PERINATAL QUALITY COLLABORATIVES SUPPORT BREASTFEEDING

Introduction
Perinatal quality collaboratives (PQCs) are state or multi-state networks of teams working to improve the quality of care for mothers and babies. PQC members typically include maternal and neonatal health experts, healthcare providers, universities or academic medical centers, state health departments, nonprofit associations and state chapters of national-level organizations, as well as families and patients. Together, these stakeholders use the best available evidence-based methods to identify areas in need of improvement in maternal and infant healthcare, such as in hospital settings, and rapidly implement or recommend changes to various practices and processes. PQCs have contributed to important improvements in healthcare and outcomes for mothers and babies, including reducing:

- Deliveries before 39 weeks of pregnancy without a medical reason.
- Healthcare-associated bloodstream infections in newborns.
- Severe pregnancy complications.

Forty-four states currently have PQCs which are structured differently depending on their goals, organization, and funding. CDC currently funds PQCs in Colorado, Delaware, Florida, Georgia, Illinois, Louisiana, Massachusetts, Minnesota, Mississippi, New Jersey, New York, Oregon, and Wisconsin.

State Perinatal Quality Collaboratives

Additionally, CDC and the March of Dimes launched the National Network of Perinatal Quality Collaboratives to support state-based PQCs in making measurable improvements in statewide health care and associated outcomes for mothers and babies. More information on developing and sustaining PQCs can be found in CDC’s Developing and Sustaining Perinatal Quality Collaboratives: A Resource Guide for States.

PQCs and Breastfeeding

PQCs focus on improving maternal and child health outcomes before, during, and after birth, including efforts to increase breastfeeding initiation and duration. North Carolina, Massachusetts, and Illinois have explicitly identified breastfeeding as a priority or goal for their PQCs. Additionally, Connecticut’s PQC prioritized increasing exclusive breastfeeding rates for term infants and the use of human milk feedings preterm infants, also called the Human Infants with Mother’s Own Milk (HI-MOM) project. Wisconsin’s PQC is also beginning an initiative to decrease the number of infants not receiving human milk at hospital discharge by 50 percent from baseline and in at least two population subgroups. To measure the impact of this initiative, the PQC will require participating sites to select measures related to breastfeeding that are relevant to their setting.

Additionally, other PQCs have worked on improving hospital policies and practices that enhance outcomes for mothers and newborns, including increasing rooming in and skin-to-skin contact—all practices that are conducive to and supportive of breastfeeding.

State Examples of PQCs and Breastfeeding

North Carolina

The Perinatal Quality Collaborative of North Carolina (PCQNC) began in 1997 when two doctors traveled across the state talking to providers in delivery hospitals, gathering information and garnering support to make North Carolina the best place to give birth and be born. Since that time, all 72 delivery hospitals have joined the PCQNC as members. Membership is free, but members must be willing and able to do work toward the goals of the PCQNC and to provide data to inform decision making. Currently, six staff support the PCQNC.

Members decide on focus areas and vote on priorities based on their experiences in hospitals and emerging trends in the field. In addition to the three overarching PQC priorities identified earlier in this report, other PCQNC priorities have included:

- Reducing first birth cesarean delivery rates.
- Improving supportive hospital breastfeeding policies and practices.
- Improving diagnosis and management of maternal hypertension and preeclampsia.
- Standardizing assessment and treatment of neonatal abstinence syndrome (NAS).

As a result, North Carolina saw a 78 percent increase in hospital breastfeeding rates. NICUs increased breastfeeding support by 425 percent and skin-to-skin by 450 percent. North Carolina also increased its mPINC score from 2007 to 2017.
emphasize the importance of skin-to-skin contact between parents and infants and discourage the use of pacifiers, though constant education is required. Most hospitals no longer maintain their nurseries and instead keep mothers and babies together rooming-in. Hospitals encourage pumping if needed and provide education regarding donor milk if moms cannot nurse. Hospitals also now have support groups for new mothers. PQCNC has website with resources and information, including human milk guidelines, to encourage shared resources between hospitals.

The PQCNC has also created an action plan to support breastfeeding for infants in the Neonatal Intensive Care Unit (NICU), using family-centered care principles. The team has worked to change policies to allow 24-hour parental visits, which reduces transportation barriers. The team also sought to make feeding times more consistent across facilities and providers. Parental support is particularly valuable for parents of premature newborns, including a mothers’ milk group.

Massachusetts

The Neonatal Quality Improvement Collaborative of Massachusetts (NeoQIC), the Massachusetts Perinatal Quality Collaborative, the Massachusetts Department of Health, and the local March of Dimes chapter created a partnership to support breastfeeding in level III NICUs among critically ill, low birthweight, and very preterm infants. The NeoQIC collected and analyzed data from level III NICUs and found that the rate of breastfeeding among these infants varied between 50 and 80 percent, with variability across racial and ethnic groups.

All 10 level III NICUs participated in the initiative to reduce racial and ethnic disparities in breastfeeding and to boost breastfeeding for all infants in the NICU. The team developed shared evaluation measures, built a data system to allow for rapid, ongoing data monitoring through a centralized database, increasing professional development, providing parent and family support, and developing educational materials.

Illinois

The Illinois PQC (ILPQC) has a long-standing history of focusing on improving the accuracy of birth certificate data to better understand maternal and infant health risk factors and outcomes. The Illinois Department of Public Health (IDPH) initiated a new project with ILPQC to focus on decreasing the prevalence and adverse consequences of NAS.

To address NAS, IDPH:
- Partnered with the ILPQC to invite perinatal administrators to participate on the project.
- Held four focus groups in several regions across Illinois.
- Developed three sets of state-specific NAS materials based on feedback.

Although this project is still in early stages, the health department and ILPQC convened a meeting for neonatal teams on May 31, 2018, to discuss strategies that hospitals can adopt to educate all women and mothers on the importance of breastfeeding, and to start addressing the needs of women and

---

The Massachusetts NeoQIC saw an increase in the rates of:
- Education delivered during prenatal visits (from 65% to 87%).
- First breastmilk expression and collection within six hours of delivery (from 40% to 65%).
- Very low birthweight infants receiving mother’s milk at discharge or transfer (from 63% to 65%).
infants affected by opioids. During the session, the team also shared patient education materials on supportive breastfeeding practices, such as skin-to-skin contact, rooming in with newborns, and opioid use during pregnancy, which were developed using neighboring states’ resources and with the input of focus groups in April and May 2018.

**National PQC Resources**
- CDC website: [Perinatal Quality Collaboratives](https://www.cdc.gov/perinatalqualitycollaboratives/index.html)
- National Institute for Children’s Health Quality website: [Coordinating Center for the National Network of Perinatal Quality Collaboratives](https://www.chq.org)