



Rising Risks, Renewed Resolve

*5 Trends Impacting Maternal
& Infant Health in 2023*

Women, Infants, & Families:

Mitigating risks and advancing equity in 2023

Pregnancy and childbirth are an increasingly perilous journey for American women and infants. The U.S. maternal mortality rate, which has been inching upward over the past two decades, **spiked dramatically**¹ in recent years—and is now three times the rate of most other high-income countries. The number of preterm births hit a 15-year high in 2022, with **more than 1 in 10²** babies delivered at least three weeks early. Rates of pregnancy complications, childbirth complications, and NICU stays—along with the healthcare utilization and spend associated with such events—follow similarly alarming trends.



19.1

deaths per 100,000 for White women in the U.S.¹



55.3

deaths per 100,000 for Black women in the U.S.¹



10.5%

U.S. infants born preterm in 2022 for the fourth year in a row.²

The rising risks that dominate the maternal and infant health landscape are tied to an intricate mix of factors, ranging from political and regulatory shifts to economic pressures to healthcare workforce shortages, systemic bias leading to a loss of trust among communities of color, and unhealthy lifestyle habits exacerbated by the pandemic. But against the backdrop of rising risks, the year ahead holds potential bright spots.

Stakeholders across the healthcare ecosystem are embracing novel solutions, pressing for more equity-minded practices, and funding both research and initiatives to turn the tide on worsening risks for maternal and infant health outcomes.

In the pages that follow, ProgenyHealth explores five major trends impacting the maternal and infant health landscape—and what this climate of rising risks means for patients, providers, and payers.

SDoH Data Tracking:

Health equity emphasis fuels momentum for SDoH data-tracking and measurement

There's little question that the quality of air people breathe, the food they eat, the resources they can access, and the safety of where they live and work all play a major role in their mental and physical health. That's no less true during pregnancy and infancy, with *American Journal of Obstetrics & Gynecology*³ research showing a strong association between infant mortality risk and social determinants of health (SDoH), particularly maternal high school completion, maternal marital status, and prenatal care. Other *research*⁴ has found that infants born during a period of unstable housing have higher rates of low birth weight, longer NICU stays and more emergency department visits—and the higher prevalence of certain health conditions, compared with their stably-housed counterparts, can persist for years.



Yet tracking SDoH within healthcare settings has long been hampered by a lack of guidance on how to standardize SDoH data collection, as well as a lack of resources to make that data collection happen. The good news? This may well be the year those twin hurdles are cleared.

For the first time, hospitals will be required to report SDoH screening results as part of the Centers for Medicare and Medicaid Services' (CMS) **Hospital Inpatient Prospective Payment System rule**⁵ in 2023. CMS also added 19 new SDoH-related **Z codes**⁶ in late 2022 to help providers track non-clinical factors that can influence patients' health, such as lacking a high school diploma, food insecurity, and homelessness.



A Blueprint for Change

The White House Blueprint for Addressing the Maternal Health Crisis, released in **June 2022**⁸, sets its sights on data standardization, transparency, research, and analysis as major goals for the future. Specific initiatives include:

- Expanding Maternal Mortality Review Committees (MMRC), which review maternal deaths during or up to one year after pregnancy, to all 50 states.
- Including an SDoH supplement for the first time to the CDC's Pregnancy Risk Assessment Monitoring System, which collects women's experiences before, during and shortly after pregnancy.

Collective SDoH data will offer greater insight into the non-clinical factors impacting specific patient populations and will assist healthcare stakeholders in improving access to and coordination of both maternal and infant care.

While a great first step, there is still a significant amount of work to be done. As many as 60% of providers say they lack the resources to address their patients' SDoH issues, a **2022 Physicians Foundation survey**⁷ found. What would help them better serve their patients? Physicians cite more investment in community resources, patient screening, financial incentives for physicians and patients, and including SDoHs in risk scoring as ways to effectively address their patients' social needs.



80%

of the factors that influence health outcomes are non-medical.⁸



60%

of providers say they lack the resources to address their patients' SDoH issues.



Bright Spot

Effectively addressing SDoH barriers means marrying one-on-one patient assessments with skilled collaboration and coordination across multiple clinical disciplines and departments. Baby Trax®, ProgenyHealth's purpose-built platform for medically complex infant care, integrates SDoH data, case management, utilization management, and clinical best practices to support clinical workflow and flag inconsistencies through real-time predictive analytics. Case managers both conduct a family-needs assessment and continue to assess the ongoing needs of the infant throughout the first year of life—including proactively connecting members to community resources that can address SDoH barriers.

Actionable Insights

ProgenyHealth developed **An Unfair Fight** with SDoH top of mind. The detailed report lays out key guidelines that healthcare providers, policymakers and payers can use to reduce the impact of systemic bias on maternal and infant health outcomes.

Takeaway

While healthcare providers have long tracked SDoH data, the federal government is focusing on sorely needed national guidelines for standardizing, incentivizing, and supporting data collection.



Maternal Health Care Access:

Despite attention and investments, maternal health access challenges will persist

Despite the recent focus on maternal health, access will likely become tougher in 2023, driven by legislation challenges, increasing healthcare costs, and widening maternal care deserts, particularly in rural areas.

In 2023, U.S. employers expect their healthcare costs to increase by **6%**⁹, and nearly one-quarter of those organizations plan to shift some of those costs to their employees, per a 2022 Willis Tower Watson survey. McKinsey research shows that if conditions don't change, Americans with commercial insurance could wind up spending **70% to 75%**¹⁰ of their discretionary income on medical expenses, an unsustainable cost for many workers.

Making matters worse, millions of Americans may lose Medicaid coverage as soon as April 2023 when a ban that previously prevented state Medicaid agencies from disenrolling people expires. This change coincides with the gradual step-down of public health emergency (PHE) funds that states are receiving for expanded Medicaid coverage. A legal **challenge**¹¹ to the Affordable Care Act's preventive healthcare coverage could also eliminate the mandate that insurers cover certain preventive health care services such as contraception access and behavioral health treatment without cost sharing. If struck down, private insurers and employers would decide which preventive services are covered and if they will pass that cost onto consumers, making access harder for groups such as low-income people.

Financial access to health care, however, isn't the only issue. Roughly **2.2 million**¹² women live in maternity care deserts—areas with no OB-GYNs, certified midwives, birthing centers or hospitals that provide obstetric care. Rural communities in particular are feeling the squeeze, as cost pressures, talent shortages, and demographic shifts are driving the closure of many maternity wards. **Less than half**¹³ of rural counties have a practicing OB-GYN.

What's Being Done:

Myriad efforts are being made to diversify and expand the perinatal workforce as well as to increase affordable maternity care access at the local level.

- Several **states have expanded**¹⁴ the type of care that nurses and midwives can administer without physician supervision. **Research shows**¹⁵ that these states have lower rates of preterm births and C-section deliveries.
- Many states are also considering or implementing Medicaid reimbursement for doulas. Doula care is connected to lower Medicaid costs, improved birthing experiences, and better birthing outcomes for people of color.
- Multiple states have expanded Medicaid access from 60 days postpartum to 12-months postpartum. That's critical, considering that 53% of all pregnancy-related deaths happen **one week to one year**¹⁶ after delivery.
- The federal government's 2023 Omnibus Funding Bill includes **\$324 million**¹⁷ toward improving maternal and infant health, **including**¹⁸ a \$3 million increase for maternal depression screening and treatment and a \$17 million increase for the Office of Research on Women's Health.



50%+

of women living in rural communities must travel 30 minutes or more to an obstetric hospital. Longer travel times are associated with a higher risk of infant death and pregnancy complications.¹⁹



Bright Spot:

There are opportunities to provide solutions in the maternal care landscape by:

- Rapidly deploying newly funded programs to focus on building trust in communities of color.
- Leveraging expanded care provider networks and community health workers to connect individuals with community resources.
- Increasing benefits to include access to critical services including transportation, nutrition, and education.

Takeaway:

The increasing cost of healthcare, looming court decisions, and a dearth of maternal care options, particularly in rural areas, could decrease maternal healthcare access in 2023.

Pregnancy Risk Factors Rising

The long tail of the pandemic has amplified alarming health trends

Rates of certain pregnancy risk factors have been inching upward for years, due in part to shifts in many Americans' lifestyle habits, increasing maternal age, and a greater prevalence in preexisting chronic conditions. The COVID-19 pandemic has also accelerated and amplified those rising risks in ways that researchers are still working to fully understand.

Preeclampsia has spiked since 2019, both in terms of the number of women impacted and the severity of preeclampsia cases. Lifestyle factors associated with the pandemic—including less physical activity, heightened stress, and an uptick in smoking—may be at play. But **research**²⁰ has also found that COVID-19 infections increase a woman's risk for preeclampsia almost two-fold. For women with pre-existing conditions such as obesity, diabetes and chronic hypertension, a COVID-19 infection elevates the risk of preeclampsia fourfold.

The CDC's first **analysis**²¹ of national trends in **gestational diabetes** also found a worrisome trend, with prevalence of the condition jumping 30% between 2016 and 2020. While no one factor is solely to blame, experts point to higher rates of depression and higher pregnancy weight gain, both of which have worsened during the pandemic.



30%

increase of gestational diabetes in pregnant women between 2016 and 2020.

And, indeed, **2022 cross-sectional analysis**²² of more than 7 million births since 2018 revealed gestational weight gain increased during the pandemic, as did risk of excessive gestational weight gain. Not all populations were impacted equally, either. The analysis found that Black individuals and those using Medicaid to pay for delivery were particularly vulnerable.



Black women, and many other individuals of color, bear the dual burden of higher risk of adverse pregnancy health issues and of experiencing adverse health outcomes from those conditions. **Hypertension** in Black women, for instance, is more frequently associated with morbidity and mortality than White women with hypertension—particularly in the postpartum period. Researchers have **noted**²³ that systemic racism, lack of access to health care services and poor quality of care may contribute to these disparities.



7 MILLION

births since 2018 revealed gestational weight gain during the pandemic.



Here, too, risks are rising. A **2022 *Circulation* study**²⁴ found that blood pressure levels significantly rose during the pandemic for both men and women, with the researchers theorizing that pandemic-associated increases in alcohol consumption and stress, along with delayed or less available medical care, likely playing a role. The rising risk of hypertension can be a matter of life and death for pregnant women, with hypertensive disorders affecting 1 in 7 hospital deliveries, per the **CDC**²⁵. The agency estimates that roughly one-third of those who died during hospital delivery had a documented history of hypertensive disorder of pregnancy.



1 in 7

hospital deliveries resulted in the mother having a hypertensive disorder.

Takeaway:

While the intensity of the early pandemic may have receded, its influence on pregnancy risk factors is only just coming into focus.

High-Tech Meets High-Touch Care:

Virtual and hands-on care will settle into a better balance

Telehealth was a vital tool during pandemic-related lockdowns. Fast-forward three years, and telehealth seems here to stay. But predictions about high-tech offerings replacing in-person appointments entirely have not borne out. Instead, high-tech care and high-touch care are increasingly operating in symbiosis, with many healthcare organizations incorporating both into a more holistic and comprehensive ecosystem of maternal and infant health.

That high-tech care is here to stay is good news on multiple fronts. For one, virtual, remote monitoring and data connectivity insights are critical tools that can allow for earlier interventions by clinical teams. AI-driven algorithms can help spot patterns humans miss—as well as remove some human bias from the application of health care. And telehealth has helped expand healthcare access for many. Health-focused apps, for one, have provided unparalleled reach, putting information literally at people's fingertips. And **studies**²⁶ also suggest that using telemedicine to supplement in-person perinatal care results in higher patient satisfaction and lower patient stress, compared with in-person appointments alone.



However, telehealth is not a substitute for high-touch care. While it's useful in targeted situations, such as monitoring high-risk pregnancies, **research shows**²⁷ it hasn't improved maternal morbidity rates. Perhaps more significantly, simply accessing and effectively utilizing high-tech offerings can be a challenge for many. Rural and low-income communities often lack access to broadband internet. And both language barriers and lack of digital fluency **can blunt**²⁸ the impact of virtual care. As researchers noted in a 2022 *Georgetown Medical Review* **study**²⁹ on pregnancy, health equity, and digital healthcare, "Creating more options for how patients can engage with their health care providers is imperative."



80%

Wearable devices can be a useful and unobtrusive early indicator of maternal health concerns, a new study suggests. By tracking their activity levels, heart rate and sleep patterns, researchers predicted with 80% accuracy which participants were at high risk to develop depression.³⁰

To that end, 2023 may well see more payers and providers utilizing systems that incorporate virtual care while still investing in high-touch, in-person care. For its part, the Biden Administration is **doubling down**³¹ on human solutions that include investments in the hiring, training, and deploying of more physicians, certified nurse midwives, doulas and community health workers, and encouraging insurance companies to cover doula services.



Bright Spot:

Mobile apps and telehealth services can be powerful tools—if a member has the health literacy and digital fluency to make use of them. ProgenyHealth pairs tailored tools with human guidance—buoyed by translation services, as needed—to help equitably ensure access to simple but transformative tasks such as downloading and using perinatal education apps.

Takeaway:

Now that telehealth is a choice, not a must, innovative approaches are emerging that weave virtual care into the in-person care experience, promising to not only address the supply and demand imbalance but also reduce barriers to access.

Maternal Mental Health:

The crisis continues—and the fallout will be felt for years to come

Mental health conditions sky-rocketed during the pandemic, but the surge has been even stronger among perinatal individuals. A cross-sectional **study**³² from the Harvard T.H. Chan School of Public Health found that pregnant and postpartum people experienced increased levels of depression, anxiety, and post-traumatic stress at rates significantly higher than the general population. The country's current maternal mental health crisis comes at a real cost. Annual delivery hospitalizations are **\$102 million more**³³, in total, for Americans with perinatal mental health conditions compared with those without a mental health condition.

Mental health disorders also increase the risk of severe maternal morbidity by 50%, **researchers**³⁴ estimate, with a diagnosis of trauma- or stress-related mental health disorder increasing the risk by 87%. Even after birth, a mother's mental health has a profound impact on the health and wellbeing of the infant. A meta-analysis in the **Journal of Affective Disorders**³⁵ found that depression or elevated depressive symptoms during pregnancy are associated with higher likelihood of both hospitalization of infants and death of infants within the first year of life.

Even getting a diagnosis can be a challenge for many. While the American College of Obstetricians and Gynecologists has long recommended that all pregnant people be screened for depression and anxiety, data released by the Healthcare Effectiveness Data and Information Set (HEDIS), for the first time in 2022, found that just 20% of women receive such screenings.



20%

of pregnant women receive screenings for depression and anxiety.

The risks are particularly acute for women of color. Studies show that Black women experience an even **higher prevalence**³⁶ of maternal mental health conditions. They're also far more likely to have their symptoms go untreated, according to a 2021 analysis in **BMC Pregnancy and Childbirth**³⁷. Still other **research**³⁸ found that treatment engagement for perinatal depression remains consistently lower among non-White groups than White individuals.



As the maternal mental health crisis persists, stakeholders in all corners of the healthcare ecosystem are taking action. For health systems and hospitals, the **American Hospital Association**³⁹ recently rolled out a series of tools and resources specifically aimed at helping them address maternal mental health. In 2022, the U.S. Health and Human Services Department launched a **Maternal Mental Health Hotline**⁴⁰ for new and expecting mothers experiencing mental health issues to speak or text with counselors free of charge. The hotline fielded more than 5,000 calls and texts in its first six months, mainly from postpartum parents.

Also last year, the HHS **appointed**⁴¹ a head of women's mental health and substance use to work across the agency's portfolio and incorporate a mental health focus throughout federal programs that support pregnant and postpartum women, including Medicaid. And Congress approved the **Into the Light for Maternal Mental Health and Substance Use Disorders Act**⁴², which expands funding for state programs to address maternal mental health, including psychiatric consultation services for obstetric providers, resources and referral programs, and front-line provider training.



Maternal Mental Health

The American Hospital Association recommends these **key initiatives**⁴³ to prioritize and manage maternal mental health issues:

- Timely screening, assessment and intervention during pregnancy and the postpartum period
- Integrating mental health throughout all aspects of care
- Regularly surveying patients and their families about the quality of care they received
- Addressing the stigma around mental illness and mental health treatment
- Offering virtual mental health services and providing support groups for patients and their families

These recommendations represent a meaningful step forward in addressing the healthcare ecosystem's capacity to diagnose behavioral and mental health concerns and increase access to care.

The Power of Paid Parental Leave:

While almost all other high-income countries mandate paid maternal leave, the U.S. government has no such policy. In fact, just 15% of U.S. workers receive some sort of paid maternity leave from their employers and **25%**⁴⁴ of women return to work within two weeks of giving birth. That lack of paid leave, which particularly impacts low-wage workers and workers of color, also impacts the physical and mental health of women and infants. Mothers who receive paid leave **are less likely**⁴⁵ to report depressive symptoms, have lower stress levels and are more likely to breastfeed. Paid leave also results in fewer socioeconomic and behavioral problems for infants during toddlerhood.



25%

of women return to work within two weeks of giving birth.



15%

of U.S. workers receive paid maternity leave from their employers.

While there's unlikely to be any near-term movement on federal paid leave—and the number of organizations offering paid leave **dropped**⁴⁶ from 53% in 2020 to 35% in 2022—some large organizations are making moves in 2023. City of Chicago workers, for example, are **now eligible**⁴⁷ for 12 weeks of parental leave and the Pentagon has **also increased**⁴⁸ paid leave for military members to 12 weeks.



Takeaway:

Maternal mental health is an urgent—and potentially life-threatening—issue that is gaining attention at all levels, but will remain a challenge as access to providers lags behind demand, with many not accepting Medicaid patients.



Conclusion:

Taking a leading role

The coming year is likely to usher in a time of increased knowledge as data collection improves in the maternity and infant health care space, prompting additional insights about ways to impact healthcare inequities and looming risks to women's continuum of care. ProgenyHealth will continue to take a leading role in assisting mothers in having healthier full-term pregnancies and navigating unavoidable complex NICU and postpartum issues by focusing on SDoH disparities, interactive technology, and supportive care management from a team of medical experts.

Resolving this complex situation may be daunting, but the actions taken today may have a real impact in the future.

About ProgenyHealth

ProgenyHealth is the only national, tech-enabled women's healthcare company dedicated to Maternity and NICU Care Management. We serve women, infants, caregivers, and families through the milestones of maternal health — from conception and pregnancy to postpartum and parenting, with special expertise in managing premature and complex births and resulting NICU admissions.

Our industry-leading intelligent platform, Baby Trax™, integrates utilization management and case management, while also driving payment validation & assurance activities based on clinical data.

With more than 20 years of experience, our board-certified physicians, nurses, social workers and others, collaborate with providers to improve health outcomes, enhance the member and provider experience, and reduce costs for commercial health plans, Medicaid payers, and large employers.

For more information, visit progenyhealth.com

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