Maternal Morbidity

Measure	2011-2015 (Pre-MI AIM)	2016-2019 (Post-MI AIM)	% Improvement
SMM - All	1.89%	1.76%	6.68%
SMM - All (excluding transfusions)	0.83%	0.70%	15.96%
SMM - Hemorrhage	26.32%	20.81%	20.96%
SMM - Hemorrhage (excluding transfusions)	11.29%	5.03%	55.41%
SMM - Hypertensione	10.88%	10.17%	6.51%
SMM - Hypertensione (excluding transfusions)	7.72%	6.67%	13.56%

families. Providing adequate and sustainable reimbursement for doula services gives women the autonomy to take personal responsibility for their birthing experience and have their companion of choice during labor and childbirth.

How might alternative payment approaches help advance strategies for more woman-centered, appropriate and cost-effective care at the time of birth?

The federal Centers for Medicare and Medicaid Services (CMS) Expert Workgroup on Maternal and Infant Health (2019-2020) reviewed approaches and made reported on "Recommendations for Maternal Health and Infant Health Quality Improvement in Medicaid and CHIP" designed for eliminating preventable maternal and infant mortality and improving outcomes for Medicaid and CHIP beneficiaries. They called for adoption of strategies to decrease cesarean births among pregnant women who are at a low risk for complications from childbirth. The recommendations for improving care at the time of birth also included: use women-centered care models, including doulas, midwives, birth centers and team-based care, implementation payment reforms to shift incentives, and use QI and measurement approaches.

Michigan has implemented structure, process and quality metrics that align with Alliance for Innovation on Maternal Health (AIM) safety bundles. Michigan was one of the first states to implement the AIM initiative in 2015. MI AIM is a data-driven, maternal safety and quality improvement initiative designed to improve maternal safety, reduce disparities, and prevent maternal morbidity and mortality. MI AIM has focused on implementing the safety bundles related to Severe Hypertension, OB Hemorrhage safety Maternal Sepsis. In addition, MI AIM in partnership with the Blue Cross-Blue Shield Obstetrics Initiative (OBI), is implementing the Primary C-Sections Bundle. Since 2015, MI AIM has worked with over two-thirds of Michigan birthing hospitals to assist in implementation and has made improvements with Severe Maternal Morbidity (SMM) rates for Hemorrhage and Hypertension (with and without transfusions).

Funded by Blue Cross Blue Shield of Michigan/Blue Care Network, OBI is a data-driven quality improvement project to safely reduce the use of cesarean delivery for low-risk births and improve or stabilize rates of maternal and neonatal morbidity. OBI is working to identify and address variation in obstetric care through collaboration, rapid cycle data reporting, and quality improvement initiatives to create optimal maternity care experiences for Michigan families. In part, the success of the OBI project is related to a hospital incentive-based pay for performance program which recognizes hospitals that excel in quality, cost-efficiency and population health management. In 2021, 40% percent of the OBI scorecard is focused on process measures.

How might alternative payment approaches help advance strategies for improving postpartum and interconception care?

To increase the use and quality of postpartum care in Medicaid, the CMS Expert Workgroup recommended: 1) continuity of coverage postpartum, increased access to community support and care coordination, 2) use of leverage through managed care contract language, and 3) improved quality of postpartum care using women-centered care models, payment reforms (e.g., pay for quality and enhanced service package), and 4) enhanced use of measurement (e.g., ACOG-NCQA (PCPI) four-part focus on attention to depression, breastfeeding, diabetes, and contraception in postpartum visits).

Interconception care is a distinct category of services that aims to provide women who had an adverse pregnancy outcome with care to reduce risks that may affect the woman's health and any future birth she may choose to have. Interconception care design goes beyond routine postpartum care and well-woman visits to be more like a chronic care or health home model, with more intensive care coordination and supports. A strong example of interconception care that has been integrated with existing home visiting services is Strong Beginnings in Kent County. Strong Beginnings has seen dramatic reductions in NICU admission, low birth weight and premature birth among women who have had a subsequent pregnancy. The planned extension of Medicaid postpartum eligibility from 60 days to 12-months will positively impact interconception care by increasing the ability to address identified health/pregnancy risks, promote healthy behaviors, and allow for birth planning.

SUMMARY

Past efforts to improve maternal and infant health outcomes were incremental and limited in design. Many efforts did not reflect new knowledge and guidelines or recommendations for improving health care practices. Often, these efforts did not acknowledge unequal treatment or address the impact of bias in the health care system. Studies have documented that the design of care often was not responsive to women's concerns and experiences.

While disparities in maternal and infant health outcomes have long been reported, studies less often measured what the National Academy of Sciences has defined as unequal treatment: differences that are not the result of patient needs or preferences.

While disparities in maternal and infant health outcomes have long been reported, studies less often measured what the National Academy of Sciences has defined as unequal treatment: differences that are not the result of patient needs or preferences. To reduce unequal treatment and disparities in outcomes will require layers of change. First and foremost is making care affordable through expanded coverage and benefits. Measuring and monitoring the implementation of practice guidelines and standard of care is a next key step. Quality improvement efforts can be designed and conducted to reduce unequal treatment, not just measure disparities at the end. Last, but not least, steps are needed to build the right incentives into payment structures and payment reform efforts to support quality and what works.

States seeking to adopt or improve payment reforms and alternative payment approaches for perinatal care might consider the process defined in a proposal for CMS to create demonstration projects, which calls for any alternative payment model for perinatal care to have the following characteristics:

- Is designed to improve maternal health outcomes for demographic groups with disproportionate rates of adverse maternal health outcomes;
- Includes methods for stratifying patients by pregnancy risk level and, as appropriate, adjusting payments under such model to take into account pregnancy risk level;
- Establishes evidence-based quality metrics for payments;
- Includes consideration of non-hospital birth settings such as freestanding birth centers;
- Includes consideration of SDOH (e.g., housing, transportation, nutrition);
- Includes racial/ethnic and professionally diverse maternity care teams (e.g., OB-GYNs, family physicians, midwives, nurse practitioners, doulas, CHW, social workers, home visitors, etc.).

Michigan has an opportunity to ensure that any perinatal payment reforms considered are based on an inclusive stakeholder process, an evidence-informed design and focus on improving outcomes, not just reducing costs. Such reforms can build upon what has been learned in other states and from nationwide demonstration projects. Michigan can incorporate our own outstanding, homegrown efforts to improve care and quality such as MI AIM, OBI, Strong Beginnings and Birth Detroit, working with health providers, health systems and health plans to create sustainable funding that moves us toward birth equity.

REFERENCES

1 Ahn R, Gonzalez GP, Anderson B, Vladutiu CJ, Fowler ER, Manning L. Initiatives to Reduce Maternal Mortality and Severe Maternal Morbidity in the United States: A Narrative Review. Annals Internal Medicine. 2020;173(11 Suppl):S3-S10. doi:10.7326/M19-3258.

2 Artiga S, Pham O, Ranji U, Orgera. Medicaid Initiatives to Improve Maternal and Infant Health and Address Racial Disparities. Kaiser Family Foundation, 2020. https://www.kff.org/racial-equity-and-health-policy/issue-brief/medicaid-initiatives-improve-maternal-infant-health-address-racial-disparities/

3 Bigby J, Anthony J, Hsu R, Fiorentini C, & Rosenbach M. Recommendations for Maternal Health and Infant Health Quality Improvement in Medicaid and the Children's Health Insurance Program. Mathematica for the Centers for Medicare and Medicaid Services. December, 2020.

4 Calvin S, Balazovic T. A Single Bundled Payment for Comprehensive Low-Risk Maternity and Newborn Care Provided by Independent Midwife-Led Birth Center Practices that Are Clinically Integrated with Physician and Hospital Services. Minnesota Birth Center. 2017. https://aspe.hhs.gov/sites/default/files/private/pdf/255731/BundledPaymentMNBirthingCenter.pdf

5 Clark M. Medicaid and CHIP Coverage for Pregnant Women: Federal Requirements, State Options. Georgetown University Center for Families and Children. (Blog). November 2020.

6 Crear-Perry J, Correa-de-Araujo R, Lewis-Johnson T, et al. Social and structural determinants of health inequities in maternal health. Journal of Women's Health. 2021;30(2):230-5. doi.org/10.1089/jwh.2020.8882

7 Cross-Barnet C, Courtot B, Hill I, et al. Facilitators and Barriers to Healthy Pregnancy Spacing among Medicaid Beneficiaries: Findings from the National Strong Start Initiative. Women's Health Issues. 2018;28(2):152-157. doi:10.1016/j.whi.2017.12.004

8 Daniel-Robinson L, Cha S, Lillie-Blanton M. Efforts to Improve Perinatal Outcomes for Women Enrolled in Medicaid. Obstetrics and Gynecology. 2015;126(2):435-441. doi:10.1097/AOG.0000000000000932

9 Daw JR, Kolenic GE, Dalton VK, et al. Racial and Ethnic Disparities in Perinatal Insurance Coverage. Obstetrics and Gynecology. 2020;135(4):917–924. doi:10.1097/AOG.0000000000003728

10 de Vries EF, Scheefhals ZTM, de Bruin-Kooistra M, Baan CA, Struijs JN. A Scoping Review of Alternative Payment Models in Maternity Care: Insights in Key Design Elements and Effects on Health and Spending. International Journal of Integrated Care. 2021;21(2). doi:10.5334/ijic.5535

11 Health Care Transformation Task Force. Promoting Equity and Value in Maternity Care. Health Care Transformation Task Force and Commonwealth Fund. June, 2020. https://hcttf.org/wp-content/uploads/2020/06/Promoting-Equity-and-Value-in-Maternity-Care_final.pdf

12 Johnson K, Rosenbaum S, Handley M. The next steps to advance maternal and child health in Medicaid: Filling gaps in postpartum coverage and newborn enrollment. Health Affairs. (Blog). January 9, 2020 doi:10.1377/hblog20191230.967912.

13 Johnson K, Applegate M, Gee RE. Improving Medicaid: Three decades of change to better serve women of childbearing age. Clinical Obstetrics and Gynecology. 2015;58(2):336-54. doi:10.1097/GRF.0000000000000115

14 Jarlenski M, Borrero S, La Charite T, Zite NB. Episode- Based Payment for Perinatal Care in Medicaid: Implications for Practice and Policy. Obstetrics and Gynecology. 2016;127(6):1080–1014. doi:10.1097/AOG.0000000000001423

15 Johnston E, McMorrow S, Thomas T, & Kenney G. ACA Medicaid Expansion and Insurance Coverage among New Mothers Living in Poverty. Pediatrics. 2020:e20193178; doi:10.1542/peds.2019-3178

16 Kozhimannil KB, Graves AJ, Ecklund AM, Shah N, Aggarwal R, Snowden JM. Cesarean delivery rates and costs of childbirth in a state Medicaid program after implementation of a blended payment policy. Medical Care, 2018; 56(8): 658–664. doi:10.1097/MLR.0000000000000937

17 Kozhimannil KB, Hardeman RR, O'Brien M. Doula care, birth outcomes, and costs among Medicaid beneficiaries. American Journal of Public Health. 2013;10(4): e113–e121. doi:10.2105/AJPH.2012.301201

18 Lee L, Chien A, Stewart A, et al. Women's Coverage, Utilization, Affordability, And Health After the ACA: A Review of the Literature. Health Affairs. 2020;39(3):387–394. doi:10.1377/hlthaff.2019.01361

19 Mathematica & CMS. Lessons Learned About Payment Strategies to Improve Postpartum Care in Medicaid and CHIP. Issue Brief. Maternal and Infant Health Initiative. 2019. https://www.medicaid.gov/medicaid/quality-of-care/downloads/postpartum-payment-strategies.pdf

20 McCloskey L, et al. and The Bridging the Chasm Collaborative, and Working Group Advisors. Bridging the chasm between pregnancy and health over the life course: A national agenda for research and action. Women's Health Issues. 2021 May-Jun;31(3):204-218. doi:10.1016/j.whi.2021.01.002

21 Medicaid (MACPAC). Medicaid's Role in Maternal Health. June, 2020. https://www.macpac.gov/wp-content/uploads/2020/06/Chapter-5-Medicaid%E2%80%99s-Role-in-Maternal-Health.pdf

22 Megibow E, Gwam P, Godbolt D, Powell A, Crear-Perry J. Evidence-Informed and Community-Based Recommendations for Improving Black Maternal Health. Urban Institute. 2021.

23 Miller HD. An alternative payment model for maternity care. Center for Healthcare Quality and Payment Reform (CHQPR). https://chqpr.org/downloads/MaternityCare_APM.pdf

24 Nijagal MA, Shah NT, Levin-Scherz J. Both patients and maternity care providers can benefit from payment reform: four steps to prepare. American Journal of Obstetrics and Gynecology, 2018; 218(4): 411. e1-e6. doi:10.1016/j.ajog.2018.01.014

26 Peahl AF, Gourevitch RA, Luo EM, Fryer KE, Moniz MH, Dalton VK, Fendrick AM, Shah N. Right-sizing prenatal care to meet patients' needs and improve maternity care value. Obstetrics and Gynecology. 2020;135(5):1027-1037. doi:10.1097/AOG.0000000000003820

27 Rodin D, Silow-Carroll S, Cross-Barnet C, Courtot B, Hill I. Strategies to promote postpartum visit attendance among Medicaid participants. Journal of Women's Health. 2019;28(9):1246-53.

28 Smith D, Hanlon C. Case Study: Tennessee's Perinatal Episode of Care Payment Strategy Promotes Improved Birth Outcomes. National Academy for State Health Policy. 2017. https://nashp.org/wp-content/ uploads/2017/10/Tennessee-Case-Study-Final.pdf

29 Taylor JK, Asiodu IV, Mehra R, et al. We must extend postpartum Medicaid Coverage. Scientific American. (Opinion). March 11, 2021.

30 Tennessee Division of Health Care Finance and Administration. Health Care Innovation Initiative. Perinatal Episode: Executive Summary. 2016.

31 U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. Medicaid and CHIP Scorecard. Prenatal and Postpartum Care: Postpartum Care. (Website undated). https://www.medicaid.gov/state-overviews/scorecard/postpartum-care/index.html#

32 U.S. Department of Health and Human Services. Healthy women, healthy pregnancies, healthy futures: Action Plan to improve maternal health in America. December 2020.

33 Wang E, Glazer KB, Howell EA, Janevic TM. Social determinants of pregnancy-related mortality and morbidity in the United States: A systematic review. Obstetrics and Gynecology. 2020;135(4):896-915. doi:10.1097/AOG.0000000000003762

34 Zephyrin L, Seervai S, Lewis C, Katon JG. Community-Based Models to Improve Maternal Health Outcomes and Promote Health Equity. The Commonwealth Fund. (Issue Brief). March 4, 2021. https://www.commonwealthfund.org/publications/issue-briefs/2021/mar/community-models-improve-maternal-outcomes-equity

SPECIAL THANKS TO OUR PARTNERS

MCMCH is proud to share the **Birth Equity Education Project** series, to increase knowledge and foster discussion about opportunities to improve maternal and infant outcomes through equitable strategies. We thank the many community members, providers and other partners including the Institute for Health Policy at Michigan State University for their input and partnership in this work.

Produced with support from the W.K. Kellogg Foundation

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