

## Insights

# Ohio's Multi-Pronged Approach to Addressing the Opioid Crisis



Since 2007, the Ohio Perinatal Quality Collaborative

(OPQC)—a statewide consortium of perinatal clinicians, hospitals, policy makers and governmental entities—has leveraged quality improvement (QI) science to significantly improve birth outcomes for moms and babies across Ohio. Their achievements include reducing early elective deliveries by [75 percent](#) across the state and a [statewide progesterone program](#) that reduced preterm birthrates before 32 weeks by [20 percent](#) in at-risk women. The OPQC's successful projects illustrate the potential of leveraging the QI framework and powerful statewide partnerships to drive population level improvement. In its efforts, the OPQC has partnered with a number of stakeholders, including the Ohio Department of Medicaid, the Ohio Department of Health, the Ohio Department of Mental Health and Addiction Services, and the Ohio Chapter of the March of Dimes.

In recent years, the OPQC has started addressing the thousands of families affected by the opioid crisis and is testing innovative strategies for improvement.

The OPQC is one of 47 state and multi-state PQCs working with the National Network of Perinatal Quality Collaboratives ([NNPQC](#)), a Centers for Disease Control and Prevention-funded initiative seeking to improve maternal and infant health outcomes by advancing evidence-informed clinical practices. More than a quarter of NNPQC teams are working on projects that address maternal opioid use disorder and neonatal opiate withdrawal syndrome, reflecting an urgent national need for improvement.

Are you a new PQC interested in learning how to support development and sustainability? The Ohio PQC in collaboration with fellow PQCs and improvement advisors developed a comprehensive resource guide. View it [here](#).

“As one of the first PQCs, Ohio is an invaluable mentor for states who are earlier in development,” says NICHQ NNPQC Executive Project Director Pat Heinrich, RN, MSN, CLE. “Their innovative work around Opioid Use Disorder (OUD) illustrates the effectiveness of their QI approach, and their lessons-learned and strategies can and should be spread to hospitals, communities, and states across the country. We need to do more to help mothers and babies affected by this national public health crisis.”

OUD among pregnant mothers in Ohio has dramatically increased, growing by [491 percent](#) between 2004 and 2011. This escalation corresponds to a spike in [babies born with neonatal abstinence syndrome](#) (NAS), which can cause babies to experience painful drug withdrawal symptoms resulting in prolonged hospitalizations and can potentially adversely affect their long-term health outcomes.

Recognizing that the crisis had reached epidemic proportions, the OPQC worked with state partners to develop a multipronged improvement strategy focused on providing comprehensive care for the mother-infant dyad. Below, the OPQC shares four core elements of their approach so that state and hospital improvement teams can learn alongside them.

### **Standardize identification and treatment for opioid exposed infants in Neonatal Intensive Care Units (NICUs)**

Between 2014 and 2018, the OPQC collaborated with more than 50 NICUs across the state (96 percent of all Ohio NICUs). Over the course of the project, participating hospitals cared for 9,600 babies born exposed to opiates.

“When we started this work, there was significant variation in how these infants were treated in the NICU—because there was no standardized protocol for NAS treatment—and there were large differences in length of stay,” explains Carole Lannon, MD, MPH, the Collaborative Science Lead for the OPQC. “We built on work done by the six children’s hospitals of the Ohio Children’s Hospital Association, and supported the hospital NICUs in adopting a set of straightforward evidence-based practices, called bundles; standardizing care; and then helping people understand that it was safe and effective.”

### **Quality Improvement at Work!**

Breastfeeding, which has numerous benefits for mothers and babies, is an important part of the nonpharmacological approach. But not all mothers could immediately breastfeed. Hospitals were uncertain about which formula would work best for babies with NAS who could not get mom’s milk, so they used an innovative quality improvement method to test the different formulas across four different groups of hospitals. The OPQC discovered that a high calorie formula had the best outcomes in terms of reducing NAS symptoms. The non-pharmacologic bundle was updated to recommend high calorie formula when breastmilk is unavailable, and the new bundle was implemented widely across the collaborative.

The OPQC's approach begins with a nonpharmacological care bundle that prioritizes keeping mother and baby together, skin-to-skin care, frequent feeding, and keeping babies in a quiet environment. If withdrawal symptoms persist, babies are transitioned to a drug protocol. The OPQC also standardized the initiation, escalation and weaning of the pharmacologic treatment, when needed.

The success of the new approach was undeniable: By the end of the initiative, OPQC hospitals had decreased length of treatment and length of stay by two days.

### **Encourage compassionate care among NICU providers**

Given that mother-baby togetherness is vital to a nonpharmacological approach, OPQC hospitals prioritized compassionate trauma-informed care—care that gives mothers a safe space to heal and empowers them to feel confident and comfortable caring for their baby.

“We realized that many NICU clinicians and staff didn’t understand opioid use disorder as a chronic disease and the stigma influencing care,” explains Lannon. “To encourage compassionate care, we provided unit-wide trainings on trauma-informed care and had addiction coaches and mothers whose babies had NAS speak on panels at our state conference. Our goal was to explain OUD as a chronic illness, provide an overview of trauma-informed care, and highlight experiences of women who had gotten through recovery.”

Surveys distributed before and after these interventions showed measurable change in provider-attitudes towards patients with OUD and an increase in compassionate care.

### **Provide comprehensive, coordinated maternity care**

While hospital-based improvements in post-delivery care are vital, the OPQC team realized that they also needed to establish upstream interventions that begin during prenatal care, says OPQC Program Advisor Karen Hughes, MPH. In 2018, they launched the Maternal Opiate Medical Supports Plus (MOMS+) Project, which focuses on supporting maternity care providers in improving care and outcomes for the mother-infant dyad. Their goal is to make sure that all women with opioid use disorder can access prenatal care, Medication-Assisted Treatment (MAT), behavioral health therapy, and other vital community supports including housing, food, and transportation. By building a reliable plan for the coordination of these services, the OPQC is working to help care teams ensure that the dyad has access to the supports they need to heal and sustain their recovery.

To further improve coordinated care between health care providers and community partners, the OPQC is developing a registry for patient information, explains OPQC Project Manager Jennifer Terry. The registry provides a secure, confidential and central place where all care providers can share data about patients, monitor appointment attendance, and improve collaboration and continuum of care across all services.

Partnering with Ohio's Medicaid managed care plans (MCPs) is also important for this work, says Hughes. “These partnerships help our prenatal care teams work with their managed care partners to break down barriers to accessing the resources the MCPs provide so that pregnant

women receive the services they need. Because we [the OPQC] had a history working with MCPs during our progesterone project, we were able to build off those strong relationships and the trust we'd already developed. As had been done with the Progesterone project, Medicaid has set up a direct line and email address for our practices to call, so they could get quick responses to their questions about referrals to services."

Building these relationships takes time, which is why the OPQC team has invited MCPs to regional meetings where they can meet maternity care providers in person, make connections, and share contact information. Because of these relationships, the OPQC has been able to share honest feedback with Medicaid about the barriers families face, and ultimately encourage system improvements.

### **Continue coordinated care after birth**

Interventions and services can't disappear after moms leave the hospital, explains Hughes. If mothers lose access to treatment and supportive services, their health and the health of their baby will suffer. That's why the OPQC is working to partner with Medicaid, family, pediatric and primary care practices, and federally qualified health centers to support the continuum of care and ongoing resources after delivery.

"This may be new territory for many of the pediatric providers," says Hughes. "Many haven't had experience working with mothers affected by opioid use disorder and their babies, so we'll need to test changes to figure out exactly what this looks like. With quality improvement, sometimes we're introducing evidence-based care and standards that already exist and sometimes we're innovating and developing those standards through the work."

*Interested in hearing more recommendations for supporting children and families affected by the opioid crisis? Check out recent articles [here](#).*