

Perinatal Quality Collaborative of North Carolina



Cardiac Conditions in Obstetric Care Charter

Problem Statement:

Maternal heart disease has emerged as a major threat to safe motherhood and women's long-term cardiovascular health. In the United States, disease and dysfunction of the heart and vascular system is now the leading cause of death in pregnant women and women in the postpartum period accounting for 4.23 deaths per 100,000 live births. The most recent data indicate that cardiovascular diseases constitute 26.5% of U.S. pregnancy-related deaths. Of further concern are the disparities in cardiovascular disease outcomes, with higher rates of morbidity and mortality among nonwhite and lower-income women.

Contributing factors include barriers to prepregnancy cardiovascular disease assessment, missed opportunities to identify cardiovascular disease risk factors during prenatal care, gaps in high-risk intrapartum care, and delays in recognition of cardiovascular disease symptoms during the puerperium.¹

Maternal cardiac conditions refer to disorders of the cardiovascular system which may impact maternal health. Such disorders may include congenital heart disease or acquired heart disease, including but not limited to cardiac valve disorders, cardiomyopathies, arrhythmias, coronary artery disease, pulmonary hypertension, and aortic dissection.²

Maternal cardiac disease occurs in ~ 1-3% of pregnancies and is a leading contributor to maternal mortality in North Carolina:

- NC rate is 27.6 per 100,000 births (2019)
- NC ranked 30th out of 50 states in maternal death in 2019.
- Black moms 2.9 times more likely to die than white moms.

Mission:

Development of a toolkit that supports the implementation of evidence-based measures to improve recognition and treatment of maternal cardiac conditions, and systems to appropriately escalate care for patients experiencing maternal cardiac conditions that can be disseminated to, and implemented at, all hospitals providing OB delivery care in North Carolina.

Aim:

Development of a specific, actionable, stepwise toolkit to improve the care of obstetric patients with or at risk for cardiac morbidities during pregnancy by implementing a system that ensures -

- Complete a cardiac risk assessment on 100% of obstetric patients.

¹ ACOG Pregnancy and Heart Disease Practice Bulletin 212 May 2019

² https://saferbirth.org/wp-content/uploads/U4-FINAL_AIM_Bundle_CCOC.pdf

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- Order cardiology consult on 100% of obstetric patients at high risk for cardiac morbidities.

Scope:

We will work with perinatal quality improvement teams in participating sites, both outpatient and inpatient, caring for mothers in the antepartum, peripartum and postpartum period.

Method:

Invite teams from labor and delivery centers to participate in the collaborative to both implement and refine the toolkit. PQCNC will facilitate the collaborative structure to include learning sessions, web conferencing, coaching to support perinatal quality improvement teams (PQIT's), education regarding quality improvement strategies and development of data systems to support most effective implementation of the Maternal Cardiac Care Toolkit.

Measurement Strategy includes:

- Cardiac risk assessment on 100% of obstetric patients.
- Cardiology consults on 100% of obstetric patients at high risk for cardiac morbidities.