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

Session Law 2016-94, Section 12I.1.(z)

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

December 29, 2016

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.

Session Law 2016-94, Section 12I.1.(z) 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 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 no later than December 31, 2016.

ACTIONS AND RESULTS TO DATE

In January 2016, the Division of Public Health allocated funding for the Infant Mortality Reduction program to local health departments in counties that experienced the highest infant mortality rates during the most recent five-year period (2010-2014). The top 25 counties were selected, but 26 were funded given a tie between counties 25 and 26. The following 26 local health departments (LHDs) were selected to receive funding, as listed below:

Local Health Department	Funding Amount
Alamance	$113,750
Albemarle Regional Health District	$35,000
Anson	$35,000
Beaufort	$60,000
Bladen	$35,000
Caldwell	$60,000
Cherokee	$35,000
Cleveland	$60,000
Columbus	$60,000
Forsyth	$113,750
Granville-Vance Health District	$60,000
Halifax	$60,000
Hertford	$35,000
Lee	$60,000
Lenoir	$60,000
Montgomery	$60,000
Northampton	$35,000
Pitt	$113,750
Richmond	$60,000
Robeson	$113,750
Rockingham	$60,000
Sampson	$60,000
Scotland	$60,000

Swain	$35,000
Warren	$35,000
Wilkes	$60,000

The funding distribution 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 $60,000; and counties with fewer than 20 deaths received $35,000. Three local health departments declined funding in fiscal year 2015-2016 (Bladen, Northampton, and Warren). The funds were declined because they were unable to effectively implement the infant mortality reduction program due to not being fully staffed, currently searching for a new Health Director, and/or unable to expend the funds in the required time frame.

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 evidence-based strategies from which they could select are summarized below. These strategies were selected based on their ability to have the greatest impact within the communities served, as DPH has expertise and experience working with communities to implement these evidence-based strategies. They are also programs that have proven to be effective through local health department implementation and which the capacity for execution already existed. Each of the evidence-based strategies were currently being implemented within some local health departments within our state and this served as an opportunity for expanding the reach in addressing infant mortality in these counties.

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 will identify, refer, and support women through education and resource referral and once identified, assist in coordination of services and encourage 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.
Long Acting Reversible Contraception (LARC)	LARC methods are types of contraception that are effective for long periods of time, easy to use, and do not require any action on the part of the user. The evidence shows that more women will use a LARC method when it is in stock and available for insertion on the same day as initial appointment without having to come back for a subsequent appointment.
Nurse Family Partnership (NFP)	Nurse-Family Partnership (NFP) is an evidence-based, community health program that helps transform the lives of 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.
Infant Safe Sleep Practices	The American Academy of Pediatrics has issued an expansion of previous guidelines on safe sleep for babies 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 must designate staff to be trained on infant safe sleep practices to provide group and/or individual education sessions to parents and caregivers.

The selected evidence-based strategies have all proven to be effective means to improve birth outcomes through addressing pregnancy intendedness, preterm birth, or infant death.

- 17P injections are designed to help prevent a preterm birth for pregnant women who have had a previous preterm delivery.
- Through group prenatal care, CenteringPregnancy® has shown to have positive outcomes related to increased breastfeeding initiation and reduced preterm birth rates, both associated with decreased infant mortality.
- LARC methods have demonstrated improvements in pregnancy intendedness, which is associated with improved birth outcomes. In addition, a short interpregnancy interval is a modifiable risk factor related to infant morbidity and mortality with improved access to the most effective form of contraception.
- NFP has been shown to reduce child abuse and neglect, and has also demonstrated reductions in prenatal smoking among mothers, which significantly contributes to infant mortality.
- Reductions in SIDS, and other sleep related deaths of infants, has been attributed to improved infant safe sleep practices.

The following is a summary of program activities to date, including the number of women served under each evidence-based strategy during the time-period of January 2016 to May 2016:

Evidence-Based Strategy (EBS)	**# LHDs that Implemented EBS**	**# Patients Received Services**	**# Patients Educated**	**# LHD Staff Training**	**# Home Visits Conducted**
17P	3	1	11	8	N/A
CenteringPregnancy®	3	25	N/A	12	N/A
LARC	21	348	3,256	92	N/A
NFP	3	197	N/A	N/A	973
Infant Safe Sleep Practices	12	755	213 (educational sessions)	42	N/A

Infant mortality is a multifactorial problem for which there is no one solution. It is influenced by the health of a woman before, during, and between pregnancies. It is also further shaped by social determinants of health, including the social, economic, geographical, and physical environments in which people are born, grow, live, work, and age. A 5-month timeframe is not sufficient to determine impact on infant birth outcomes, including infant mortality, given all the complex associated factors. In addition, to assess the effect of infant mortality as a result of some of these

interventions requires the completion of pregnancy and the first year of life of the infant. Funding was allocated to continue to support these evidence-based programs in SFY 16-17. As these strategies are continued, sustained funding is needed in order to show impact and DPH will continue to track outcomes within available resources. To show an effect on infant mortality rate, these strategies will need to be maintained over a longer period while tracking county level birth outcomes, in combination with other interventions to improve the health of women of childbearing age and birth outcomes. Each of the evidence-based strategies are included as part of a statewide, collaborative Perinatal Health Strategic Plan that was released in March 2016 by DHHS and its partners.