North Carolina's 2022–2026 Perinatal Health Strategic Plan: Addressing Perinatal Health Inequities Across the Life-Course

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North Carolina's Perinatal Health Equity Collective promotes the implementation of the 2022–2026 Perinatal Health Strategic Plan, building off its 2016–2020 predecessor. Through its overarching goals, the plan recognizes that reducing perinatal health inequities requires improving health care, strengthening families and communities, and addressing social, racial, and economic inequities across the life-course.

Overview of North Carolina's Perinatal Health Strategic Plan

North Carolina continues to struggle with disparities in perinatal health outcomes that negatively impact families, communities, and the state as a whole. The state's Perinatal Health Strategic Plan (PHSP) is a collaborative blueprint for elevating these issues and collectively implementing efforts to improve these inequities. In 2016, the Women, Infant, and Community Wellness Section (WICWS) of the Division of Public Health (DPH) in the North Carolina Department of Health and Human Services (NCDHHS) convened a group of more than 100 partners known today as the Perinatal Health Equity Collective. This collective drafted a statewide plan with a focus on infant mortality, maternal health, maternal morbidity and mortality, and the health status of all people of child-bearing age [1]. The 2022–2026 version of the PHSP is poised for release in 2022 as the state continues to strive to achieve perinatal health equity.

With the long-term goal of improving birth outcomes and the inequities that exist in the state's infant mortality rate [2] and maternal mortality and morbidity rates, the PHSP lays out three main goals, each containing four points (Figure 1) and numerous evidence-based or evidence-informed strategies. The 2022–2026 PHSP establishes greater accountability by putting into place a monitoring plan with dozens of data indicators to track outcomes. It includes the following four overarching indicators: 1) to eliminate the Black/White disparity in infant mortality; 2) to eliminate the Black/White disparity in severe maternal morbidity (excluding transfusions [3]); 3) to decrease the percentage of preterm births to 7.3% or less for all racial/ethnic groups; and 4) to increase health insurance rates to 90% or above for all racial/ethnic groups.

A Life-Course Approach

Both the 2016–2020 and 2022–2026 versions of the PHSP use a framework adapted from *Closing the Black-White Gap in Birth Outcomes: A Life-Course Approach* (2010) by Drs. Michael Lu, Milton Kotelchuck, Vijaya Hogan, and colleagues [4]. The life-course approach looks at health in populations over time by "focusing on broad social, economic, and environmental factors as underlying causes of persistent inequalities" [4]. This approach—when applied to birth outcomes—emphasizes the idea that providing

FIGURE 1.
North Carolina 2022–2026 Perinatal Health Strategic Plan's Life-Course Approach to Improving Perinatal Health Outcomes

Goal 1 – ***Address Economic and Social Inequities***	
Point 1	Undo racism
Point 2	Support working parents and families
Point 3	Reduce poverty among people of reproductive age and families
Point 4	Close the education gap
Goal 2 – ***Strengthen Families and Communities***	
Point 5	Invest in community building
Point 6	Support coordination and cooperation to promote reproductive justice within communities
Point 7	Enhance coordination and integration of family support services
Point 8	Strengthen father and coparent involvement in families
Goal 3 – ***Improve Health Care for All People of Reproductive Age***	
Point 9	Expand access to high-quality health care
Point 10	Improve access to and quality of maternal care in all settings
Point 11	Increase access to preconception, reproductive, and sexual health care for people of reproductive age
Point 12	Provide interconception care

Source. Lu MC, et al. [4]

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access to prenatal care and expecting it, "in less than nine months, to reverse the lifelong, cumulative impact of social inequality on the health of African American mothers" is short-sighted [5]. Both the PHSP and its original framework, through their three overarching goals, recognize that reducing perinatal health inequities will require improving health care, strengthening families and communities, and addressing social, racial, and economic inequities.

With the 2022–2026 PHPS's primary focus of increasing health equity, which is the opportunity for every person to have good health regardless of social and economic factors [6], "Undo Racism" was moved from Point 12 to Point 1 (Figure 1). This move places further emphasis on how the effects of interpersonal, structural, and systemic racism have always impeded the ability of BIPOC (Black, Indigenous, and People of Color) to achieve the best possible health, especially when considering how policies and practices have been experienced by these groups across the life-course [7]. Additionally, the 2022–2026 plan seeks to address the challenges of structural racism by focusing on the drivers of health. These drivers of health (sometimes called social determinants of health) are the factors that influence and affect our health in the environments where we live, learn, work, and play [8].

Policy Successes

The 2016–2020 PHSP touts numerous successes, including informing the development of Healthy North Carolina (Healthy NC) 2030 indicators and the *Healthy North Carolina 2030: A Path Toward Health* report [9]. The desired results of the PHSP, which is a comprehensive plan that focuses on direct health outcomes as well as non-medical drivers of health, overlap with those of several Healthy NC 2030 indicators, including but not limited to: 1) decreasing the number of individuals living below 200% of the federal poverty level; 3) lowering the short-term suspension rate; and 20) improving the infant mortality rate [9].

Perhaps most critical to moving policy elements of the PHSP into implementation have been the perinatal health partnerships developed and deepened during the creation and implementation of the 2016–2020 PHSP. These partnerships, and the momentum that the PHSP generated, also helped support numerous policy changes, including: legislation was approved in December 2015 to establish the state's Maternal Mortality Review Committee and reviews began in 2016; NC Medicaid began covering medical lactation support services in 2017; Governor Roy Cooper issued Executive Order No. 95 on May 23, 2019, extending paid parental leave to state employees in cabinet agencies; and Medicaid postpartum health care coverage was extended from 60 days to 12 months for eligible beneficiaries in North Carolina beginning April 1, 2022.

Policy Opportunities on the Horizon

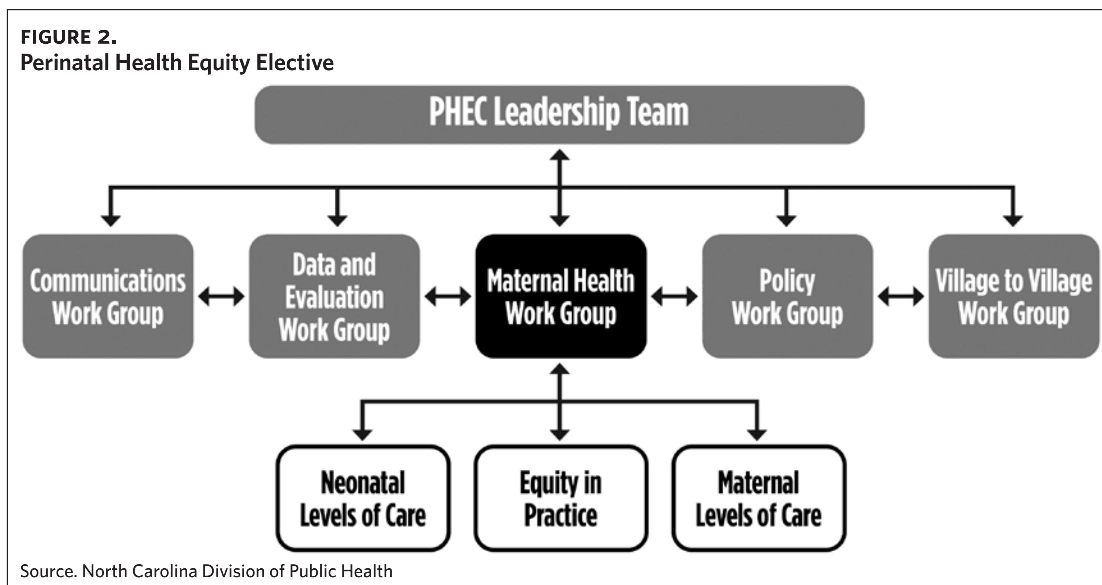
The PHSP provides a foundation for a coordinated strategy to be used throughout North Carolina and identifies varying organizations' roles in that strategy. Most recently, the North Carolina Institute of Medicine's Maternal Health Task Force produced 14 recommendations with the goal of improving maternal health in the state. These recommendations were merged with the 2022–2026 PHSP in order to ensure that partners would have one unified state plan to prioritize. When creating proposals or thinking through a larger approach, PHSP partners can turn to the plan to ensure that the work they are doing addresses and aligns with systemic goals.

PHSP implementation has also included policy development work. We provide updates on the focus areas here.

Doula Services

Research has shown that doula services can have a positive impact on reducing disparities in maternal and infant

FIGURE 2.
Perinatal Health Equity Elective



Source. North Carolina Division of Public Health

POLICIES & PROGRAMS – SIDEBAR

outcomes [10]. Currently, outreach and education pertaining to doula services is ongoing in the state. DPH completed a North Carolina doula landscape analysis in early 2022 to gather information from practicing doulas on their training and certification, along with service implementation location. This information has led to plans for a statewide summit planned for Fall 2022. This event will include a focus on doula competencies, training, and education. It will also include discussions related to service reimbursement. As part of Medicaid transformation, doula services are currently being provided by some Prepaid Health Plans as a value-added option. During the 2022 session of the General Assembly, Governor Roy Cooper included funds to allow for Medicaid to provide reimbursement for doula services. As this was not included in the budget approved by the General Assembly, doula services continue to be provided in a limited capacity in different parts of the state. Funding has been provided through several foundations, NCDHHS' Maternal Health Innovation Program, and self-pay users, along with the continued efforts of some Prepaid Health Plans. Doula services remain one of the current priorities of the NCDHHS focus on improving child and family well-being, and specifically in addressing maternal and infant health outcomes.

Group Prenatal Care

Research has also shown that group prenatal care, specifically the CenteringPregnancy care model, supports reduction in perinatal health disparities [11]. Several funders have supported training and capacity-building efforts for CenteringPregnancy in North Carolina. During the 2022 session of the General Assembly, the governor included funds to allow for Medicaid to provide reimbursement for group prenatal care services. As with doula services, the funding needed for Medicaid-enhanced reimbursement was not included in the latest budget approved by the General Assembly. Limited funding continues to support CenteringPregnancy through the March of Dimes, foundations, and NCDHHS. Group pre-

natal care is also a current NCDHHS priority in improving maternal and infant health outcomes.

Neonatal and Maternal Levels of Care

North Carolina previously participated in the Perinatal Regionalization Collaborative Improvement and Innovation Network (CoIIN) to reduce infant mortality. This effort, along with recommendations from the North Carolina Institute of Medicine's Perinatal Systems of Care Task Force, focused on North Carolina updating its neonatal levels of care (alignment with American Academy of Pediatrics guidance) and developing maternal levels of care for hospitals (alignment with American College of Obstetrics & Gynecology and Society for Maternal Fetal Medicine). This work continues as part of NCDHHS' priority focus on children and families, with a specific effort to improve maternal and infant health. As part of the Perinatal Health Equity Collective, the North Carolina Institute of Medicine will convene two action teams to lead this work in collaboration with NCDHHS, the North Carolina Healthcare Association, hospital systems, and individuals with lived experience (Figure 2).

Pharmacy Bill

North Carolina House Bill 96 expanded practice authority for certain pharmacists and pharmacy technicians [12]. This allows for pharmacists to dispense certain forms of contraceptives for individuals aged 18 years and older. Outreach and education are being led by the North Carolina Pharmacy Board and Association.

Perinatal Incarceration

The "Dignity for Women Who are Incarcerated" Bill (House Bill 608) was approved in late 2021 in North Carolina and includes the expansion of privacy for women in the prison system [13]. It also mandates improved care for pregnant women who are incarcerated, unborn children, and postpartum women. This bill limits the use of restraints on pregnant women, body cavity searches of women who are

pregnant or in postpartum recovery, and the placement of pregnant or recovering women in restrictive housing. The UNC Collaborative for Maternal and Infant Health leads North Carolina's Perinatal Health and Incarceration Working Group, which continues to champion this work.

Getting Involved

The Perinatal Health Equity Collective monitors the work of the PHSP and strives to find alignment and collaboration opportunities with other initiatives occurring in the state. This includes connecting with individuals with lived experience, communities, and organizational partners to share and evaluate the plan. While there is still more work to be done to branch out and engage with new partners, regular Perinatal Health Equity Collective meetings now highlight speakers and organizations from varied domains to increase awareness of work on the social determinants of health. The Perinatal Health Equity Collective meets every two months.

Five work groups meet more frequently to further the work of the PHSP (Figure 2). The Communications work group promotes and shares the intent and goals of the PHSP to audiences and stakeholders across North Carolina, while the Data and Evaluation work group compiles data annually for the Perinatal Health Strategic Plan Data Indicators and monitors new data sources. In addition, this group promotes data quality improvement and assists other Perinatal Health Equity Collective work groups to move data to action. The Maternal Health work group represents the former Task Force on Maternal Health, led by the North Carolina Institute of Medicine. Partners and experts from across North Carolina will work to elevate evidence-based solutions to best improve maternal health outcomes. At least three action teams will fall under this work group: Maternal Levels of Care, Neonatal Levels of Care, and Equity in Practice. The Policy work group advocates for and promotes policies found in the PHSP through education and information sharing, and the Village to Village work group (formerly known as the Community and Consumer Engagement Work Group) strives

to develop a network of preconception and interconception community members from across North Carolina who can create strategies and activities to strengthen the PHSP.

As North Carolina continues to experience high rates of maternal and infant mortality, while simultaneously grappling with unacceptable inequities in perinatal outcomes, there is much more work to be done. The Perinatal Health Equity Collective was formed to lead the implementation of the PHSP. This collaborative partnership welcomes all who are interested in tackling these issues as we work to improve maternal health, birth outcomes, and the overall health of individuals of reproductive age. To join the Perinatal Health Equity Collective, email PHSPquestions@dhhs.nc.gov. NCMJ

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