# STATE OF NORTH CAROLINA
# DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER
GOVERNOR

MANDY COHEN, MD, MPH
SECRETARY

January 16, 2020

**SENT VIA ELECTRONIC MAIL**

The Honorable Joyce Krawiec, Chair
Senate Appropriations Committee on
Health and Human Services
North Carolina General Assembly
Room 308, Legislative Office Building
Raleigh, NC 27603

Dear Chairwoman:

Session Law 2019-192, Section 1.1.(cc) directs the Department of Health and Human Services, Division of Public Health, to report on the Maternal and Child Health Block Grant awarded during each year of the 2017-2019 fiscal biennium. The Division shall report on the counties selected to receive the allocation, the specific evidenced-based services provided, the number of women served, and any impact on the counties' infant mortality rate. This report is due 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. Pursuant to the provisions of law, the Department is pleased to submit the attached report.

Should you have any questions regarding this report, please contact Mark Benton, Assistant Secretary for Public Health, at 919-707-5000.

Sincerely,

Mandy Cohen, MD, MPH
Secretary

cc:
Kody Kinsley
Tara Myers
Matt Gross
Katherine Restrepo
Erin Matteson
Mark Benton
Susan G. Perry
Rob Kindsvatter
Hattie Gawande
Jared Simmons
Theresa Matula
Beth Lovette
Dave Richard
Marjorie Donaldson
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January 16, 2020

**SENT VIA ELECTRONIC MAIL**

The Honorable Larry Potts, Chair
House Appropriations Committee on
Health and Human Services
North Carolina General Assembly
Room 307C, Legislative Office Building
Raleigh, NC 27603

The Honorable Donna White, Chair
House Appropriations Committee on
Health and Human Services
North Carolina General Assembly
Room 306A2, Legislative Office Building
Raleigh, NC 27603

Dear Chairmen:

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MANDY COHEN, MD, MPH
SECRETARY

January 16, 2020

**SENT VIA ELECTRONIC MAIL**

Mr. Mark Trogdon, Director
Fiscal Research Division
Suite 619, Legislative Office Building
Raleigh, NC 27603-5925

Dear Director Trogdon:

Session Law 2019-192, Section 1.1.(cc) directs the Department of Health and Human Services, Division of Public Health, to report on the Maternal and Child Health Block Grant awarded during each year of the 2017-2019 fiscal biennium. The Division shall report on the counties selected to receive the allocation, the specific evidenced-based services provided, the number of women served, and any impact on the counties' infant mortality rate. This report is due 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. Pursuant to the provisions of law, the Department is pleased to submit the attached report.

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AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

# Report on Use of $1.575M for Evidence-Based Programs for Infant Mortality Reduction

## Session Law 2019-192, Section 1.1.(cc)

**Report to the**

**House of Representatives 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**

**January 16, 2020**

## 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 fiscal biennium of 2017-2019 and 2019-2021.

Session Law 2019-192, Section 1.1.(cc) requires the Division of Public Health 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, 2019 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 June 2018, the Division of Public Health allocated funding for the Infant Mortality Reduction program to local health departments (LHDs) in counties that experienced the highest infant mortality rates during the five-year period of 2010-2014. This funding was for the period beginning June 30, 2018 and ending May 30, 2019, and the amount of funding was based on the number of infant deaths per county during the 5-year period. Counties that had 75 or more deaths received an allocation of $113,750; counties with 20 – 74 deaths received $63,500; and counties with fewer than 20 deaths received $38,500. In SFY 2018 – 2019, the total number of LHDs who received funding was 21, secondary to Hertford County Health Department becoming associated with Albemarle Regional Health Services and 2 LHDs who declined funding (Anson and Warren). These declined funds were redistributed to two local health departments to implement a pilot Doula Services Program (Granville-Vance Health District and Wilkes County Health Department).

The following table lists the 21 local health departments who received funding in state fiscal year 2018-2019:

| Local Health Department | Funding Amount |
|---|---|
| Alamance | $113,750 |
| Albemarle Regional Health District | $38,500 |
| Beaufort | $63,500 |
| Caldwell | $63,500 |
| Cherokee | $38,500 |
| Cleveland | $63,500 |
| Columbus | $63,500 |
| Forsyth | $113,750 |

| | |
|---|---|
| Granville-Vance Health District | $102,000 (includes $38,500 for pilot Doula Services Program) |
| Halifax | $63,500 |
| Lee | $63,500 |
| Lenoir | $63,500 |
| Montgomery | $63,500 |
| Pitt | $113,750 |
| Richmond | $63,500 |
| Robeson | $113,750 |
| Rockingham | $63,500 |
| Sampson | $63,500 |
| Scotland | $63,500 |
| Swain | $38,500 |
| Wilkes | $102,000 (includes $38,500 for pilot Doula Services Program) |

All local health departments were required to implement or expand upon at least one evidence-based strategy (EBS) that is proven to lower infant mortality rates. The following selected strategies have all proven to be an effective means to improve birth outcomes through addressing pregnancy intendedness, preterm birth, and/or infant death:

| Evidence-Based Strategy | Description |
|---|---|
| **17P (alpha hydroxyprogesterone)** | 17P is a synthetic form of progesterone that has been shown to reduce the recurrence of preterm birth for women who have a history of preterm birth. The Local Health Department shall identify, refer, and support women through education and resource referral and, once identified, assist in coordination of services and remove barriers that may impact compliance to treatment plans. |
| **CenteringPregnancy®** | 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 birth outcomes. |
| **Doula Services Program** | A doula is a trained professional that provides pregnant women with continuous physical, emotional, and informational support before, during, and shortly after birth to achieve a healthy and positive birth experience. The Local Health Department shall hire a doula coordinator whose responsibilities include: recruiting and coordinating the trainings for community members to serve as doulas; conducting outreach and education; developing procedures and educational materials; matching doulas with |

| | |
|---|---|
| | pregnant women; conducting follow-up and birth satisfaction surveys with program participants; and tracking and reporting data. |
| **Infant Safe Sleep Practices** | The American Academy of Pediatrics has issued an expansion of previous guidelines on infant safe sleep that have been reviewed as evidence-based strategies to reduce the risk of Sudden Infant Death Syndrome (SIDS) and sleep-related deaths. The Local Health Department shall designate staff to be trained on infant safe sleep practices to provide group and/or individual education sessions to parents and caregivers. |
| **Nurse Family Partnership (NFP)** | Nurse-Family Partnership (NFP) is an evidence-based, home visiting program that helps vulnerable women pregnant with their first child. Each woman served by NFP is partnered with a registered nurse early in her pregnancy and receives ongoing nurse home visits that continue through her child's second birthday. |
| **Reproductive Life Planning Services** | The Local Health Department shall provide an assessment of each woman's reproductive life plan which includes contraceptive counseling and education using a tiered approach presenting information on all birth control methods from the most effective to the least effective methods. Increasing access to long acting reversible contraception (LARC) provides uninsured/underinsured women with birth control methods that are effective for long periods of time, easy to use, and do not require any action on the part of the user. |
| **Tobacco Cessation and Prevention** | The Local Health Department shall provide tobacco use screening (inclusive of electronic nicotine devices) and counseling to all adults and youth present at health care visits. Local Health Department staff shall be trained in the evidence-based 5A's (Ask, Advise, Assess, Assist, Arrange) method of tobacco cessation counseling. The Local Health Department shall designate staff to become certified tobacco treatment specialists to provide tobacco cessation counseling services to clients. Clients should be referred to QuitlineNC (1-877-QUIT-NOW) and/or appropriate community resources. The Local Health Department should counsel clients on, and engage in evidence-based policy support efforts, to limit secondhand smoke exposure. |

Most of the evidence-based strategies were already being implemented within some local health departments, and this funding served as an opportunity for expanding the reach in addressing infant mortality in these counties. They were selected based on their ability to have the greatest impact within the communities served and have proven to be effective through local health department implementation, particularly for those where the capacity for execution already exists.

Local health departments have reported that through the Infant Mortality Reduction program that they are able to provide additional resources, education and services to the women, families and communities they serve. The Reproductive Life Planning Services (RLPS) strategy has provided women with a comprehensive education on all birth control methods and an individual reproductive life plan. Women who have chosen long acting reversible contraception (LARC) but were ineligible to receive a LARC because they were uninsured or underinsured, were able to receive them through this program. Some LHDs who implemented the RLPS have reported experiencing lower numbers of unplanned pregnancies.

A limited number of LHDs have chosen 17P as an evidence-based strategy. LHDs who have implemented 17P have found that educating pregnant women on the importance of this treatment and removing potential barriers for compliance to treatment are challenging.

The LHDs that provide education and resources under the Infant Safe Sleep Practices strategy have experienced increasing attendance in individual and group education sessions. Women/parents who would otherwise be unable to purchase a safe sleep environment for their infant are provided with one after receiving safe sleep education.

The following is a summary of program activities, including the number of women served under each evidence-based strategy during the time-period of June 2018 to May 2019:

| **Evidence-Based Strategy (EBS)** | **# LHDs that Implemented EBS** | **# Patients Received Services** | **# Patients Educated** | **# Staff Trained** | **# Home Visits Conducted** |
|---|---|---|---|---|---|
| **17P** | 1 | 2 (19 injections) | 3 | 0 | N/A |
| **CenteringPregnancy®** | 4 | 237 | N/A | 25 | N/A |
| **Doula Services Program** | 2 pilots | 41 | N/A | 2 trained doulas | N/A |
| **Infant Safe Sleep Practices** | 15 | 2,875 | 900 (educational sessions) | 9 | N/A |
| **Nurse Family Partnership (NFP)** | 5 | 227 | N/A | 6 | 1,671 |
| **Reproductive Life Planning (RLP) Services** | 14 | 804 | 15,499 | 114 | N/A |
| **Tobacco Cessation and Prevention** | 4 | 120 counseled; 106 QuitlineNC referrals | 6,579 (screened) | 19 | N/A |

Infant mortality is a multifactorial problem for which there is no one solution. That's because it is influenced by the health of a woman before, during, 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 is whether she has health insurance, and if she has access to a health provider or facility. The importance of access to health insurance has been demonstrated in research. Specifically, studies have shown a greater decline in the infant mortality rate in states that has expanded Medicaid and even greater decline in rates for African American births.[i] Ultimately, expanding Medicaid can be a critical tool to reducing infant mortality rates.

North Carolina's infant mortality rate for 2018 was 6.8 deaths per 1000 live births, the lowest in state's history. Improvements occurred within all minority populations, however, the disparity ratio between non-Hispanic black and non-Hispanic white births remained greater than twofold. The Division of Public is focusing on this disparity 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.

The following table lists the baseline 2010-2014 infant mortality rates along with the 2014-2018 rates (per 1,000 live births) for the state and the 21 Local Health Departments who received funding for the Infant Mortality Reduction program in 2018-2019.

- For 16 of the 21 counties funded (76%), the 2014-2018 rates were lower than the 2010-2014 rates (represented in green).
- One county had the same rate (represented in yellow).
- For 4 of the 21 counties funded (19%), the 2014-2018 rates were higher than the 2010-2014 rates (represented in red).

| **Residence** | **2010-2014 Infant Mortality Rates[1]** | **2014-2018 Infant Mortality Rates[1]** | **Evidence-Based Program(s) Implemented in FY19** | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 17P | Centering Pregnancy | Doula Services Program | Safe Sleep | NFP | RLP | Tobacco Cessation & Prevention |
| **North Carolina** | **7.1** | **7.1** | | | | | | | |
| Alamance | 8.5 | 7.3 | | X | | X | | X | |
| Caldwell | 10.4 | 8.0 | | | | X | | | X |
| Columbus | 10.9 | 10.5 | X | X | | | X | X | |
| Forsyth | 8.5 | 8.2 | | | | | | X | |
| Granville-Vance Health District (Vance County) | 9.7 | 7.6 | | X | X | | | | |
| Halifax | 10.9 | 10.2 | | | | X | | | |
| Lee | 8.8 | 7.5 | | | | X | | | |
| Lenoir | 9.2 | 7.5 | | | | X | | | |
| Montgomery | 13.5 | 8.8 | | | | X | | X | |
| Pitt | 10.8 | 10.2 | | X | | X | X | | |
| Robeson | 12.0 | 10.6 | | | | | X | X | |
| Rockingham | 9.6 | 8.3 | | | | X | X | X | X |
| Sampson | 8.9 | 6.0 | | | | | | X | |
| Scotland | 11.7 | 9.4 | | | | X | | X | |
| Swain | 10.2 | 9.1[2] | | | | X | | X | |
| Wilkes | 9.2 | 7.3 | | | X | X | | X | |
| Cleveland | 9.0 | 9.0 | | | | | X | X | |
| Albemarle Regional Health District | 10.8/15.1 | 13.7/17.5 | | | | | | X | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| (Bertie/Hertford Counties) | | | | | | | | | |
| Beaufort | 10.5 | 11.6 | | | | X | | X | |
| Cherokee | 10.0 | 12.0 | | | | X | | | X |
| Richmond | 8.7 | 9.2 | | | | X | | | X |

[1]Source: North Carolina Center for Health Statistics (2010-2014, 2014-2018)
[2]Rates based on small numbers (fewer than 10) are unstable.

The current reporting timeframe is insufficient to determine impact on infant birth outcomes, including infant mortality, given all the complex associated factors previously noted. The $1.575M is only one source of funding for the state's infant mortality efforts, and the impact on infant mortality should be determined in the full context of the counties' resources, given many counties have been experiencing other reductions related to their maternal and child health funding.

Funding was allocated to continue to support these evidence-based programs in state fiscal year 2019-2020, and each of the evidence-based strategies are included as part of a statewide, collaborative Perinatal Health Strategic Plan being implemented by DHHS and its partners. The Division of Public Health is aligning infant mortality reduction initiatives with the Early Childhood Action Plan and coordinating with other DHHS programs supporting maternal and child well-being. Additionally, the implementation of NC Care360 provides a new resource for local health departments to refer patients to human service agencies and confirm the provision of necessary assistance. DPH is active in the development and dissemination of NC Care360 which is on schedule for full statewide implementation by December 2020.

Beginning in state fiscal year 2021-2022, the Division of Public Health will award funding for the Infant Mortality Reduction program to local health departments (LHDs) in the counties with the highest infant mortality rates during the more current five-year period of 2014-2018. Consideration will also be given for the infant mortality disparity ratio within the selected counties. Using this five-year period, the list of the highest-ranking counties and LHDs that receive funding may change. A shift in the available selection of evidence-based strategies and the funding allocations to LHDs will be considered as well.

- [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