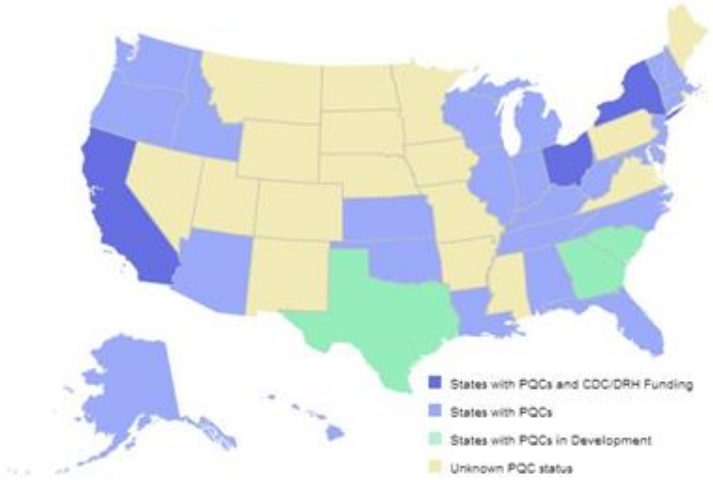
Fact Sheet

Perinatal Quality Collaboratives

Perinatal Quality Collaboratives (PQCs) are networks of perinatal healthcare providers and public health professionals working to improve maternal and perinatal health outcomes by supporting evidence-based clinical practices and processes. PQCs may include hospitals, pediatricians, neonatologists, obstetricians, perinatologists, midwives, nurses, state health department staff, quality improvement experts, and others. Currently, 32 states have either established or are establishing PQCs.



Source: CDC Division of Reproductive Health

IMPACT ON MATERNAL AND PERINATAL HEALTH OUTCOMES

PQCs focus on quality improvement in a broad range of issues that affect maternal and perinatal health outcomes such as early elective deliveries, antenatal steroid use, hospital-acquired neonatal infections, neonatal abstinence syndrome, and more.[1] Each of these issues independently affects maternal and perinatal health. For example, research suggests increased use of Caesarean section and induced labor before 39 weeks gestation (early elective delivery) may have influenced the increase in preterm birth rates between the 1980s and 2006.[2,3] Preterm birth is the leading cause of infant death and long-term neurological disabilities in children, and costs the U.S. healthcare system more than $26 billion each year.[4]

STATE EXAMPLES

The **California Perinatal Quality Care Collaborative** (CPQCC) is a network of healthcare leaders and 132 member hospitals representing more than 90 percent of all neonates cared for in California neonatal intensive care units (NICUs). CPQCC's primary goal is to develop a network of public and private obstetric and neonatal providers, insurers, public health professionals, and business groups to support a system for benchmarking and performance improvement activities for perinatal care throughout California. The CPQCC is led by an executive committee that meets regularly to discuss, review, prioritize, and plan CPQCC initiatives. Member hospitals submit data to the CPQCC data center, which is managed locally. Key CPQCC activities include: 1) developing and maintaining a perinatal data system to monitor the impact CPQCC initiatives have on maternal and perinatal outcomes; (2) implementing a comprehensive strategy for benchmarking and data-driven quality improvement activities; (3) providing topic-specific, intensive quality improvement collaborative projects, training, and toolkits; and (4) researching best practices and reassessing outcomes of performance improvements initiated.

The **New York State Perinatal Quality Collaborative** (NYSPQC) was formed in 2010 and is led by the New York State Department of Health. The collaborative focuses on reducing elective preterm deliveries, reducing central line-associated bloodstream infections, reducing the percentage of babies born prior to31 weeks gestational age discharged below the tenth percentile for growth (weight and head

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circumference), and reducing maternal mortality.[5] NYSPQC uses the Institute for Healthcare Improvement Breakthrough Series model for quality improvement.

The **Perinatal Quality Collaborative of North Carolina** (PQCNC) is a community of organizations, agencies, and individuals committed to making North Carolina the best place to give birth and be born. PQCNC collaborates with families, patients, providers, healthcare payers, hospital leadership, and public officials to address a broad range of issues. These include reducing catheter-associated bloodstream infections, enrolling all NICU infants in the North Carolina Immunization Registry, eliminating early elective deliveries, promoting exclusive breast milk use in hospitals, addressing neonatal abstinence syndrome, and more.

The **Ohio Perinatal Quality Collaborative** (OPQC) formed in 2007 and focuses on conducting statewide OB and neonatal quality improvement projects to increase use of best methods of care for pregnant women and preterm newborns.[6] Key partners include the Ohio Department of Health (ODH) Office of Vital Statistics, the ODH Child and Family Health Services program, the state Medicaid agency, CDC, Vermont Oxford Network, March of Dimes Ohio, academic medical centers in Ohio, the Ohio chapter of the American Academy of Pediatrics, the Ohio section of the American College of Obstetricians and Gynecologists, healthcare provider teams at 24 hospitals, and others. A major OPQC initiative focuses on reducing early elective deliveries. Between 2008 and 2013, OPQC engaged 105 maternity sites, including 20 maternity hospitals (which deliver more than 47 percent of babies born in the state). As a result, between September 2008 and March 2013, an estimated 31,600 births shifted from 36-38 weeks gestation to 39 weeks or more, preventing as many as 950 NICU admissions and saving an estimated $19 million in healthcare costs.[7]

RECOMMENDATIONS FOR STATE PQCs

State health agencies are critical members of PQCs. The founder of the OPQC says the following elements are needed to build a successful statewide PQC:

- Use a population-based, rapid-response data system.
- Engage a well-connected, committed, clinical leadership in obstetrics and pediatrics.
- Obtain access to baseline data.
- Involve key state agencies and professional organizations.
- Create centralized administrative infrastructure.
- Provide access to rigorous improvement science expertise.
- Integrate community and academic partners.
- Be transparent when sharing results.[8]

RESOURCES

The CDC Division of Reproductive Health's Perinatal Quality Collaboratives web page includes archived webinars on a variety of topics related to forming PQCs and PQC-related topics.

[1] CDC. "Perinatal Quality Collaboratives." Available at http://www.cdc.gov/reproductivehealth/MaternalInfanthealth/PQC.htm. Accessed 5-23-2014.
[2] Fuchs K, Wapner R. "Elective cesarean section and induction and their impact on late preterm births." *Clinics in Perinatology*. 2006. 33(4):793–800. Available at http://www.ncbi.nlm.nih.gov/pubmed/17148005. Accessed 5-23-2014.
[3] Bettegowda VR, Dias T, Davidoff MJ, *et al*. "The relationship between cesarean delivery and gestational age among U.S. singleton births." *Clinics in Perinatology*. 2008. 35(2):309–23. Available at http://www.ncbi.nlm.nih.gov/pubmed/18456071. Accessed 5-23-2014.
[4] PQC 101 webinar: http://www.cdc.gov/reproductivehealth/MaternalInfanthealth/PQC.htm
[5] http://www.albany.edu/sph/cphce/mch_nyspqc.shtml
[6] Rose B and Donovan E, 2012. The Ohio Perinatal Quality Collaborative. [Presentation]. *March of Dimes Prematurity PREVENTION Symposium*. Washington, DC.
[7] Ohio Department of Health, 2013. Ohio's Commitment to Prevent Infant Mortality. Available at: http://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/cfhs/Infant%20Mortality/collaborative/OhioCommitment2013-h.ashx. Accessed 04-08-2014.
[8] PQC 101 webinar: http://www.cdc.gov/reproductivehealth/MaternalInfanthealth/PQC.htm

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