

**Report on Use of Funds for Evidence-Based Programs for
Infant Mortality Reduction**

Session Law 2023-134, Section 9M.1.(dd)



Report to the

**House Appropriations Committee on
Health and Human Services
and**

**Senate Appropriations Committee on
Health and Human Services
and**

Fiscal Research Division

By

North Carolina Department of Health and Human Services

December 31, 2024

BACKGROUND

In state fiscal year (SFY) 2015-2016, the North Carolina General Assembly appropriated one million five hundred and seventy-five thousand dollars (\$1,575,000) in the Maternal and Child Health Block Grant Plan to the Department of Health and Human Services' (DHHS) Division of Public Health (DPH) for each year of the 2015-2017 fiscal biennium to be used for evidence-based programs in North Carolina counties with the highest infant mortality rates. The North Carolina General Assembly repeated this appropriation at the same level and for the same purposes for the 2017-2019, 2019-2021, and 2021-2023 fiscal biennia. An additional \$152,307 was appropriated in SFY 2024, bringing the total amount of funds to \$1,727,307.

Session Law 2023-134, Section 9M.1.(dd) requires DPH to report on (i) the counties selected to receive the allocation, (ii) the specific evidenced-based services provided, (iii) the number of women served, and (iv) any impact on the counties' infant mortality rate. The legislation requires DPH to report its findings no later than December 31 of each year to the House of Representatives Appropriations Committee on Health and Human Services, the Senate Appropriations Committee on Health and Human Services, and the Fiscal Research Division.

ACTIONS AND RESULTS TO DATE

In SFY 2023-2024, DPH awarded funding for the Reducing Infant Mortality in Communities (RIMC) program (formerly entitled the Infant Mortality Reduction program) through a competitive request for applications (RFA) process. Previously, funding for this program was distributed to all local health departments (LHDs) that served counties within the top quartile (i.e. the top 25) for infant mortality rates. Under the RFA award process, LHDs were eligible to apply for the RFA if they served a county that ranked in the top quartile for the infant mortality rate or the infant mortality disparity ratio for the five-year period of 2016-2020.

In collaboration with the community, each LHD was required to select at least two out of five evidence-based strategies (EBSs) to implement: Breastfeeding Support Services, Centering Pregnancy, Doula Services, Infant Safe Sleep Services, and Preconception and Interconception Health Services with Diabetes Management Services or Weight Management Services. These EBSs are all considered an effective means to improve birth outcomes through addressing pregnancy intendedness, preterm birth, and/or infant death.

Evidence-Based Strategy	Description
Breastfeeding Support Services	Breastfeeding is one of the most effective preventive measures a mother can take to protect the health of her infant and herself. It is recommended to exclusively breastfeed during the first six months of life. While a high percentage of mothers initiate breastfeeding, most mothers stop breastfeeding due to the lack of support and rates are significantly lower among African American infants. To improve breastfeeding rates, the involvement and support from interventions must be delivered in different settings and include the involvement and support of clinicians, health systems, family, friends, employers, and the community. Ready, Set, BABY! (RSB) prenatal breastfeeding classes are provided by a trained educator to pregnant individuals

	<p>served at the LHD and in the community. Breastfeeding support services are also provided to pregnant and postpartum individuals by a trained Breastfeeding Peer Counselor. LHDs will establish new breastfeeding-friendly community spaces or workplaces and conduct community outreach and education activities.</p>
CenteringPregnancy®	<p>CenteringPregnancy® is a model of group prenatal care which incorporates three major components: assessment, education, and support. This model of group prenatal care promotes greater patient engagement, personal empowerment and community building, and has been shown to improve positive birth outcomes and lower racial disparities for preterm births. LHDs shall provide group prenatal care services.</p>
Doula Services	<p>A doula is a trained professional that provides physical, emotional, and informational support to an individual before, during and after childbirth. Studies show that doula support can improve preterm birth and low birthweight rates among non-Hispanic Black women and play a role in reducing racial and ethnic disparities in birth outcomes. LHDs shall recruit and provide doula training to at least four community members to provide doula services during the 3-year period. Doula services include at least one prenatal visit (childbirth education provided), continuous onsite labor support at the hospital, at least one postpartum visit and at least one contact 30 days after birth.</p>
Infant Safe Sleep Practices	<p>The American Academy of Pediatrics (AAP) has issued guidelines on safe sleep for infants to reduce the risk of sudden infant death syndrome (SIDS) and other sleep-related causes of infant deaths. The LHD shall designate staff to be trained on infant safe sleep practices to provide group and/or individual education sessions to pregnant individuals and their family members or support persons. For individuals who are in need, the LHD shall provide a safe sleep space (crib, play yard, portable crib) for their infant after receiving infant safe sleep education. Information on the benefits of breastfeeding and the elimination of tobacco use are included in infant safe sleep education.</p>
Preconception and Interconception Health Services – Diabetes Management Services/Weight Management Services	<p>Preconception and Interconception health services support the reproductive justice framework where all people can create self-determined reproductive lives. It is important for individuals whether or not they plan to have a baby. The overall health of individuals can affect fertility, fetal development and birth outcomes. LHD services include comprehensive contraceptive education and reproductive life plan assessments, and weight management or diabetes management services for individuals of reproductive age.</p>

RIMC program funding was awarded to eight LHDs for a three-year grant period of June 1, 2023 – May 31, 2026 (SFY 2024-2026). This allows LHDs additional resources and a defined timeframe to develop or enhance a community-driven, more comprehensive approach to improving birth outcomes and addressing the associated disparities.

The following table lists the eight LHDs who received funding for the three-year grant period (SFY 2024-2026) and the EBSs they selected to implement:

Local Health Department/District	Annual Funding Amount	Evidence-Based Strategy
Franklin County Health Department	\$221,638	Breastfeeding Support Services/Infant Safe Sleep Services
Granville-Vance District Health Department	\$227,965	Centering Pregnancy/Infant Safe Sleep Services
Guilford County, on behalf of its Department of Health and Human Services-Division of Public Health	\$245,000	Doula Services/Preconception and Interconception Health Services-Diabetes Management
Lee County Health Department	\$196,350	Breastfeeding Support Services/Infant Safe Sleep Services
Martin-Tyrrell-Washington District Health Department	\$152,307	Breastfeeding Support Services/Infant Safe Sleep Services
Scotland County Health Department	\$253,302	Doula Services/Infant Safe Sleep Services
Wayne County Health Department	\$205,745	Breastfeeding Support Services/Infant Safe Sleep Services
Wilkes County Health Department	\$225,000	Infant Safe Sleep Services/Preconception and Interconception Health Services-Weight Management

Each LHD was required to create a partnership with a local community-based organization for each selected EBS. The partner organization and LHD are responsible for ensuring that people with lived experience are engaged in all aspects of the program. The partner organization will provide guidance, support and/or services to the LHD for each selected EBS. Some LHDs provided RIMC funding to their partner organizations.

During SFY 2024, seven LHDs implemented **Infant Safe Sleep Services**. Families who would otherwise be unable to obtain a safe sleep space (crib or play yard) for their infants, are provided with one after receiving safe sleep education. Three-month follow-up surveys are conducted with participants who received infant safe sleep education to obtain information on their infant safe sleep

practices, breastfeeding initiation and maintenance, and tobacco/electronic nicotine device use. The LHDs that implemented Infant Safe Sleep Services conducted 188 surveys in SFY 2024. Participant reported data includes:

- 88% reported always laying their baby down to sleep on their back
- 85% reported initiating breastfeeding, out of those who initiated breastfeeding:
 - 47% reported breastfeeding their infant between one and three months
 - 36% reported breastfeeding their infant over three months
- 99% reported not allowing smoking inside the home
- 97% reported not allowing the use of electronic nicotine products inside the home

The following is a summary of program activities, including the number of individuals served under each EBS during the time-period of June 2023 to May 2024:

Evidence-Based Strategy (EBS)	# LHDs that Implemented EBS	# Patients Received Services	# Patients Educated	# Staff Trained
Breastfeeding Support Services	4	34	434 Ready, Set, BABY! class participants	11
CenteringPregnancy®	1	82	-	4
Doula Services	2	44	-	14 Doulas
Infant Safe Sleep Services	7	-	892	28
Preconception and Interconception Health Services – Diabetes Management/Weight Management	2	10, 611	42 Weight Management/ 0 Diabetes Management	-

Below is the baseline infant mortality and disparity ratio data for the newly funded counties. Data for the five-year periods of 2016-2020 and 2018-2022 are included for the top-ranking counties that were eligible to apply for this RFA.

County	Infant Mortality Rate 2016-2020¹	Infant Mortality Disparity Ratio 2016-2020¹	Infant Mortality Rate 2018-2022²	Infant Mortality Disparity Ratio 2018-2022³
North Carolina	7.0	2.59	6.8	2.63
Franklin	6.9	3.63	7.7	*
Granville	6.6	2.92	4.6	*
Guilford	8.7	3.11	8.4	2.89
Lee	8.4	3.10	7.4	*

Martin	13.5	1.38	13.2	*
Scotland	9.3	3.33	8.8	*
Vance	9.3	2.71	9.2	*
Washington	20.4	1.58	18.5	*
Wayne	8.2	3.06	9.7	3.37
Wilkes	7.1	3.94	7.9	*

¹Source: NC Department of Health & Human Services State Center for Health Statistics, 29NOV2021

²Source: NC Department of Health & Human Services, Title V Office in Collaboration with the State Center for Health Statistics, 24MAR2024

³Source: NC Department of Health & Human Services, Title V Office in Collaboration with the State Center for Health Statistics, 06MAR2024

*Technical note: Rates based on small numbers (fewer than 10) are unstable and should be interpreted with caution.

The Division of Public Health is focusing on these disparities while addressing the overall infant mortality rate. Elimination of health disparities is a priority for DHHS and a key area of emphasis in developing programming.

Infant mortality is impacted by multiple factors for which there is no one solution. It is influenced by the health of an individual before, during, after and between pregnancies. It is also further shaped by determinants of health, including the social, economic, geographical, and physical environments in which people are born, grow, live, work, and age.

Another key element in supporting improved birth outcomes is access to both health insurance and a healthcare provider or healthcare facility. Research has shown a greater decline in the infant mortality rate in states that have expanded Medicaid, especially in African American birth rates. North Carolina’s recent expansion of Medicaid will be a critical tool to reducing infant mortality rates.

After Year 1 of the RIMC program’s grant, isolating the impact of these evidence-based programs within each county remains challenging, given that this funding is only one resource for the state’s infant mortality efforts. The impact on infant mortality should be determined in the full context of the counties’ resources, as well as the socioeconomic factors and other issues facing individuals and families. In addition, many counties have been experiencing other reductions related to their maternal and infant health funding.

One of the priorities of DHHS is child and family wellbeing, including a specific focus on maternal and infant health. These efforts are connected to the work of the Perinatal Health Equity Collective, which provides oversight and guidance for the implementation of the Perinatal Health Strategic Plan (PHSP). The selected evidence-based strategies within the RIMC program are included in the statewide PHSP. DPH has aligned infant mortality reduction initiatives with the State Health Improvement Plan and continues to coordinate with other DHHS programs that support maternal, infant, child and family well-being.

i Bhatt, C. B., & Beck-Sagué, C. M. (2018). Medicaid expansion and infant mortality in the United States. *American Journal of Public Health*, 108(4), 565–567. <https://doi.org/10.2105/AJPH.2017>