

## ISSUE BRIEF

### KEY TAKEAWAYS

- There is a need to embed equity into perinatal care reform in the United States to address the rise in maternal mortality and morbidity, which disproportionately impacts pregnant people of color.
- An increasingly common alternative payment model (APM) to support perinatal care is episode-based bundle payments or “bundles.” While bundles encourage coordination of obstetric services during pregnancy, delivery, and the immediate post-partum period, they have not been designed to address the needs of the whole person, including behavioral health and social drivers of health, nor encourage coordination across the care continuum (such as before and after pregnancy).
- Linking perinatal bundles with population-based models (like accountable care organizations) can help address the needs of the whole person and improve longitudinal health outcomes for birthing people.

### AUTHORS

Brianna Van Stekelenburg  
Montgomery Smith  
Rebecca Whitaker  
Sarahn Wheeler  
Zavera Basrai  
Robert Saunders

### INTRODUCTION

The United States has persistently high [rates](#) of maternal morbidity and mortality. The causes of this are multi-faceted, including social drivers of health; increases in [chronic conditions](#) for people of reproductive age coming into pregnancy, such as hypertension, diabetes, and diagnosed obesity; limited access to and poor [transitions](#) in care before, during, and after pregnancy; and limited coordination between perinatal and other types of care.

Racism and [structural inequities](#) make these trends even more pronounced among [people of color](#), specifically Black, American Indian, and Hispanic people. These inequities manifest into higher observed maternal mortality rates among people of color compared to White people, and these [disparities](#) have worsened over the last several decades. Racism and structural inequities have also contributed to [higher prevalence](#) of chronic diseases among people of color. And while all pregnant people experience limited collaboration between primary care and perinatal providers -- one [study](#) found that only 60% of birthing people with complications, and 50% of birthing people without, transitioned into [primary care](#) one year after delivery -- rates of primary care initiation following pregnancy are even [lower](#) among birthing people of color. Another source of racial and ethnic disparities is limited access to primary care broadly, which inhibits access to quality longitudinal care and a chance to start pregnancy healthier.

Payment and clinical policies set by Medicaid and commercial payers represent powerful levers to reduce disparities in both pregnancy outcomes (e.g., cesarean delivery, preterm birth, experience of care) and maternal health outcomes, such as maternal morbidity and mortality. Medicaid has a significant opportunity in improving disparities and health outcomes

given that it is the largest single payer of pregnancy-related services and covers [42 percent](#) of all births, with many of those births in rural areas and among Black, American Indian, and Hispanic birthing people. Commercial payers can also play a role in addressing maternal health outcomes given they cover approximately [half of all births](#).

While it will likely take a variety of aligned interventions to tackle the maternal health crisis, Alternative Payment Models (APMs) represent one potential solution to improve maternal health outcomes and reduce persistent disparities. APMs represent an opportunity to improve outcomes and reduce inequities in maternal morbidity and mortality by providing greater financial flexibility to health care providers, such as giving them the ability to address social drivers of poor health. Further, APMs can incorporate financial incentives that encourage providers to reform models of care.

This issue brief draws on research that includes a literature scan of existing Medicaid and commercial perinatal APMs along with expert stakeholder interviews with policymakers, payers, providers, and academic experts. It highlights current perinatal payment models, which have largely bundled together perinatal<sup>1</sup> services; outlines where equity can be embedded in payment reforms; and illustrates how payment reforms can be linked to address the needs of the whole person and improve longitudinal health outcomes for birthing people.

## Current Policy Context Can Motivate Further Payment And Care Delivery Reforms

There have been multiple recent policy changes supporting access and quality of perinatal care. For example, postpartum coverage has been extended temporarily through the [moratorium](#) on Medicaid disenrollment, and states now have the option to extend postpartum coverage up to [12 months](#) to support ongoing perinatal care through the American Rescue Plan Act. Medicaid and commercial payers are increasingly enabling access to [doulas](#), who provide culturally sensitive, patient-centered support and advocacy to birthing people throughout pregnancy and the postpartum period, which has shown to improve pregnancy outcomes. And, the expansion of [telehealth](#) and remote care models during the COVID-19 pandemic highlighted the potential to rethink prenatal and postpartum care, helping people and families access care when and how they need it.

Recently, the Biden-Harris Administration shone a spotlight on poor maternal health outcomes and the inequities in outcomes by issuing a national [Call to Action](#) to reduce maternal mortality and morbidity and advancing a focus on health equity within the [Center for Medicare and Medicaid Innovation \(CMMI\)](#) and the [Centers for Medicare and Medicaid Services \(CMS\)](#). As part of the Call to Action, CMS proposed a new [policy](#) to create a “birthing friendly” hospital designation to encourage institutions to focus on equity, harm, and racism. The US Department of Health and Human Services (DHHS) recently announced over [\\$20 million in investments](#) to implement the [Biden-Harris Administration Blueprint for Addressing the Maternal Health Crisis](#) further signaling a deep commitment to improve health equity and reduce disparities in maternal and infant health. APMs serve as a vehicle to actualize the goals of the Biden-Administration’s Call to Action because they allow health care providers flexibility to care for the needs of the whole person, including social drivers of health.

### KEY TAKEAWAYS

**The increased attention on the maternal health crisis, along with recent policy changes and additional resources devoted to equity, make it an opportune time to revisit perinatal APMs to better integrate equity and move the needle on maternal health outcomes and inequities.**

<sup>1</sup> The perinatal period lacks a uniform definition, but this brief refers to the perinatal period as the time surrounding pregnancy, starting at conception and extending to a year postpartum.

## Current State Of Perinatal Payment Reforms

While the above policy changes are providing momentum for change in maternal health, more will be needed to address the deep-seated and multi-faceted challenges, which can range from access to obstetric care to coordination between obstetric and primary care.

One approach that has been used at the state level to advance maternal health is [perinatal bundles](#), which are advanced APMs ([HCP-LAN category 3](#)) that hold

an entity accountable for the cost and quality of care associated with the perinatal and immediate postpartum period, and theoretically care for the [infant](#). The payment structure for bundles gives providers more financial flexibility to cover services, based on their clinical judgment on appropriateness and need for driving improved health outcomes.

Existing perinatal bundles vary in the way they are designed (e.g., populations included, services covered), with [Table 1](#) illustrating this variation.

**TABLE 1** Examples of Perinatal Episode-Based Bundle Payment Models

Bundle	Populations Included	Covered Services and Duration of Coverage	Payment	Participation
<b>Tennessee Health Care Innovation Initiative Perinatal Bundle</b> <i>(Implemented in 2014)</i>	<ul style="list-style-type: none"> <li>Covers low to moderate risk pregnant people enrolled in Medicaid</li> </ul>	<ul style="list-style-type: none"> <li>Coverage begins 280 days prior to delivery and ends 60-days post discharge</li> <li>All pregnancy-related services, including: prenatal visits, lab tests, emergency department visits, professional and facility fees associated with delivery, and postpartum care</li> </ul>	<ul style="list-style-type: none"> <li>Providers receive fee-for-service payments that are reconciled retrospectively, with opportunity for gainsharing</li> <li>The reconciliation process is triggered by delivery</li> <li>Payment thresholds based on historical data for risk sharing</li> <li>Principal accountable provider is the provider responsible for delivery</li> </ul>	<ul style="list-style-type: none"> <li>Mandated participation for Medicaid providers; Commercial participation is voluntary</li> </ul>
<b>Colorado Health First Colorado Maternity Bundle</b> <i>(Implemented in 2020)</i>	<ul style="list-style-type: none"> <li>Covers pregnant people enrolled in Medicaid, including high-risk births</li> </ul>	<ul style="list-style-type: none"> <li>Coverage begins 280 days prior to delivery and ends 60-days post discharge or birth</li> <li>Includes prenatal, labor and delivery, and postpartum care</li> <li><a href="#">Includes</a> substance use disorder services</li> </ul>	<ul style="list-style-type: none"> <li>Providers receive fee-for-service payments that are reconciled retrospectively, with opportunity for gainsharing</li> <li>The reconciliation process is triggered by delivery</li> <li>Principal accountable provider is either the perinatal provider who delivers the baby or provides prenatal services</li> <li>Thresholds based on the 2 previous years claims data</li> <li>Upside-only risk for the first year of implementation, providers move to downside risk year 2</li> </ul>	<ul style="list-style-type: none"> <li>Medicaid participation only and participation is voluntary</li> </ul>
<b>Blue Cross Blue Shield of North Carolina Pregnancy Bundle</b> <i>(Implemented in 2022)</i>	<ul style="list-style-type: none"> <li>Includes all types of births, regardless of whether the pregnancy is viewed as high or low risk</li> </ul>	<ul style="list-style-type: none"> <li>Covers prenatal care, labor and delivery, and two months of postpartum care</li> </ul>	<ul style="list-style-type: none"> <li>Retrospective payment with opportunity for gainsharing</li> <li>Upside-only risk for first 2 years of implementation</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary participation for providers in Blue Cross NC network</li> </ul>

Limited [evidence](#) exists on the effect of bundles on pregnancy and maternal health outcomes, partially because many models are recently implemented (or pre-implementation) and therefore have not yet been evaluated. The evidence that does exist is mixed. For example, the Tennessee Health Care Innovation Initiative Perinatal Bundle, one of the more mature bundles, shows [reductions](#) in spending and an increase in prenatal group B streptococcus screening rates, but does not show meaningful changes to cesarean delivery rates.

There are multiple challenges in evaluating bundled payment models. One challenge is that a common practice for a fully bundled maternity payment is to submit a single claim after delivery. For many health

care episodes, administrative claims data are used to judge health care quality and outcomes, such as seeing whether clinical guideline-recommended clinical services were delivered or whether clinical services associated with poor outcomes occurred. However, the single claim approach does not allow for analyzing claims data this way, which limits the evidence on pregnancy and maternal health outcomes. Even when claims data can be used, most existing evaluations of perinatal bundles [focus](#) on performance measures such as spending, care processes, and limited pregnancy outcome measures (such as rates of early elective delivery, vaginal delivery and cesarean delivery), but not on patient experience or broader maternal health outcomes like morbidity and mortality.

## KEY TAKEAWAYS

- Bundled payments are becoming one of the dominant APMs for perinatal care.
- Limited evidence exists on the ability of bundles to improve maternal health outcomes and perinatal equity, pointing to a need for additional evaluations of perinatal bundles that move beyond process measures to focus more on outcomes and the experience of care for birthing people.
- Current evidence suggests perinatal bundles can be a useful tool in encouraging action in pregnancy care, but their current implementation may not drive transformative improvements in maternal health outcomes and reducing disparities.

## Adapting Perinatal Bundles To Improve Equity And Maternal Health Outcomes

Given the modest impact that perinatal bundles have had to date, especially on improving equity, this section outlines strategies that payers and providers can implement to overcome the current limitations of perinatal bundles to better serve birthing people.

**Develop multi-payer approaches to perinatal bundles.** Perinatal bundles vary greatly, and there can be multiple perinatal bundles operating simultaneously by different payers. Unaligned models may limit participation among

diverse provider types and organizations, particularly safety-net organizations with more limited resources to establish payer-specific workflows.

### Leverage Postpartum Coverage

Existing bundles covering birthing individuals enrolled in Medicaid in states that have extended Medicaid postpartum coverage, as authorized by the [American Rescue Plan Act](#), should align the duration of the bundle to a full year after birth.

To maximize the impact on health outcomes, states and regions should identify opportunities for alignment across Medicaid and commercial APMs. Alignment could be the traditional deep variety, seeking alignment on all APM components, or directional, such as broadly similar models with common quality measures, data sharing, and technical assistance. There are opportunities to involve employers and other purchasers in alignment efforts, as they finance much of commercial health insurance and have interests in a healthy workforce. Given Medicaid's dominant role supporting births, states could drive alignment by inviting commercial plans to engage in alignment discussions and leveraging contracting mechanisms for Medicaid health plans. CMS can encourage alignment through template 1115 waivers to facilitate state Medicaid innovation in new payment models.

**Extend the duration of bundles into the postpartum period.** Over half of pregnancy-related deaths occur postpartum. Most bundles cover only 60 days of postpartum care, but close to [12 percent](#) occur between 43 and 365-days postpartum. For example, [one study](#) found that almost half of deaths from cardiomyopathy for pregnant people occurred between six weeks and a year postpartum. This underscores the importance of [extending health care access](#) through 12 months postpartum as well as expanding care beyond the traditional obstetrics team to include primary care services.

**Incorporate the infant in the bundle.** Although most bundles do not currently include the infant, some models are beginning to consider incorporating a period of pediatric care. Caring for the birthing parent-baby dyad is important for [establishing](#) the foundation of health for the [birthing parent and infant](#). The Bree Collaborative [recommends](#) including 30 days of post-birth pediatric care to enhance a family-centered approach to care.

However, a notable challenge for incorporating the infant in the bundle is data linkages both for providers at the point of care (provider-to-provider data exchange) and for payers focused on model implementation (linking birthing parent to infant in administrative claims to assess health care quality and cost). Some states are exploring linkages through birth certificate data, but these data can take longer to process and acquire, limiting applicability to payment models.

## Leverage Community-Based Resources

[Cityblock](#) works with maternity care organizations to provide additional medical, care coordination, and social services to pregnant members through community-based partners, including teams hired from within communities and trained to be certified doulas.

**Increase access to care outside of facility-based settings.** Current models are structured to emphasize facility-based care. To improve health outcomes and address inequities, models need to meet the person where they are and support patient preferences (e.g., access to home visits, telehealth, birth centers) when the states' facilities regulations allow. Moreover, community-based models leveraging lactation consultants and community-based organizations, for example, have been shown to reduce disparities.

Increasing access to care outside of facility-based settings may require redefining the bundled payment to account for community-based services, providing technical assistance and upfront resources to care delivery organizations to invest in workforce to deliver care in the community, or providing guidance on how to partner with community-based organizations to provide additional wraparound services.

**Integrate behavioral health and social drivers of health interventions.** Behavioral health conditions are associated with [higher rates of severe maternal morbidity and contribute to higher birth costs](#), but based on our inventory of existing bundles, behavioral health services have not been consistently integrated into perinatal care. (At present, perinatal bundles focus on traditional pregnancy-related services – prenatal care, labor, and delivery.) Importantly, substance use disorders were [increasing](#) among pregnant people prior to the COVID-19 pandemic, which, coupled with the pandemic's impacts on mental health, highlight the urgent need to integrate behavioral health services in perinatal care.

Further, research indicates that social drivers of health have implications beyond the perinatal period and [perpetuate disparities](#) across the lifespan. Yet few perinatal bundles include social drivers interventions.

To provide holistic perinatal care, perinatal bundles should encourage engagement of behavioral health providers and community-based organizations to provide services that address social drivers of health. [CMMI's Maternal Opioid Misuse \(MOM\) model](#) provides an example for how to support coordinated and integrated care delivery for physical health care, behavioral health care, and critical wrap-around services.

**Encourage expansion of the perinatal workforce.** At present, many states and private payers [do not encourage](#) the use of important perinatal providers, including midwives and doulas. Doulas can be a critical part of a care team that can help provide whole-person care and address social drivers of health, [improving health](#)

[outcomes](#) for pregnant people. Midwives also can provide a holistic experience, with midwifery associated with [reduced](#) clinical interventions during labor and decreased cesarean births. Not only does expanding the perinatal workforce increase access, but midwives and [doulas](#) can also share lived experiences with the patients they serve, provide health education, promote healthy lifestyles, and advocate for birthing people served by perinatal bundles. Perinatal bundles could directly invest in the perinatal workforce by establishing cost benchmarks that encourage the provision of services by midwives and doulas or could partner with organizations like Cityblock to leverage community resources, including doulas.

## KEY TAKEAWAYS

- At present, efforts to address equity within perinatal bundles are limited.
- Perinatal bundles can be modified to have a bigger impact on equity and maternal health outcomes, such as by extending the duration of the episode for postpartum care, increasing access to community-based resources, and encouraging participation across diverse provider types and organizations.

## Linking Bundles To Primary Care Population-Based Payment Models Can Better Address Equity In Maternal Health

On their own, perinatal bundles have limitations in improving maternal health outcomes and addressing persistent maternal health disparities. While there are modifications that can improve their impact, their effectiveness can be substantially increased when paired with broader population-based payment models, such as accountable care organizations (ACOs). Population-based models encourage a whole-person approach, with coordination across all the health needs birthing people have.

There is a clear need for this whole person approach. In a recent [report](#) from the Commonwealth Fund, people

of reproductive age were among the most likely to have two or more chronic conditions, yet were likely to skip or delay care because of costs. Moreover, [studies](#) have found that compared to white individuals, people of color are less likely to access primary care after a year postpartum, regardless of whether they are covered by Medicaid or commercial insurance. Gaps in care for birthing people could be addressed in part through better linkages to high-quality and culturally-sensitive primary care supported by population-based payment models.

Linking perinatal bundles to population-based primary care models leverages evidence showing there are [reductions in spending and improved patient outcomes](#) when people are cared for through a combination of population-based models, like ACOs, and bundled payments. Furthermore,

experts posit that coordinating between bundles and population-based payment models [could catalyze reform](#) by supporting innovative partnerships between primary care and perinatal providers.

Importantly, a perinatal bundle linked with primary care population-based models establishes accountability for outcomes across the life course. For example, under such a model, a primary care-focused ACO will be incentivized to enhance preconception care, which is crucial for [optimizing](#) the health of the birthing person and the fetus during pregnancy. Further, it [strengthens](#) care coordination efforts between perinatal and primary care providers, especially for chronic condition management, and builds relationships that serve to address the long-term needs of birthing people and their families. Linking a perinatal bundle as a “maternity wrap” to a primary care population-based payment model will also provide access for birthing individuals to expanded services for

the perinatal period that are associated with better health outcomes, such as telehealth, care management services, interdisciplinary care teams (e.g., including doulas and midwives), and wraparound services (e.g., interventions to help address social drivers of health).

### Strategies and Considerations for Linking Perinatal Bundles and Primary Care Population-Based Models

There are multiple [strategies for coordinating](#) bundles and population-based payment models, which can be adapted for perinatal health, with **Table 2** outlining different approaches in order of increasing financial integration. As financing becomes more integrated, there are more opportunities for flexible care delivery that can be responsive to an individual’s needs.

**TABLE 2** Strategies for Coordinating Perinatal Bundles with Primary Care Population-Based Models

Coordination Strategy	Description of Strategy
<b>Contractual Requirements for Health Plans or Provider Organizations</b>	One option is to have a contractual obligation to coordinate care (e.g., referral protocols and care transitions) between the primary care population-based model and the principal accountable provider of the perinatal bundle (e.g., OBGYN or midwife). Payment is separate and flows directly to each entity without common financial accountability. Such an arrangement may be more feasible within Medicaid, as states can include care coordination requirements in their managed care contracts; however, commercial plans could elect to include similar provisions in their contracts with perinatal providers.
<b>Purchased Service Model</b>	This model occurs when one entity “purchases” or outsources services to the other. Within the context of perinatal care, the primary care population-based model could contract with a perinatal provider via a bundled payment to provide perinatal services. Under this arrangement, each payment model would have separate spending and outcome targets, but the primary care provider would have an interest in improving health outcomes.
<b>Gainsharing Model</b>	Under this model, the entities responsible for perinatal care and overall population health are eligible for savings if both successfully meet cost reduction and quality thresholds. Both entities take on risk, though the degree of risk depends on who is the principal accountable provider of the birthing individual and the structure of the relationship between the two entities. Gainsharing models require a shared commitment to ensure coordination across the care continuum.
<b><a href="#">Blended Accountability Model</a></b>	Under this model, savings and quality improvements for the perinatal episode are shared between the entity responsible for the perinatal bundle and the population-based model. The population-based model is adjusted so there are not disincentives for participating in both an episode-based model and population-based model.

## Design Considerations for Linking Bundles and Population-Based Models

To establish a link between bundles and population-based primary care models, ACO models need changes to their design. For example, people are traditionally attributed to ACOs based on where they receive the [plurality](#) of primary care services, but some birthing people may not have eligible primary care claims outside of the pregnancy and immediate postpartum period, making it important to determine how those birthing people can be part of the ACO. In the [Medicare Shared Savings Program](#), the largest ACO program, an obstetrician may be an attributing provider if a person cannot be attributed from their primary care utilization. However, the attribution methods for Medicaid and commercial ACOs may differ from Medicare, and there is less visibility into many of their attribution methods. It will be important to verify that pregnant people are not excluded from ACOs because their providers are not eligible to attribute patients or their utilization patterns are not eligible for attribution. ACOs could also explore formal partnerships with perinatal providers to improve coordination and improve access to primary care services.

Key considerations and investments needed for coordinating a perinatal bundle with a primary care population-based payment model to improve equity and maternal health outcomes include:

- **Investing in data infrastructure.** Linking perinatal bundles with population-based models will [require](#) the collection and sharing of actionable data to facilitate seamless and high-value referrals, care coordination, and addressing any emerging issues (which could be first identified in an emergency department visit). However, limited perinatal care data are observable in claims under the bundled payment models operated by commercial health insurers, which can limit an understanding of provider quality for referrals.

For care coordination, it is important to establish alternative, standardized data flows between providers, health systems, payers, and state-federal exchanges. This could be done through health information exchanges; admission, discharge, and transfer (ADT) feeds, and federated data sharing approaches. Additional data elements that are critical to share

between pediatric and perinatal care providers include maternal depression score, delivery complications, and newborn care complications.

Data flows should also include standardized race, ethnicity, and language data necessary for identifying and intervening on longstanding inequities in maternal health outcomes.

- **Supporting independent and rural providers.** Smaller and under-resourced organizations like Federally Qualified Health Centers (FQHCs) often need upfront capital to participate in value-based payment models. [Research](#) suggests upfront infrastructure investments are needed to enhance independent providers and rural providers' engagement with these models and in turn ensure systematic and quality coverage of birthing people. This will be critical to encourage participation among diverse provider organizations and prevent inequities in care delivery and poor health outcomes due to lack of access to providers, health care facilities and culturally-sensitive care. The recent Medicare [Physician Fee Schedule](#) rule changes proposed by CMS aim to increase access to ACOs and advance equity through policies, such as advance pay and benchmark changes. If other payers follow Medicare's lead, these policies could help ACOs that serve underserved populations.
- **Considering mandatory participation.** As more evidence is gathered on the effect of bundles in particular on pregnancy and maternal health outcomes, it will be important to consider a glidepath to mandatory participation. Voluntary participation in APMs like ACOs or perinatal bundles may limit engagement of diverse provider types and organizations in the payment models, inclusion of high-risk pregnancies, and care innovation. Organizations opting to participate in voluntary models may have greater opportunities to capture cost savings because they are better-resourced organizations or serve a patient population with higher socioeconomic status. Payers can examine whether [mandatory participation](#) can facilitate increased coverage and access. Medicaid programs and commercial plans can phase in mandatory participation and provide financial and technical supports particularly for small, independent, or under-resourced providers.

- **Expanding access and building an adequate perinatal workforce.** Opportunities to expand access include investing in the perinatal workforce, leveraging telehealth for behavioral health providers, and engaging safety-net providers. FQHCs provide primary care services across the life course, as well as perinatal health services, in underserved areas and should be considered a [key partner](#) in improving health outcomes for birthing people.

It is important to note that insurance coverage greatly influences the impact of a linked primary care population-based model and a perinatal bundle. For instance, these

linkages may be easier to implement in commercial markets where coverage is often more continuous. Medicaid enrollment churn leading to uninsurance, which is more prevalent in states with lower income eligibility thresholds, complicates improving maternal health outcomes. It is estimated that nearly [60 percent](#) of birthing individuals enrolled in Medicaid or the Children's Health Insurance Program (CHIP) had a gap in coverage in the six months prior to giving birth. However, the new state option to expand Medicaid eligibility up to one year postpartum presents a new opportunity to invest in a model that links a perinatal bundle and primary care ACO.

## KEY TAKEAWAYS

- To better address persistent disparities, including birthing people's overall health, there is a need for more holistic payment for perinatal care beyond the pregnancy episode.
- Linking perinatal APMs to serve as a "maternity wrap" with broader population-based payment models can better address longitudinal care and health equity by strengthening care coordination efforts and building relationships to serve the long-term needs of birthing people and their babies.
- To ensure successful linkages, the bundled and population-based payment models must be designed to account for unique perinatal attribution, data capabilities, and care coordination.

## CONCLUSION

Past state and federal policy changes and APM designs have helped expand access to pregnancy care and improve maternal health outcomes but have not done enough to address persistent and worsening inequities. Addressing inequities in maternal health outcomes requires identifying and intervening on structural causes of inequities, including access to longitudinal, culturally sensitive, and person-centered care. The changing policy environment around [reproductive health](#) in the United States, particularly with the overturning of *Roe v. Wade*, will likely significantly increase the need for access to quality perinatal care and action to address inequities in maternal mortality rates. By linking a perinatal bundle with a primary care population-based model, providers would be able to focus on the health and social needs of the whole person leading up to, during, and after pregnancy.

## Acknowledgements

We would like to thank the individuals and organizations who interviewed with us during our information gathering stage for this issue brief. They provided crucial insight as well as answered key questions we had, and we greatly appreciate their time and contributions to this work. The viewpoints expressed in this brief do not necessarily reflect the viewpoints of the individuals interviewed nor their organizations. This issue brief was made possible from the contributions of several people, including:

---

### **Karen M. Dale**

CEO AmeriHealth Caritas DC and Chief Diversity, Equity and Inclusion Officer AmeriHealth Caritas Family of Companies

### **Erin Taylor, MPH**

Senior Consultant, Bailit Health

### **Soyini Abdul-Mateen**

Principal Product Developer, Blue Cross and Blue Shield of North Carolina

### **Sarah Davis, MPH**

Senior Strategic Advisor, Blue Cross and Blue Shield of North Carolina

### **Shaunteria Scott, MHA**

Principal Program Manager, Blue Cross and Blue Shield of North Carolina

### **Priti Khanal**

Senior Program Officer, Center for Health Care Strategies

### **Karla Silverman**

Associate Director, Complex Care Delivery, Center for Health Care Strategies

### **Deirdra Stockmann**

Acting Director, Division of Quality and Health Outcomes, Center for Medicaid & CHIP Services, CMS

### **Kristen Zycherman**

Maternal and Infant Health Initiative lead, Center for Medicaid & CHIP Services, CMS

### **Nick Fiore**

Senior Associate, Market Operations, Cityblock Health

### **Tanya Alteras**

Senior Director, Health Care Transformation Task Force

### **Anna Kemmerer**

Associate, Health Care Transformation Task Force

### **Jennifer N. Sayles, MD, MPH**

Executive Consultant, Kaiser Permanente

### **Allison Bryant, MD, MPH**

Senior Medical Director for Health Equity, Mass General Brigham

### **Elizabeth Howell, MD, MPP**

Harrison McCrea Dickson President's Distinguished Professor Chair, Department of Obstetrics and Gynecology, Perelman School of Medicine, University of Pennsylvania Health System

### **David Johnson**

Former Medical Director of Value Transformation, BCBSNC at the time of the contribution to this work. Currently, Clinical Operating Partner, Rubicon Founders

---

We would like to thank members of our broader research team for strategic guidance and support, including Patricia Green.

Dr. Robert Saunders has a consulting agreement with Yale-New Haven Health System for development of measures and development of quality measurement strategies for the Innovation Center Alternative Payment Models under CMS contract No. 75FCMC18D0042/Task Order No. 75FCMC19F0003, "Quality Measure Development and Analytic Support," Option Year 2. He also been an external reviewer for The John A. Hartford Foundation, and he is a co-chair for the Health Evolution Summit Roundtable on Value-Based Care for Specialized Populations.

Support for this brief was provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation. We would like to acknowledge specific support and interest from Katherine Hempstead, PhD.

---

### **About the Robert Wood Johnson Foundation**

For more than 45 years the Robert Wood Johnson Foundation has worked to improve health and health care. We are working alongside others to build a national Culture of Health that provides everyone in America a fair and just opportunity for health and well-being. For more information, visit [www.rwjf.org](http://www.rwjf.org). Follow the Foundation on Twitter at [www.rwjf.org/twitter](https://www.rwjf.org/twitter) or on Facebook at [www.rwjf.org/facebook](https://www.rwjf.org/facebook).

---

### **About the Duke Margolis Center for Health Policy**

The mission of the Robert J. Margolis, MD, Center for Health Policy at Duke University is to improve health, health equity, and the value of health care through practical, innovative, and evidence-based policy solutions.

The Duke-Margolis Center for Health Policy values academic freedom and research independence, and its policies on research independence and conflict of interest are [available here](#).

For more information, visit [healthpolicy.duke.edu](http://healthpolicy.duke.edu) and follow us on Twitter @DukeMargolis.

For more information about this brief, please contact: Brianna Van Stekelenburg at [brianna.van.stekelenburg@duke.edu](mailto:brianna.van.stekelenburg@duke.edu).