Action Plan for Maternal Health

Recommendations for Pennsylvania hospitals and policymakers to advance maternal health quality, equity, and access.

The Hospital + Healthsystem Association of Pennsylvania

Task Force on Maternal and Child Health

January 2025

At a Glance: Action Plan for Maternal Health

Ensuring access to high-quality and equitable maternal health care requires strong collaboration between the health care community, government, community organizations, patients and families, and other stakeholders. Developed by HAP's Task Force on Maternal and Child Health, these recommendations focus on what Pennsylvania hospitals and policymakers can do to:

Advance high-quality, equitable maternal health care.

Expand access to safe maternal care across the commonwealth.

Strengthen and diversify the perinatal and neonatal workforce.

HAP is committed to advancing these priorities by advocating for public policies and supporting Pennsylvania hospitals in achieving these recommendations.

The following recommendations are presented in greater detail throughout this report:

Advance high-quality, equitable maternal health care.

Hospitals

- ✓ Address leading factors in severe maternal morbidity and maternal mortality.
- ✓ Create and resource the infrastructure necessary to assess and improve health equity and address social determinants of health.
- ✓ Improve access to perinatal quality data.

Policymakers

- ✓ Expand access to doula care and community health workers.
- ✓ Expand Pennsylvania's maternal home visiting program to all eligible families in all 67 counties.
- ✓ Ensure comprehensive coverage and appropriate reimbursement for remote patient monitoring.

HAP can support these recommendations through advocacy and initiatives to:

- ✓ Collaborate with the PQC to support hospital engagement.
- ✓ Facilitate connections between hospitals, local health departments, and community organizations that provide resources for birthing people.
- ✓ Provide data and support to help hospitals assess obstetric care quality and equity to drive improvement.

Expand access to safe maternal care across the commonwealth.

Hospitals

- ✓ Connect patients with primary care well before potential pregnancy.
- ✓ Ensure all emergency departments are prepared to respond to obstetric emergencies.
- ✓ Collaborate with midwives to ensure safe community-based birth care and eliminate barriers to transfer.

Policymakers

- ✓ Evaluate and ensure payment adequacy to sustain access to labor and delivery services.
- ✓ Invest in increasing access to perinatal behavioral health care.
- ✓ Ensure hospitals have the flexibility to align staffing with patient needs and implement innovative care models.

HAP can support these recommendations through advocacy and initiatives to:

- ✓ Convene hospitals and other stakeholders to consider creative ways to staff and resource obstetric services in rural hospital communities.
- ✓ Engage statewide community stakeholders to improve collaboration, communication, and education around the care and transport of pregnant and postpartum people.
- ✓ Identify opportunities for a statewide obstetric simulation program.

Strengthen and diversify the perinatal and neonatal workforce.

Hospitals

- ✓ Implement innovative staffing models to extend the reach of obstetric providers.
- ✓ Leverage technology and create programs to attract and retain providers.
- ✓ Create and strengthen pipelines to recruit maternal health providers, including a focus on underrepresented communities.

Policymakers

- ✓ Address Pennsylvania's challenging medical liability climate to ensure providers remain in Pennsylvania to deliver care.
- ✓ Support programs and policies that enable the training of more maternal health professionals.
- ✓ Support policies that enhance the diversity of the maternal health workforce.

HAP can support these recommendations through advocacy and initiatives to:

- ✓ Connect hospitals, education programs, and workforce development organizations to build partnerships that develop maternal health professionals.
- ✓ Provide data and thought leadership to inform workforce development.
- ✓ Facilitate sharing of best workforce development practices among Pennsylvania hospitals.

HAP's Task Force on Maternal and Child Health

This action plan was developed by HAP's Task Force on Maternal and Child Health, a group of clinical and administrative leaders tasked with guiding initiatives that support hospitals in providing high-quality, equitable, and accessible maternal health care.

During 2023, HAP's Board of Directors identified maternal health as a priority area of focus for quality improvement efforts and public policy and authorized the task force's creation. The task force met five times to inform and develop the recommendations outlined in this report and also held a joint meeting with HAP's Committee on Public Payor Policy and the Pennsylvania Department of Human Services to inform a proposed Hospital Quality Incentive Program metric related to maternal health.

Shelly Buck, chair of HAP's Task Force on Maternal and Child Health, moderates a panel discussion focused on advancing maternal health equity during HAP's 2024 Leadership Summit.

Task Force Charge: HAP's Task Force on Maternal and Child Health will take a data-focused approach to improve maternal and child health outcomes and reduce disparities. This task force is charged with developing recommendations to the Pennsylvania Department of Human Services on the forthcoming maternal health quality improvement program policy and metric(s), identifying opportunities for quality improvement collaboratives, informing HAP's policy and advocacy agenda, and providing guidance on data analysis and benchmarking criteria.

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The work of the task force was supported by HAP staff and the expertise of Adriane Burgess, PhD, RNC-OB, C-ONQS, CPHQ, C-LSSGB, FAWHONN, of Perinatal Quality Consultants, who has extensive background in perinatal quality, improvement, education, and policy.

Introduction

Nearly all (97%) births in the commonwealth occur in a Pennsylvania hospital. Hospitals are committed to and invested in continuous improvement and collaboration with other health care providers, policymakers, patients, families, and other stakeholders to ensure access to high-quality, equitable maternal health care throughout Pennsylvania.

Recent trends underscore the importance of these efforts. Maternal health complications are on the rise. Racial disparities in maternal health outcomes are widening. And—amid workforce shortages, financial distress, and a worsening medical liability climate—few hospitals are able to sustain maternal health services, leading to care deserts and gaps in services, particularly in rural communities.

Hospitals are focused both on improving the care they provide and being leaders in confronting the challenges outside their walls that contribute to maternal health complications and disparities in outcomes. More than half of maternal deaths occur during the postpartum period. The Pennsylvania Maternal Mortality Review Committee found that more than 60 percent of pregnancy-associated deaths in the commonwealth during 2020 occurred more than 43 days after delivery. The committee identified mental health, including substance use disorder, as the leading cause of pregnancy-associated deaths, responsible for 45 percent of deaths reviewed. Research shows that access to prenatal care and social drivers of health also play a significant role in maternal health outcomes.

Addressing these challenges requires strong collaboration with a focus, not only on improving safe and equitable hospital care, but also on strengthening care coordination, closing gaps in primary care and behavioral health services, tackling social drivers of health, strengthening connections with community partners, and ensuring the long-term sustainability of accessible maternal health care throughout the commonwealth.

Developed by HAP's Task Force on Maternal and Child Health, these recommendations focus on what Pennsylvania hospitals and policymakers can do to:

✓ Advance high-quality, equitable maternal health care.

✓ Expand access to safe maternal care across the commonwealth.

✓ Strengthen and diversify the perinatal and neonatal workforce.

The recommendations in this report are intended to identify key opportunities to improve maternal health quality, equity, and access, not to be a comprehensive list of all actions to be taken. For each recommendation, the task force identified potential strategies for success. The task force also identified opportunities for HAP to support hospitals in achieving these recommendations, as well as advocate for policy recommendations.

Concerning Trends for Pennsylvania

40%
increase in severe maternal morbidity over five years

2.3x
severe maternal morbidity rate for Black patients versus white patients

38
hospitals closed labor and delivery units since 2005

18
rural hospitals closed labor and delivery units since 2005

47.6%
of women in rural counties live more than 30 minutes from a birthing hospital

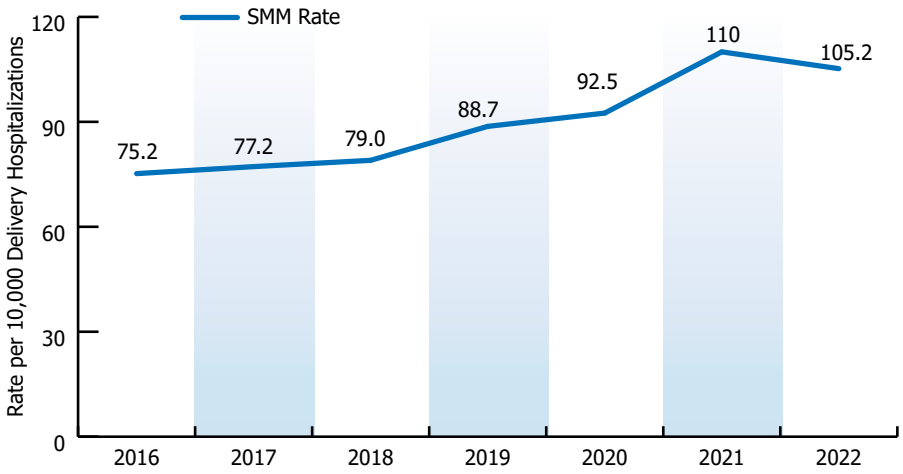
Advance High-Quality, Equitable Maternal Health Care

Hospitals and health systems play a foundational role in ensuring birthing people receive high-quality, equitable, and safe health care before, during, and after delivery.[1]

Although rates of in-hospital maternal mortality have decreased in recent years, rates of severe maternal morbidity (SMM)–short or long-term health consequences resulting from unexpected outcomes during delivery—continue to increase, and there are significant racial disparities in outcomes.[2] This is true both nationally and within Pennsylvania.[3]

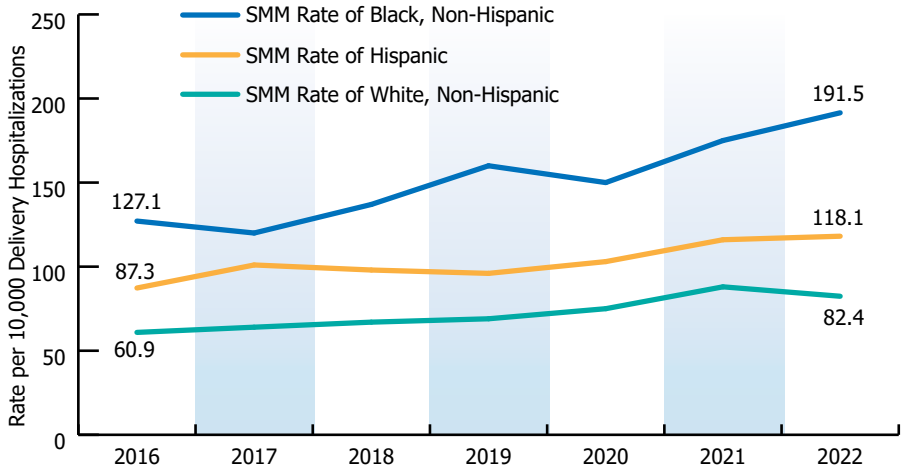
Increasing SMM and widening disparities are not acceptable and can largely be prevented. Hospitals and policymakers must work collaboratively to advance equitable and high-quality care.

Statewide, the SMM rate increased 40% from 2016–2022.



Source: Pennsylvania Health Care Cost Containment Council (PHC4)

The SMM rate for Black patients increased almost 1.5 times more than the rate for white patients from 2016–2022. In 2022, the SMM rate for Black patients was more than double the rate for white patients.



Source: PHC4

Recommendations for Hospitals

Address leading factors in severe maternal morbidity and maternal mortality.

Hospitals can be leaders in not only improving the care they provide but also identifying and addressing the myriad of factors that contribute to maternal health complications.

Studies have attributed increasing SMM to a rise in preexisting conditions, such as chronic hypertension and diabetes. Better management of a birthing person's comorbid conditions during pregnancy may help reduce SMM occurrence and ultimately decrease mortality risk.[4] The Pennsylvania Maternal Mortality Review Committee's (MMRC) most recent analysis identified mental health, including substance use disorder, as the leading cause of pregnancy-associated deaths.[5] The MMRC identified substance use disorder as a contributing factor in approximately 41 percent of all cases reviewed.

The Alliance for Innovation in Maternal Healthcare (AIM) safety bundles are a quality improvement initiative to support best practices that make birth safer, improve maternal health outcomes, and save lives by implementing best practices in hospitals. AIM developed eight bundles that include actionable steps that can be adapted to a variety of facilities and resource levels to address the leading causes of preventable maternal mortality.[6]

AIM Safety Bundles

The eight AIM safety bundles focus on:

- ✓ Obstetric hemorrhage
- ✓ Severe hypertension
- ✓ Safe reduction of primary cesarian birth
- ✓ Cardiac conditions
- ✓ Care for pregnant and postpartum people with substance use disorder
- ✓ Perinatal mental health
- ✓ Postpartum discharge transitions
- ✓ Sepsis

Hospitals can:

- ✓ Ensure the full implementation of all eight AIM patient safety bundles.
- ✓ Leverage innovative strategies to monitor and treat comorbid conditions during pregnancy and postpartum, such as remote blood pressure monitoring.
- ✓ Dedicate resources and staff to evaluate and improve perinatal quality and safety.
- ✓ Adopt an organizational approach to the provision of respectful and trauma-informed maternity care.
- ✓ Optimize the electronic health record (EHR) to screen pregnant and postpartum patients for perinatal mental health conditions, including substance use disorders, and quickly connect patients with appropriate resources, education, and/or treatment.
- ✓ Encourage collaboration between primary care, OB-GYNs, and mental health professionals to provide comprehensive care to patients with perinatal mental health conditions.
- ✓ Ensure patients with substance use disorder have access to treatment early in pregnancy and receive supportive follow-up after delivery, including providing naloxone at discharge.

A Team Approach to Improving Heart Care

Temple Health uses a specialized, interdisciplinary team to support safe pregnancy and delivery for patients with cardiovascular disease.

Heart conditions are a significant cause of maternal deaths. Temple's Cardio-Obstetrics Program brings together a team of cardiology and obstetric providers to quickly intervene when pregnant patients have signs of heart conditions so they can provide necessary care and support safe delivery.

The approach has helped the system cut the wait time from when a pregnant patient with cardiovascular disease is seen in the emergency department or by their OB-GYN to when they have a cardiology appointment from two to three months down to about a week. And the interdisciplinary partnership enables patients to deliver in the labor and delivery unit—rather than the cardiology unit—allowing for a better birth experience and the ability to keep parents and babies together after delivery.

Create and resource the infrastructure necessary to assess and improve health equity and address social determinants of health.

Ensuring equitable care is integral to all quality-improvement efforts.[7] Hospitals must proactively and deliberately address both implicit bias within care delivery and the broader effects of structural racism.[8]

It's also critical to look upstream at the social determinants of health (SDOH) that contribute to poor maternal health outcomes. Differences in the availability of resources driven by systemic factors have led to pronounced inequities in access to quality health care, education, food security, safe housing, and employment, ultimately producing racial disparities in health outcomes. For example, hypertension and lack of physical activity are pre-pregnancy conditions that are influenced by the availability of safe places to exercise and access to affordable, nutritious food.

Investment in programs that overcome disparities across these social drivers of health and standardized workflows to screen and respond to SDOH can decrease pre-pregnancy health risks and improve the lives of birthing people and infants.[9,10]

Hospitals can:

- ✓ Implement and evaluate standardized protocols to reduce racial disparities in the leading causes of SMM and maternal mortality.
- ✓ Review cases of SMM to determine if bias, inequitable care, or SDOH affected the outcome, and implement appropriate interventions.
- ✓ Strive to increase trust in the health care system by engaging patients and families in co-designing maternity care.
- ✓ Implement the Institute for Healthcare Improvement's framework to achieve health care equity, including reviewing policies through an equity lens.
- ✓ Standardize workflows to screen for SDOH in primary care and throughout prenatal care and connect patients with needed resources.

How Implicit Bias Training Improves Care

The American Journal of Public Health published a systematic review that examined the degree to which implicit bias toward race and ethnicity exists among health care professionals and how that bias changes health care outcomes.[11] The results revealed a significant relationship between implicit bias and four areas of patient care: patient–provider interactions, treatment decisions, treatment adherence, and patient health outcomes. Research demonstrates that while implicit bias correlates with lower quality of care,[12] it can be improved through training and self-awareness.[13]

Implicit bias training for perinatal providers is just one component of a comprehensive, multi-pronged solution to deliberately address racial disparities in maternal outcomes. It should be incorporated as part of the strategy to support each of these recommendations.

A Comprehensive Approach to Equity

Main Line Health has made health equity a strategic priority, focusing on advancing the health and well-being of its communities; engaging employees, physicians, and partners; and advancing research and provider education.

The health system is strengthening necessary infrastructure through steps such as adding leaders and staff dedicated to leading equity work; mandating training to increase cultural competency and awareness of power, privilege, and structural racism; and leveraging its electronic health record to capture data that drives decision making. That data is used to identify and implement strategic initiatives that will have the greatest benefit to improving outcomes, including in maternal health.

Main Line leverages community health workers as agents to achieve health equity. These workers can operate outside the hospital walls to build trusting relationships with patients and community members, help patients navigate care, and connect patients with resources to address needs like food, transportation, housing, and utilities.

Improve access to perinatal quality data.

Perinatal leaders need ready access to detailed data on perinatal measures to improve quality and equity. Hospitals must prioritize perinatal quality data, dedicate resources to tools that help to guide teams' prioritization of improvement initiatives, and look for opportunities to include the voices of birthing people in data collection strategies.

Hospitals can:

- ✓ Collect data that is stratified by race, ethnicity, and language (REaL) so that disparities can be identified and addressed.
- ✓ Develop a perinatal dashboard that includes perinatal and neonatal process and outcome measures, including patient experience.
- ✓ Ensure a forum exists for perinatal patients and families to provide feedback to improve equitable care.
- ✓ Create multidisciplinary severe maternal morbidity review teams that regularly review cases of obstetric and neonatal morbidity for opportunities to improve processes and workflows.
- ✓ Ensure an accountability model is in place so that quality measures not meeting target are appropriately identified and addressed.

Opportunities for HAP

Collaborate with the PQC to support hospital engagement.

The Pennsylvania Perinatal Quality Collaborative (PQC) works with hospitals and health systems to implement evidence-based practices and obstetric safety bundles and provide support in using quality improvement principles to address gaps in care. As of 2024, 75 Pennsylvania birthing hospitals—nearly all birthing hospitals statewide—participate in the Pennsylvania PQC. There is much evidence to support the benefits of participating in quality collaboratives.[14] Yet, full participation requires significant time and resources for perinatal nurses and providers, as well as buy-in from leadership.

Pennsylvania PQC

In 2024, the Pennsylvania PQC areas of focus include:

- ✓ Substance use disorder
- ✓ Substance-exposed newborns
- ✓ Safe sleep
- ✓ Maternal sepsis

HAP can:

- ✓ Continue to serve in an advisory capacity to inform improvement opportunities and promote participation.
- ✓ Collaborate with the Pennsylvania PQC to identify resources that hospitals need to better support their full participation.
- ✓ Design educational and technical support that is mindful of PQC programming, improves the collective impact, and doesn't distract from participation.

Facilitate connections between hospitals, local health departments, and community organizations that provide resources for birthing people.

Fostering hospital-community partnerships can help connect patients with support programs to offer comprehensive services during the pregnancy. Local partnerships help to bridge gaps in services and provide options for additional support during pregnancy and in the postpartum period, when traditional services may be less available. Non-profit organizations and local health departments have supportive programs that can help address SDOH and deliver services that medical providers are not able to offer.[15]

HAP can:

- ✓ Work with local health departments and community organizations to identify gaps in maternal and child health resources.
- ✓ Facilitate awareness of PA Navigate across hospitals.
- ✓ Conduct webinars to increase hospital awareness of community organizations and resources and promote connections to facilitate warm handoffs.
- ✓ Support efforts to address SDOH that contribute to maternal complications.

Provide data and support to help hospitals assess obstetric care quality and equity to drive improvement.

Collection, analysis, and use of data is critical in ensuring continuous improvement and enhanced accountability. HAP can support hospitals by providing comparative data to advance maternal health quality and equity.

HAP can:

- ✓ Connect hospitals with robust data systems to monitor rates of SMM and identify areas for improvement in obstetric quality and safety.
- ✓ Design a member dashboard to include obstetric outcome measures like SMM that are stratified by race and ethnicity, allowing hospitals to compare rates of SMM across regional boundaries with benchmarking and comparative data.
- ✓ Support hospitals in including patients and families in co-designing maternal care services and improvement initiatives.
- ✓ Support hospitals in developing strategies to collect, assess, and deploy REaL data to drive maternal health equity improvement.
- ✓ Convene hospitals that use the same EHRs to share reporting strategies and best practices for collecting and assessing perinatal quality data.
- ✓ Collaborate with the Pennsylvania Patient Safety Authority to assist with patient safety alerts and proactive education.

Partnering for Equitable Care

Allegheny Health Network, UPMC, and community partners are focused on ending preventable deaths of Black mothers, birthing people, and babies through better communication, information sharing, and community-wide collaboration.

The First Steps and Beyond program brings together hospitals, community organizations, doulas and birth workers, and government officials in a targeted approach to advancing health equity by addressing both medical and social needs. The collaborative is taking steps such as sharing recommendations and best practices to address racism and bias in care, developing and implementing obstetrical racism training, providing education and support to postpartum patients, creating a shared referral system to connect patients with resources, and reducing silos to better address social determinants of health.

Recommendations for Policymakers

Expand access to doula care and community health workers.

Doula support during pregnancy and birth improves the labor and delivery experience.[16] Doulas are professionals who provide emotional, physical, and informational support during pregnancy, delivery, and after childbirth. Studies indicate that doula care can reduce rates of cesarean delivery, improve newborn health, improve patients' ratings of the childbirth experience, and benefit infants through high rates of breastfeeding initiation in the postpartum period.[17]

In Pennsylvania, reimbursement for doula care is inconsistent among payors. Targeted public policies can make doula care more accessible.[18]

Community health workers are lay members of the community who work either for pay or as volunteers with the local health care system in both urban and rural settings. Community health workers usually share ethnicity, language, socioeconomic status, and life experiences with the community members they serve, providing a pathway for expanding culturally competent perinatal education and care coordination for maternal and infant health. In Pennsylvania, community health workers are not able to bill for the services they provide. A growing number of states have submitted state plan amendments to authorize Medicaid payment for community health workers.

Policymakers can:

- ✓ Promote awareness of the opportunity for doulas to be certified and paid for services through Medicaid.
- ✓ Require commercial insurers to cover doula services.
- ✓ Submit a Medicaid state plan amendment to authorize payment for community health workers.

Expand Pennsylvania's maternal home visiting program to all eligible families in all 67 counties.

In Pennsylvania, home visiting programs target expectant and new parents with children through kindergarten entry age living in communities that are at risk for poor maternal and child health outcomes. Only 19 Pennsylvania counties are funded to provide maternal home visiting programs.[19]

By expanding Pennsylvania's maternal home visiting program to all 67 counties and incentivizing Medicaid Managed Care Organizations to collaborate with existing programs, more families can receive supportive, non-clinical services. These programs provide education on prenatal care, breastfeeding, child development, and maternal warning signs, which are critical for reducing risks during the postpartum period when maternal deaths are most likely to occur.[20]

Policymakers can:

- ✓ Incentivize Medicaid Managed Care Organizations to expand and collaborate with existing, evidence-based home visiting programs.
- ✓ Promote awareness of the availability and benefits of home visiting programs.

Making Connections Through Home Visiting

Jefferson Einstein Philadelphia Hospital is helping new parents and babies thrive through a new program that provides in-home health and wellness visits and connects families with important resources.

Family Connects Philadelphia, a partnership between the hospital and the Philadelphia Department of Public Health, is free to Philadelphia residents who deliver at the hospital. Participants can opt to receive a home visit about three weeks after delivery from a registered nurse who examines the health of the birthing parent and infant, provides a mental health screening and support, offers education on child care and safety, and helps families access support related to food assistance, childcare, health insurance, and more.

The program is modeled off an initiative that began in North Carolina that has been found to improve maternal health, support infant safety, and reduce racial disparities in rates of postpartum anxiety and depression.

Ensure comprehensive coverage and appropriate reimbursement for remote patient monitoring.

With the increase in maternal care deserts, many patients must travel farther for perinatal care. Remote monitoring enables patients to receive care without the cost and burden of frequent prenatal visits. Two recent studies demonstrated that telehealth resulted in higher satisfaction and lower prenatal stress for patients compared with those receiving in-person care.[21] Blood pressure monitoring is especially important as hypertension is a leading cause of maternal health complications.

About 33 percent of births in Pennsylvania are covered by Medicaid, yet some services are not covered. Private insurance also fails to provide consistent coverage for maternal health services, such as for blood pressure monitors. Without this coverage, many patients face significant out-of-pocket expenses or are unable to access these services entirely.

Policymakers can:

- ✓ Allow Medicaid reimbursement for remote patient monitoring.
- ✓ Require insurance coverage on a per-pregnancy basis for blood pressure monitoring systems.

A Technology-Focused Approach to Hypertension

Penn Medicine has improved maternal health outcomes, reduced readmissions, and eliminated racial disparities through its award-winning Heart Safe Motherhood program.

The initiative addresses pregnancy-related hypertension, a leading cause of maternal readmissions and deaths, by remotely monitoring blood pressure in high-risk, postpartum patients. Rather than relying on follow-up office visits—which can be a significant barrier and are often missed—providers prompt patients with text message reminders to check their blood pressure at home with equipment supplied by the hospital. Patients receive automated feedback and providers have access to real-time readings and trends so they can quickly intervene if needed.

A trial assessing the program found it more than doubled the percentage of patients for whom providers were able to obtain blood pressure readings after discharge, eliminated 10-day readmissions for hypertension among participants, and erased inequities between Black and white patients in follow-up for pregnancy-related hypertension.

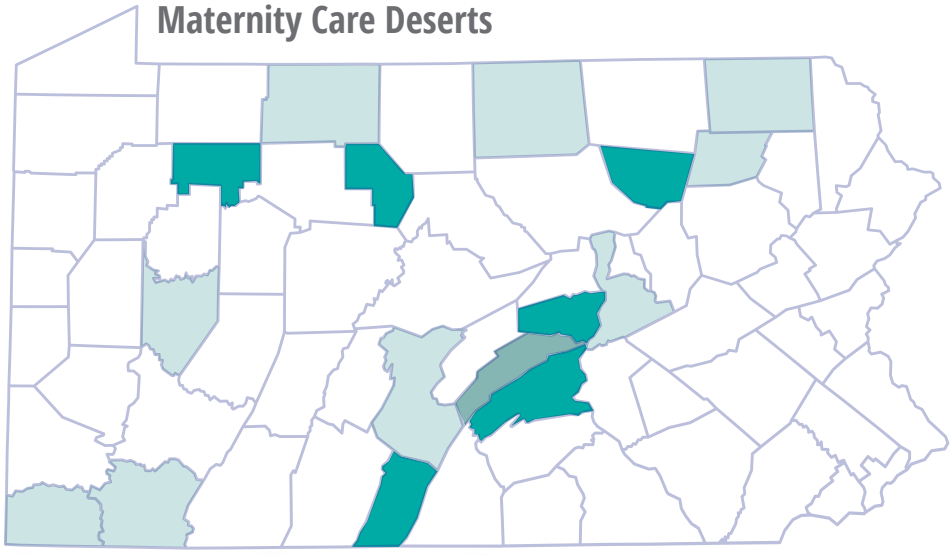
Expand Access to Safe Maternal Care Across the Commonwealth

Access to maternal health services is critical to improving health outcomes for birthing people and infants across Pennsylvania. However, challenges such as maternal health deserts, hospital financial stability, and health care access disparities pose alarming risks to maternal health.

As more obstetric units close across the commonwealth, maternity care deserts have increased. Since 2005, 38 Pennsylvania hospitals have had to close their labor and delivery units, 18 of them in rural communities. Nearly half of women in rural Pennsylvania communities live more than 30 minutes from a birthing hospital.[22]

Hospitals, HAP, and policymakers must work together to ensure access to high-quality maternal health care in communities throughout the commonwealth.

Maternity Care Deserts



Moderate Access to Care

Low Access to Care

Maternity Care Desert

Source: March of Dimes

16
counties with reduced access

47.6%
of women in rural counties live more than 30 minutes from a birthing hospital

3.1x
longer distance to care for women living in maternity care deserts

180+
babies delivered annually by EMS

Average distance to maternal care:

9.4 miles
Urban areas

23.5 miles
Rural areas

27.8 miles
Maternity care deserts

Recommendations for Hospitals

Connect patients with primary care well before potential pregnancy.

U.S. women between the ages of 18 and 49 years have increasing rates of health risks and comorbid conditions yet the lowest percentage of visits to primary care providers (PCP).[23,24] Health problems that exist before pregnancy can increase the risk of complications during pregnancy.[25] Preconception management of chronic conditions such as diabetes, hypertension, and obesity is critical to ensuring safe pregnancies and healthy outcomes.

A 2017 report found only 33.2 percent of recent birthing people reported talking with a health care professional about improving their health before their most recent pregnancy.[26] Access to primary care is associated with decreased acute care utilization and better health outcomes, yet there are disparities in access.[27]

Connecting birthing people with primary care is crucial for their health and well-being. Proactive strategies can also reduce inequities in care. For example, recognizing that cardiac conditions are the leading cause of pregnancy-related death among Black birthing people, providers can work with patients to optimize cardiovascular health beginning in childhood.[28]

Hospitals can:

- ✓ Implement systems-based solutions to ensure connections to both primary and gynecologic care for patients aging out of pediatric care or who do not have a PCP.
- ✓ Encourage—and leverage the EHR to facilitate—connections between OB-GYNs and primary care to ensure seamless referral and handoff after delivery, particularly for patients with increased risk for chronic conditions.
- ✓ Provide telehealth options for primary and wellness care visits, making it easier to access care.
- ✓ Implement models that integrate maternity care with primary care, allowing for continuous support and follow-up.

An Incentive for Improved Care Coordination

The Pennsylvania Hospital Quality Incentive Program (HQIP) is the Medicaid pay-for-performance program focused on improving quality of care in certain target areas.

HAP—informed by the task force—is collaborating with the Pennsylvania Department of Human Services (DHS) to determine an outcomes-based maternal health quality metric slated to begin in January 2026. HAP anticipates the measure will focus on postpartum discharge transitions. Such efforts improve attendance at postpartum visits, promote earlier identification of maternal and neonatal warning signs, and ensure prompt appropriate referrals to resources.

The program will be valued at $30 million. The measure will need to be approved by the Centers for Medicare & Medicaid Services.

Improving Outcomes Through Follow-Up

WellSpan Health leverages its EHR to ensure more patients diagnosed with hypertension during pregnancy access follow-up care. Hypertension during pregnancy can increase the risk later in life of cardiovascular disease, a leading cause of death among U.S. women.

WellSpan used its EHR to create a registry of patients who gave birth in the system and who were diagnosed with hypertension during pregnancy. Once flagged, those patients receive communication encouraging them to follow up with their primary care provider, as well as educational information about prevention strategies. Primary care providers are also notified about the diagnosis so they can discuss cardiovascular risks with patients.

After implementing the program, WellSpan saw a more than 62 percent increase in the percentage of at-risk patients who had follow up appointments with their primary care provider to discuss cardiovascular health.

Ensure all emergency departments are prepared to respond to obstetric emergencies.

More than half of maternal deaths occur after delivery in a time when postpartum patients often do not present for care with their obstetricians.[29] Emergency departments must be prepared to identify urgent maternal health warnings and treat obstetric complications.

Maternal and infant health outcome improvement is challenged by the number of disjointed touchpoints in a health care system that exist from conception through one year postpartum. For example, a birthing person may shift from a midwife-led clinic to a hospital delivery with an OB-GYN provider, then go back to a PCP in the postpartum period, followed by another shift to having the majority of interactions with their child's pediatrician. Encouraging connection and communication among various providers is another approach to ensuring accountability for high-quality care and outcomes.

Hospitals can:

- ✓ Include emergency departments and EMS providers in regular drills and simulations on high-risk obstetric complications.
- ✓ Enable emergency departments to screen people of childbearing age for pregnancy in the past 365 days and/or have that information available through a shared medical record.
- ✓ Evaluate the quality, safety, and readiness of emergency department care for birthing and postpartum patients, including current policies, order sets, and availability of equipment, medication, and personnel to treat patients who present with severe obstetric complications.
- ✓ Strengthen connections and collaboration between birthing and non-birthing hospitals to ensure timely and appropriate transfer and validate workflows for OB-GYN consultation and transfer.

Collaborate with midwives to ensure safe community-based birth care and eliminate barriers to transfer.

In 2023, there were 3,831 intended homebirths in Pennsylvania, a 59 percent increase since 2016.[30] Rates of home birth have been increasing statewide and nationally and this trend may continue as maternity care deserts increase. To ensure safe care, birthing hospitals should work with home-birth midwives to eliminate barriers to transfer and to support education and training.

Hospitals can:

- ✓ Create welcoming environments that are supportive of home birth midwives and the care they provide to the community.
- ✓ Engage home-birth midwives in continuing education and quality review of cases that required transfer.
- ✓ Collaborate with local EMS to improve transfer of care from home to hospital.
- ✓ Ensure that local EMS have education on obstetric and neonatal warnings signs and transfer protocols.

Preparing for Emergencies in a Rural Community

Titusville Area Hospital takes a proactive approach to ensuring its rural community has quick access to safe care for obstetric emergencies.

The hospital does not have labor and delivery services and instead partners with its affiliated hospital, Meadville Medical Center, to offer other OB-GYN services on site. However, as a critical access hospital, the facility must be prepared to perform deliveries and respond to pregnancy-related emergencies in its emergency department.

Each year, the hospital obtains a labor and delivery simulation model from its insurance organization and partners with a local OB-GYN to train emergency department clinicians on both normal and complicated deliveries. The training includes simulations for complications such as shoulder dystocia, breech presentation, nuchal cord, and cord prolapse. As part of this process, the OB-GYN also works with the emergency department team to update its procedures and recommendations for maternal and infant care.

Opportunities for HAP

Convene hospitals and other stakeholders to consider creative ways to staff and resource obstetric services in rural hospital communities.

According to the March of Dimes, only 0.3 percent of maternity care providers practice in rural communities.[31] With increasing—and increasingly disparate—rates of maternal morbidity and mortality, compounded by closures of birthing hospitals limiting access to quality maternity care, targeted strategies are necessary to help rural hospitals improve perinatal outcomes and expand access to care.

HAP can:

- ✓ Explore regional partnerships to provide high-quality obstetric care, including connecting rural and urban hospitals to ensure safe deliveries in high-risk cases.
- ✓ Convene hospitals and other key stakeholders in rural areas to collaborate on innovative ways to connect and leverage local resources.
- ✓ Advocate for appropriate reimbursement and additional resources to keep obstetric services available in communities.
- ✓ Collaborate with the Pennsylvania Office of Rural Health to align work to support maternal health.

Engage statewide community stakeholders to improve collaboration, communication, and education around the care and transport of pregnant and postpartum people.

EMS providers are often first responders to obstetric emergencies but may have limited obstetric training. From 2018–2021, more than 180 babies on average were delivered by EMS annually.[32] In a study of EMS providers, 82 percent reported not having attended an obstetric education training, although 39 percent have delivered a baby in a prehospital setting.[33] In addition, home births are at their highest level since at least 1990.[34] There are opportunities to help hospitals collaborate with community stakeholders, such as EMS providers and home-birth practitioners, to ensure early identification and timely response to obstetric complications.

HAP can:

- ✓ Convene key stakeholders—including state agencies, EMS providers, and home-birth midwives—around the emergency care of birthing people in out-of-hospital settings to cultivate collaboration and ensure safe transfer.
- ✓ Partner to create educational resources to EMS providers on obstetric complications.
- ✓ Facilitate collaboration between hospitals and home-birth providers to better understand barriers to safe transfer.

Supporting Safe Homebirth in Maternity Deserts

Geisinger Medical Center and Geisinger Lewistown Hospital are improving maternal care in their communities by strengthening connections with midwives and other community-based birth workers.

The hospitals' primary service areas include several plain sect communities as well as rural counties designated as maternity care deserts. Geisinger women's health quality leaders identified concerning trends in maternal and infant complications and deaths, often involving cases where home-birth patients were abruptly transferred to the hospital with little or no warning.

The hospitals launched an initiative to improve maternal and neonatal outcomes from home-birth—including among patients transferred to the hospital—by strengthening relationships and trust between the hospitals, home-birth workers, and plain communities. Key steps have included providing training to home-birth workers about obstetric emergencies, creating a feedback loop, implementing education to bridge cultural divides, hosting monthly workgroup meetings, and establishing workflows to refer home-birth patients to Geisinger for prenatal imaging. The team is expanding this framework throughout the Geisinger system, where applicable.

Identify opportunities for a statewide obstetric simulation program.

Using simulations to practice and prepare for obstetric emergencies has the potential to improve patient safety and outcomes and can be tailored to meet the needs of organizations.[35] While this practice is important for teams at all hospitals, it's especially crucial for hospitals that do not have labor and delivery units where patients may seek obstetric care in the emergency department. Specially tailored quality improvement is also particularly valuable for rural obstetric units and critical access hospitals that have low volumes of obstetric cases[36] and may have higher SMM rates.[37] However, it may be challenging for some hospitals to facilitate these drills due to limited access to simulation equipment or individuals trained in implementing obstetric drills or simulations.

HAP can:

- ✓ Explore opportunities for expanding hospitals' access to simulation equipment to enhance readiness for obstetric emergencies.
- ✓ Identify resources to support rural emergency departments and low-volume obstetric facilities in training for and responding to high-risk maternal health conditions.

Recommendations for Policymakers

Evaluate and ensure payment adequacy to sustain access to labor and delivery services.

Sustaining access to maternal care is especially challenging for rural communities. Nearly two-thirds of Pennsylvania's rural hospitals do not offer obstetric services.[38] Compounding these challenges, Pennsylvania hospitals are facing financial crisis. In fiscal year 2023, 51 percent of acute care hospitals provided health care services at a loss, and those relying on Medicaid payments are twice as likely to operate at a loss.[39] This financial strain, combined with rising costs for insurance, prescription drugs, supplies, and staffing, threatens hospital sustainability. The impact is even more severe in rural areas, where the decrease in maternal health care access has been the most pronounced.

Policymakers can:

- ✓ Direct the Joint State Government Commission to study maternity provider reimbursement rates under Medical Assistance and make recommendations.
- ✓ Ensure adequate Medicaid supplemental funding for hospital obstetric and neonatal units in the state budget.

Practicing for Higher-Risk Deliveries

A team of obstetric providers at Reading Hospital – Tower Health regularly undergo specialized training and simulations to be prepared to safely deliver babies in breech position.

Breech birth occurs when the fetus does not move into a head-down position towards the end of pregnancy, a condition that can bring significant risks for the mother and baby. The hospital identified a need for a safe environment to support such patients who wanted a vaginal, rather than cesarean, delivery. To limit risks and promote safe outcomes, the hospital offers this option to patients who meet certain criteria.

The hospital partners with a nonprofit organization to conduct special training on a routine basis with a team of physicians and certified nurse midwives. The training includes working with a simulation model that gives providers realistic, hands-on experience with breech deliveries so they are better prepared to support patients.

Invest in increasing access to perinatal behavioral health care.

In identifying mental health and substance use disorder as leading factors in maternal deaths, the Pennsylvania MMRC called for the commonwealth to "improve access to behavioral health providers and resources, de-stigmatization of mental health conditions including substance use disorder, increase access to and education about naloxone use, and improve reimbursement for providers."[40] Postpartum depression is one of the most common complications after pregnancy, affecting one in seven new mothers, or 400,000 births per year nationally.[41]

Policymakers can:

- ✓ Increase funding of community-based programs that support maternal mental health and substance abuse treatment for pregnant and postpartum patients.
- ✓ Support policies that bolster the behavioral health workforce, including peer support professionals, and empower providers to practice at the top of their license.
- ✓ Expand crisis infrastructure, including increasing the number of crisis centers across the commonwealth.
- ✓ Support policies that enable timely patient access to appropriate behavioral health care settings.

Ensure hospitals have the flexibility to align staffing with patient needs and implement innovative care models.

High-quality obstetric care depends on highly skilled and specialized providers. As they confront statewide and national workforce shortages, hospitals are adopting innovative care models that better support patients and providers, extend the reach of providers, and empower health care professionals to practice at the top of their license. These innovations are especially critical to maintain access to care in rural communities. Implementing mandates that remove staffing flexibility could limit access to care and limit innovation.

Policymakers can:

- ✓ Maintain flexibility to align staffing with patient needs and adopt innovative care models.
- ✓ Modernize hospital regulations to reflect today's care delivery.

Innovative Staffing to Improve Coordination for SUD Treatment

Penn Highlands DuBois is improving care for birthing parents and babies affected by substance use disorder (SUD) through a program that connects patients with specialized support and services.

The Substance Use Disorder Care Coordinator Program helps "bridge the gap" between patients struggling with SUD and services that support a healthy pregnancy. Patients are referred to the program by their obstetrician or community organizations and work with a care coordinator nurse who supports them through pregnancy and into the postpartum period. The care coordinator attends prenatal care appointments, provides education, helps the patient access SUD treatment and behavioral health care, connects the patient with community services to meet their needs, and meets with the patient and baby in the hospital after delivery as well as in the postpartum period.

Penn Highlands created the program in response to a rise in substance exposed newborns in the rural communities of northwestern and central Pennsylvania it serves.

Strengthen and Diversify the Perinatal and Neonatal Workforce

Hospitals and health systems are currently navigating workforce shortages that jeopardize access to high-quality, equitable care for patients, and the communities they serve.

In a recent HAP survey, Pennsylvania hospitals reported significant vacancies for advanced practice providers and nursing staff and identified obstetrics and gynecology among the areas of the greatest physician need, complicating access to maternal care.[42] Nationally, new projections by the Association of American Medical Colleges show the U.S. will face a physician shortage of up to 86,000 physicians by 2036.[43] There is projected to be a shortage of physicians in family medicine and general internal medicine in primary care as well as OB-GYN physicians in women's health in 2030, based on current utilization patterns.[44]

Efforts should also be made to ensure maternal care teams reflect the diversity of the patients they serve. Culturally congruent care has the potential to improve maternal health outcomes, eliminate disparities, foster patient satisfaction, and encourage better engagement in health care management. Studies show that patients cared for by doctors of the same race were more likely to adhere to medication guidelines and recommendations,[45] reported improved satisfaction with their experience,[46] were more likely to bring up health concerns to their provider, and more often accessed preventative services.[47] For these reasons, provider organizations have prioritized expanding and diversifying the perinatal workforce as a key strategy to improve maternal health outcomes.[48,49,50]

Average Vacancy Rates

19%
certified nurse midwives

19%
certified registered nurse practitioners

19%
nursing support staff

14%
registered nurses

In rural communities:

28%
nursing support staff

26%
registered nurses

Source: HAP's Hospital Workforce Survey, January 2024

Recommendations for Hospitals

Implement innovative staffing models to extend the reach of obstetric providers.

Developing staffing models to extend the reach of obstetric providers requires a multifaceted approach that incorporates technology, team-based care, and community engagement. The perinatal clinical workforce encompasses a range of personnel including OB-GYNs, certified nurse midwives, obstetric nurses, and maternal fetal medicine specialists, as well as family medicine physicians and advanced practice professionals, such as physician assistants and nurse practitioners.

To meet the needs of their communities, hospitals should also consider how to incorporate a variety of health care professionals such as doulas, community health workers, and certified professional midwives. Additionally, peer support specialists are a growing, culturally aligned, and often community-focused group that can work with new parents on issues such as mental health support, resource navigation, and substance use disorders.[51]

Hospitals and health systems should explore ways to leverage innovative models to deliver perinatal care such as telehealth, remote patient monitoring, group prenatal care, and pregnancy medical home.[52]

Hospitals can:

- ✓ Incorporate team-based models of care that use a range of care providers and emerging technologies, such as virtual nursing and remote patient monitoring.
- ✓ Create and support programs to train doulas and community health workers.
- ✓ Provide ongoing training for family medicine providers—including physicians, nurse practitioners, and physician assistants—to expand their roles in obstetric care.
- ✓ Create programs to hire support professionals—including licensed practical nurses, obstetric technicians, nurses' aides, and others—to support nursing staff and perinatal patients by performing non-nursing duties.

Improving Care Navigation

St. Luke's University Health System employes obstetric nurse navigators to guide patients through pregnancy and ensure they are accessing important care during and following pregnancy.

Launched recently, the program includes 14 nurses who serve as patients' go-to resource for questions and care coordination. Nurse navigators touch base with patients during each trimester and following delivery to answer questions, provide education, confirm and schedule appointments, ensure patients are up to date with screenings and testing, and support patients in accessing specialty care if needed. In addition to scheduled calls, patients can also contact nurse navigators via phone or electronic messages to ask questions or get assistance.

Leverage technology and create programs to attract and retain providers.

The nature of obstetric care puts unique stressors on care teams. The pandemic, workforce shortages, and a worsening medical liability climate have only compounded these challenges. To attract and retain providers to perinatal care, hospitals must take steps to reduce strain on care teams, including implementing technology that can better support providers and patients.

Hospitals can:

- ✓ Promote employee wellness programs and avenues for positive stress relief, including trauma-informed healing.
- ✓ Offer grief and counseling support so that staff have resources for coping with unanticipated events.
- ✓ Explore new forms of artificial intelligence support for documentation, clinical, and predictive capabilities.
- ✓ Create telehealth and telemonitoring resources to expand aspects of the care team that bring new opportunities and dimensions to care delivery.

Create and strengthen pipelines to recruit maternal health providers, including a focus on underrepresented communities.

Addressing workforce shortages and ensuring culturally congruent care requires a multifaceted approach to building upon health care career pipelines and recruiting providers from underrepresented communities. Hospitals must engage in a variety of strategies, including education, community engagement, financial support, and ongoing professional development.

Hospitals can:

- ✓ Ensure a workplace culture that values diversity and inclusion.
- ✓ Collaborate with schools and training programs to offer clinical observation, rotational, and precepting experiences, and establish dedicated pathways for students interested in maternal health careers.
- ✓ Actively recruit from underrepresented communities to create a workforce that reflects the patient population of the communities they serve.
- ✓ Offer scholarships or loan forgiveness programs for those entering the maternal health field, including targeted opportunities to increase providers of color and those from rural communities.
- ✓ Collect data on workforce diversity to identify areas to further diversify the maternal health workforce to reflect the community they serve.

Expanding Access to Mental Health Care

Lehigh Valley Health Network, part of Jefferson Health, is expanding access to treatment for postpartum depression and other pregnancy-related mood and anxiety disorders by integrating mental health care directly into its OB-GYN services.

Through the WAVES (Women Adjusting to Various Emotional States) program, pregnant and postpartum patients can receive specialized education, resources, treatment, and support from obstetric providers who have extra training in perinatal mental health. Rather than depending on being able to recruit additional behavioral health providers, the program leverages physicians and advanced practice providers who are already part of Lehigh Valley Physician Group's OB-GYN practice. Patients can seamlessly sign up for the program as part of their routine obstetrics care, making the services easy to access.

Opportunities for HAP

Connect hospitals, education programs, and workforce development organizations to build partnerships that develop maternal health professionals.

As a member-driven organization that provides advocacy and supportive services across hospitals and health systems statewide, HAP can play a pivotal role connecting the hospital community with other partners across the commonwealth to develop a perinatal workforce that meets the needs and reflects the diversity of Pennsylvania communities.

HAP can:

- ✓ Facilitate local and regional partnerships to grow the maternal health workforce.
- ✓ Convene people of color who are in clinical training to better understand incentives and barriers to joining the perinatal workforce and to inform efforts to grow a diverse workforce to provide culturally congruent care.
- ✓ Engage Pennsylvania's two Historically Black Colleges and Universities and other partners to inform efforts to build up the maternal health workforce.
- ✓ Work with state and national organizations to make resources available for students and HAP members to develop new programs or expand existing capacity.

Provide data and thought leadership to inform workforce development.

HAP is uniquely positioned to evaluate data and performance and proactively identify issues or trends across local, regional, state, or national perspectives. Collaborating with other state hospital associations also allows for discovery of promising practices and interventions.

HAP can:

- ✓ Lead efforts to gather and share data that informs and drives efforts to grow the maternal health workforce.
- ✓ Analyze local workforce development board and Pennsylvania Department of Labor and Industry data to inform perinatal workforce efforts.
- ✓ Engage industry and academic partners to discuss challenges, explore partnerships, and identify solutions.

Strengthening Patient Relationships through Doulas

UPMC Magee-Womens is improving health equity and engaging patients in their care by integrating hospital-based doulas into care teams. The Birth Circle Doula Program—which has expanded to several other UPMC birthing hospitals—has increased attendance at prenatal and postpartum visits, reduced cesarean deliveries, and boosted breastfeeding rates.

Through UPMC's program doulas—trained, nonmedical staff who provide physical and emotional support for pregnant patients—work as part of the care team along with clinical staff and meet with patients during the prenatal and postpartum periods, in addition to supporting delivery. They play a crucial role in improving outcomes and addressing racial disparities in maternal health by supporting culturally concordant care, building trust between patients and providers, connecting patients with services, and serving as patients' advocates. UPMC recruits doulas from the same communities and patient populations they serve, and doula services are offered for free to patients.

Facilitate sharing of best workforce development practices among Pennsylvania hospitals.

Representing nearly all of hospitals within the state, HAP has the ability to tap into Pennsylvania clinical experts in maternal health care and share best practices and promising interventions broadly across its membership. This can happen through a variety of means, including webinars, on-demand education, member communication channels, and in-person events.

HAP can:

- ✓ Convene a maternal health summit where clinicians and department leaders share best practices and discuss innovative ideas.
- ✓ Invite external speakers to educate on emerging practices and new interventions in clinical support.

Recommendations for Policymakers

Address Pennsylvania's challenging medical liability climate to ensure providers remain in Pennsylvania to deliver care.

Obstetrics is among the highest-risk specialties for medical liability. With year-over-year increases in premiums, restricted access to liability insurance coverage, and a growing number of nuclear verdicts, it is clear Pennsylvania is once again approaching a medical liability crisis, putting access to obstetric care in jeopardy.

Pennsylvania's medical liability climate affects access to care. A survey by the American College of Obstetricians and Gynecologists found that risk of litigation results in fewer providers delivering babies and accepting patients with high-risk pregnancies.[53] The American Medical Association found that liability climate affects where and in what specialty providers practice.[54] Research shows physician supply is higher and patients' access to care is enhanced in areas where physicians are under less pressure from the system due to reforms, such as caps on damages.[55,56,57,58]

In 2022, the Pennsylvania Supreme Court eliminated a rule that had stabilized the state's medical liability system and protected Pennsylvanians' health care access for nearly two decades. The decision allows medical liability claims to be moved from the counties in which an alleged event occurred to counties that have histories of higher payouts. In the first year following the rule change, the number of medical malpractice cases filed nearly doubled.

Previously when venue shopping was permitted in the commonwealth, Pennsylvania faced difficulties recruiting and retaining obstetric providers due to high insurance premiums. From 1999–2000 alone, median medical liability awards increased nearly 43 percent.[59] Philadelphia experienced the closing of 11 maternity wards between 1997 and 2007, with liability concerns cited as one of the main reasons for these closures.

Policymakers can:

- ✓ Implement policy and programmatic changes to address Pennsylvania's challenging medical liability climate through collaboration between the governor, General Assembly, and courts.
- ✓ Take steps to reverse the 2022 venue rule change.

Support programs and policies that enable the training of more maternal health professionals.

Hospitals are working hard to develop, recruit, and train perinatal health professionals. Targeted public policies and investments can bolster these efforts, especially in areas where they are needed most, such as rural communities. Policies to grow the workforce should focus on both clinical and non-clinical roles that support patients before, during, and after pregnancy, including family practice providers, OB-GYNs, perinatal nurses, midwives, doulas, and non-clinical community health workers.

Among the hospitals responding to HAP's workforce survey, 35 percent cited unavailable or inadequate childcare as a top barrier to employing and retaining staff.[60] This intersection of workforce shortages and childcare challenges further exacerbates the difficulties faced by health care facilities in providing comprehensive maternal care.

Policymakers can:

- ✓ Support policies and investments to assist hospitals, Federally Qualified Health Centers, and birthing centers in rural counties or designated medically underserved areas with hiring health care practitioners.
- ✓ Work to remove clinical licensure delays.
- ✓ Increase the number of J1 visas to empower hospitals to recruit more international professionals.
- ✓ Expand federally funded residency opportunities to increase the physician workforce.
- ✓ Support policies that address access to childcare.

Support policies that enhance the diversity of the maternal health workforce.

Targeted federal and state investments can help increase access to culturally congruent care by growing the number of clinical and non- clinical maternal health professionals from underrepresented communities.

Policymakers can:

- ✓ Support funding to build and scale programs to grow and diversify nurses, midwives, physician assistants, doulas, and other perinatal health workers.
- ✓ Examine barriers that prevent people from underrepresented communities from entering the perinatal workforce.

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