A Retrospective Look at North Carolina's Efforts to Reduce Infant Mortality

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North Carolina has consistently struggled with infant mortality. In 1989, North Carolina had the second highest infant mortality rate in the country, surpassed only by the District of Columbia. In response to this alarming fact, former Governor James G. Martin established the Governor's Commission on Reduction of Infant Mortality, which was funded in part by GlaxoSmithKline [1]. This commission was widely perceived as one of the first actions taken by the state to address this troublesome issue. The commission was paramount in launching important policies and programs to decrease North Carolina's infant mortality rate, improve maternal health, and streamline access to medical resources for expectant mothers in North Carolina. Since then, the state has aggressively worked towards the commission's initial goals using public, private, and federal funds. Looking back on the policies and programs enacted, 3 distinct themes emerge: expansion of medical care, support of select populations, and prevention.

The early 1990s saw the largest reduction in infant mortality, as the state focused its efforts on expanding access to medical care for pregnant women. An important development during this period was the creation of the North Carolina Healthy Start Foundation [2]. The foundation works with the government to promote programs and policies designed to reduce infant mortality. For example, the Baby Love program provides prenatal care, home visits, and pregnancy education to low-income women across the state (written communication with Belinda Pettiford, head of the Women's Health Branch, Department of Health and Human Services; February 26, 2016). The North Carolina Child Service Coordination Program was introduced in the early 1990s to offer assistance to families with children at risk for developmental delays [3]. The expansion of Medicaid was also key in improving access to prenatal care for pregnant women at this time. The success of these early expansion initiatives was reflected in the infant mortality rate, which decreased from 12.6 deaths per 1,000 live births in 1988 to 9.2 deaths per 1,000 live births in 1995 [4].

From the mid-1990s to 2008, North Carolina focused on supporting select populations with the highest risks of infant mortality. Data from that period showed that minority racial groups—namely African Americans and Native Americans—had substantially higher infant mortality rates than whites and Hispanics. In 1995, for example, the infant mortality rate among African Americans in North Carolina was 15.6 deaths per 1,000 live births, compared with a rate of 6.8 deaths per 1,000 live births among whites [4-6].

In 1994, the North Carolina General Assembly created the Minority Infant Mortality Reduction Program—now known as Healthy Beginnings—which provides grants of up to $50,000 annually to community-based programs and local health departments for initiatives that improve birth outcomes in minority communities. The success of these local programs has varied greatly from year to year. In 1997, North Carolina gained the benefit of additional resources when the Department of Public Health received its first federally funded grant to target infant mortality in 6 eastern counties. Concurrently, the University of North Carolina at Pembroke received a federal grant to cover the counties around Robeson County (written communication with Belinda Pettiford, head of the Women's Health Branch, Department of Health and Human Services; February 26, 2016). These grants were meant to combat the high infant mortality rate in the most at-risk communities. Overall, from the late 1990s through the early 2000s, the state focused on identifying at-risk populations and reducing the infant mortality rate in select communities.

The newest trend in North Carolina's effort to reduce infant mortality involves shifting the focus further

upstream. Previously, the aim was to promote maternal health during pregnancy; now, the focus is on bolstering women's health before conception. In 2008 and again in 2014, the Preconception Health Strategic Plan emphasized approaches that women can take to improve their behaviors, lifestyles, and medical conditions during their childbearing years [7]. In 2011, the state began to offer incentives through the pregnancy medical home model to maternity care providers who met certain criteria designed to improve the quality of prepartum and postpartum care [8]. Looking to the future, the new Perinatal Health Strategic Plan will consider social determinants of health as part of a plan to improve infant mortality, maternal health, maternal mortality, and the health status of both women and men during their childbearing years (written communication with Belinda Pettiford, head of the Women's Health Branch, Department of Health and Human Services; February 26, 2016).

As of 2013, North Carolina ranked 12th in the nation for highest infant mortality rate, at 6.99 infant deaths per 1,000 live births [9]. Although this rate was still above the national average of 5.96, that gap is quickly being closed. From 2005 to 2013, North Carolina reduced its infant mortality rate by 20.7%, compared to the national reduction of 13.1% during the same time frame [5].

Since answering Governor Martin's call in 1989, North Carolina has decreased the total infant mortality rate over 61% to 7.1 infant deaths per 1,000 live births [5]. This success is not due to a single program; rather, the constellation of policies enacted over the decades has been decisive in reducing the infant mortality rate. Although much remains to be done, it is reassuring to see North Carolina lead the way in reducing infant mortality and improving maternal health through an assortment of policies, programs, and funding that the state offers to North Carolina families and communities. NCMJ

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