The Pennsylvania Perinatal Quality Collaborative (PA PQC) will be launched in April, with an initial focus on reducing maternal mortality and improving care for pregnant and postpartum women and newborns affected by opioids.

Perinatal Quality Collaboratives (PQCs) are networks of teams working to improve the quality of care for mothers and babies across prenatal, labor/birth, newborn, and postpartum services. These teams are typically comprised of physicians, nurses, midwives, social workers, pharmacists, quality and safety leaders, administrators, and other licensed and unlicensed professionals. They identify processes that need to be improved and quickly adopt best practices to achieve collective aims.

Over 140 people from all the regions of the Commonwealth are working together to standup the PA PQC through an Advisory Group and nine work groups. They represent State agencies, providers, health system associations, provider associations, health plans, community-based organizations, researchers, foundations, quality improvement collaboratives, and advocates. The work groups are identifying the drivers, key interventions, and quality metrics to move the needle on the collective aims of the PA PQC, which are listed below. The Jewish Healthcare Foundation and its operating arm, the Women's Health Activist Movement Global (WHAMglobal), are helping to administer the work of the PA PQC, which is being led by these stakeholders.

Reduce Maternal Mortality

- Decrease maternal mortality across races, ethnicities, and regions in the Commonwealth by serving as an action arm of the Pennsylvania Maternal Mortality Review Committee (MMRC)

Improve Care for Pregnant and Postpartum Women with Opioid Use Disorders

- Increase substance use disorder (SUD) screening, diagnosis, and referrals
- Increase initiation in and continuation with Medication-Assisted Treatment (MAT)
- Increase engagement in prenatal and postpartum care

Improve Care for Opioid-Exposed Newborns

- Increase reliable screening of opioid-exposed newborns
- Increase use of non-pharmacological treatment for opioid-exposed newborns
- Increase rooming-in with families during the hospital stay for newborns with Neonatal Abstinence Syndrome (NAS)
- Decrease length of stay for newborns with NAS
- Increase breastfeeding among mothers with OUD
- Increase well-child visits among newborns with NAS

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The teams of physicians, nurses, midwives, social workers, pharmacists, quality and safety leaders, administrators, and other licensed and unlicensed professionals from perinatal sites that join the PA PQC will:

- Participate in in-person, one-day Learning Collaborative sessions with continuing education credits on a quarterly basis
- Launch Plan, Do, Study, Act (PDSA) quality improvement cycles in-between the Learning Collaborative sessions, and share what is working well at subsequent sessions to inform the collective work of the group
- Attend virtual sessions to support their quality improvement projects
- Access the Vermont Oxford Network's (VON) NAS Universal Training Program and the VON Day Audits to help their organization become a Center of Excellence for Education and Training for Infants and Families Impacted by NAS
- Provide their own data and report the aggregate information through an online data portal, which will trend the outcomes over time and compare it to the outcomes of other provider teams in the PA PQC

To support this work, the health plan teams that join the PA PQC will:

- Participate in the Learning Collaborative sessions and virtual sessions
- Engage related contracted resources and care management teams in the PA PQC activities to assist PA PQC providers in their network on quality improvement projects
- Provide feedback to providers on core metrics that require claims data, such as well-child and postpartum care visits

The Learning Collaborative sessions will allow participants to:

1. Report out on what is working well and what is not working well
2. Learn how their peers in Pennsylvania implemented key interventions for achieving the common aims around maternal mortality, OUD, and NAS
3. Hear from content experts about how to implement the key interventions
4. Identify ideas for starting quality improvement cycles around maternal mortality, OUD, and NAS once they return to their organization

Due to the level of interest in the PA PQC, the Learning Collaborative sessions will likely move to a regional model over time for the West, Northeast, Lehigh/Capital, and Southeast regions of Pennsylvania. A regional PQC in the Northeast, the Northeastern Pennsylvania PQC (NEPaPQC), is already underway. It aims to improve perinatal identification and treatment of OUD in pregnant women, and improve the identification and treatment provided to infants with NAS. The NEPaPQC is analyzing baseline data, and an initial wave of quality improvement projects will be implemented shortly.

Participating in the PA PQC will help your organization:

- Adopt best practices and formalize quality improvement initiatives for reducing maternal mortality and improving perinatal care for women with OUD and Opioid-Exposed Newborns
- Improve performance on quality metrics that are typically included in value-based payment models for perinatal care
- Access the VON NAS Universal Training Program and the VON Day Audits (which typically costs $3,000 to $4,500 for an institution and $10,000 to $15,000 for health systems) to help your organization become a VON Center of Excellence for NAS
- Highlight the successes and results of the best practices at your organization

Background about the PA PQC's Focus Areas

Maternal Mortality

The rate of maternal mortality in the U.S. is three times greater than any other developed country, and it is rising.[1] More moms are dying today than 20 years ago. In Pennsylvania, the rate has doubled since 1994, and it is 2.6 times higher for black women than for white women.[2] Over 60% of maternal deaths are preventable due to factors, such as lack of knowledge on warning signs and need to seek care, misdiagnosis and ineffective treatments, and lack of coordination between providers.[3] Half of pregnancy-related causes of death include hemorrhage, cardiovascular and coronary conditions, cardiomyopathy, or infection.[3] More than half of maternal deaths occur in the postpartum period.[3] The Commonwealth currently ranks 17th in maternal mortality, 26th in infant mortality, 32nd in prenatal care before the third trimester, and 31st in tobacco use during pregnancy.[2]

Pennsylvania can become the best place for a mom to have a healthy baby, with excellent attachment between the mom and baby dyad. Recently, Pennsylvania created a Maternal Mortality Review Committee (MMRC). The PA MMRC will review maternal deaths and develop strategies for the prevention of maternal deaths.[4] Prior to this statewide MMRC, Philadelphia was the only city in Pennsylvania with an MMRC.[5] The PA PQC will serve as the action arm of the PA MMRC by disseminating its recommendations and strategies.

The PA PQC's Maternal Mortality Driver Diagram Work Group has identified several key interventions that the PA PQC will help to implement among other key interventions that are aligned with national recommendations:

- expanding pre-conception, inter-conception, and postpartum care;
- providing implicit bias training and assessments;
- screening for social determinants of health, mental health, and substance misuse, and connecting to appropriate supportive services;
- offering prenatal group education classes; and
- implementing protocols for reducing delays in diagnosis and effective treatment for hemorrhage and cardiovascular conditions.

Pregnant and Postpartum Women with Opioid Use Disorders

Analyses from states, such as Massachusetts, found that pregnancy-associated deaths related to substance use disorders climbed to 41.4% in 2014 from 8.7% in 2005.[6] In Pennsylvania, the opioid use rate per 1,000 maternal hospital stays has significantly increased from a rate of 3.0 per 1,000 maternal stays in 2000-2001 to a rate of 19.6 per 1,000 maternal hospital stays in 2016-2017.[7] There are also significant outpatient implications. The PA Department of Human Services' and University of Pittsburgh's analyses of Medicaid data indicate that 70-84% of women with opioid use disorders (OUD) do not receive a postpartum visit.[8] In comparison, the weighted average of postpartum care across the Physical HealthChoices MCOs is 68%.[9]

In response, the PA PQC's Maternal OUD Driver Diagram Work Group has identified several key interventions that the PA PQC will help to implement among other key interventions that are aligned with national recommendations:

- educating staff and patients about substance use disorders;
- screening pregnant women for substance misuse and physical and behavioral health co-morbidities using validated screens;
- connecting women to treatment and supportive resources; and
- establishing prenatal, intrapartum, and postpartum care pathways for women with OUD that incorporate care coordination among multiple providers.

Opioid-Exposed Newborns and Neonatal Abstinence Syndrome

As a result of the increase in pregnant women with OUD, the rate of Neonatal Abstinence Syndrome (NAS) has significantly increased in Pennsylvania from 1.2 newborn stays with NAS per 1,000 in 2000-2001 to 15 newborn stays with NAS per 1,000 in 2016-2017.[10] Babies with NAS stayed in hospitals and NICUs 5 times longer and experienced more complications, such as low birth weight, prematurity, difficulty feeding, and respiratory distress.[10]

In 2018, Pennsylvania passed Act 54 to meet the federal CAPTA requirements and develop the Pennsylvania Plan of Safe Care Guidance.[11] In relation to this Act, the Departments of Health (DOH), Drug & Alcohol Programs (DDAP) and Human Services (DHS) have convened a Multi-Disciplinary Workgroup on Infants with Substance Exposure (MDWISE) in which interagency protocols are being developed to support the multi-disciplinary teams that will identify, assess, and construct plans of safe care for children born affected by substance use or withdrawal symptoms resulting from prenatal drug exposure or fetal alcohol spectrum disorder. MDWISE seeks to minimize prenatal exposure to substances and to improve infant, child, and family outcomes through this work. Under the law, mandatory notification to the department is required when a medical professional involved in the delivery or care of a child under one year of age has determined, based on standards of professional practice, that the child was born affected by substance use or withdrawal symptoms resulting from prenatal drug exposure or fetal alcohol spectrum disorder. DOH, DDAP and DHS have collaborated to determine these guidelines, which will inform the work of the PA PQC.

The PA PQC's NAS Driver Diagram Work Group has identified several key interventions that the PA PQC will help to implement among other key interventions that are aligned with national recommendations:

- attaining high reliability with NAS scoring using validated screens;
- standardizing non-pharmacological measures for opioid-exposed newborns;
- standardizing pharmacological interventions for newborns with NAS;
- ensuring a safe discharge; and
- supporting the mother and baby dyad with wrap-around and follow-up services in the community.

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