Improving Access with a Comprehensive Approach to Reduce Infant Mortality in Maryland
Maryland Department of Health and Mental Hygiene

"The bottom line is that our strategies for driving down infant mortality are saving lives. Over these past few years we've made great strides. We've been able to expand healthcare access to young women and parents, build on local public health efforts, and educate new parents on safer sleep practices. But progress is never inevitable—it has to be earned. We have to work for it and therefore, our work continues." – Maryland Gov. Martin O'Malley

Overview
In 2009, Maryland reached its goal, set in 2007, of reducing overall infant mortality by 10 percent by 2012. Although the state had reached its goal three years early, much work remained. Maryland's infant mortality rate ranked in the bottom half of U.S. states and significant racial disparities persisted. In Maryland, a black infant is 1.5 times more likely than a white infant to be born prematurely, almost two times more likely to be at low birth weight (LBW), three times more likely to be very low birth weight (VLBW), and 2.5 to three times more likely to die in the first year of life. These disparities have a significant economic impact on the state. To address these challenges, Governor Martin O'Malley made reducing infant mortality one of 15 strategic goals under the Governor's Delivery Unit, and set a new goal of reducing the black infant mortality rate in Maryland by 10 percent and maintaining or further improving the rate statewide.

A statewide needs assessment identified Prince George's County as having one of the highest infant mortality rates in the state. Subsequently, the Prince George's County Health Department implemented the "Healthy Women, Healthy Lives" program, which used a comprehensive approach to improve women's overall health and birth outcomes. Women of childbearing age were targeted across the lifespan: before, during, and after pregnancy. The efforts in Prince George's County contributed to the success seen in Maryland's birth outcomes.

> **Economic Impact:**
> **The cost of VLBW and LBW births in MD, 2009**
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> - **$239,945 for VLBW.**
> - **$45,543 for LBW.**
> - **$8,703 for normal weight babies.**

Role of the State Health Agency
The Maryland Department of Health and Mental Hygiene (DHMH) discovered that uninsured women were presenting to labor and delivery without previous prenatal care, lacked access to Medicaid and prenatal care programs, and were applying for benefits late. In addition, a number of providers were only billing for delivery and not for prenatal care services. To increase the number of women accessing prenatal care, some local health departments implemented the "Quick Start" prenatal care program, which allowed women to get a timely prenatal care appointment while they awaited Medicaid eligibility determinations. The program also coordinated care with obstetricians/gynecologists (OB/GYNs) and nurse midwives.

The health department focused on prenatal care because Maryland vital statistics data showed that a lack of prenatal care was associated with higher infant mortality rates. Donald Shell, MD, MA, former Prince George's County health officer and now director of the Center for Chronic Disease Prevention and Control at DHMH, says, "Prenatal care received at any time has the potential to improve birth outcomes."

Part of the health department's strategy was to expand family planning clinics' services to include comprehensive preconception women's health services, including screening for Medicaid eligibility. Perinatal navigation services were instituted in collaboration with and funding from the DHMH Office of Minority Health and Health Disparities and were used to educate women on the important link between preconception health and birth outcomes. Perinatal navigators, or culturally competent community health workers, were a vital component to the program because they were trained to address minority health needs. They served as mediators for at-risk pregnant women, the health department, and private healthcare providers to ensure that women were applying for Medicaid and accessing care.

In Prince George's County, a community-based organization was provided space in an intensive outpatient substance program serving women and their children, and provided perinatal navigation and pregnancy/delivery support for women in the program who became pregnant. Women served in this clinic with poor birth outcomes were identified to have experienced domestic violence, physical or emotional abuse, histories of substance abuse, or sexually transmitted diseases, each having and adverse impact on birth outcomes.

Although perinatal navigators have proven effective at guiding pregnant women to care, it was also necessary to enact a policy change at the state Medicaid level and institutional change at the health department level. DHMH also needed strong support and leadership from the governor's office to ensure success in reducing infant mortality. These changes—in conjunction with "Quick Start" prenatal care, accelerated certification of eligibility (ACE) for Medicaid, and linking pregnant women with a community-based OB/GYN—formed part of the approach used to tackle infant mortality.

Steps to get pregnant women earlier entry to prenatal care through accelerated Medicaid eligibility included:
- Providing the opportunity to apply for Medicaid at the local health department and social services department.
- Governor's office approval of Medicaid ACE process.
- Maryland's Department of Human Resources (DHR) providing conditional eligibility upon applying through Medicaid ACE and approval within 10 days, for up to 90 days coverage, until full application is processed.
- Monitoring department performance of eligibility determinations for pregnant women to ensure 10-day requirement.
- Sending a letter to all prenatal providers encouraging uninsured pregnant women to apply for Medicaid.
- Training substance abuse and mental health providers to screen for Medicaid eligibility and services for pregnant women.

Partners
Many partners worked together on this effort including, but not limited to: the Maryland Office of Minority Health and Health Disparities, Maryland Medicaid, DHR, Maryland Department of Social Services, local health departments, the Maryland Governor's Office for Children, Youth, and Families, CareFirst BlueCross BlueShield, and both the University of Maryland's and Johns Hopkins University's medical schools and schools of public health.

Evaluating the program performance measures on health outcomes in the county included monthly reporting to the governor's office, data collection of target jurisdictions, and annual assessments of state and jurisdiction vital statistics, Medicaid, Title X, and Pregnancy Risk Assessment Monitoring System data.

Health Outcomes

Since the inception of initiatives focused in Prince George's County, the overall infant mortality rate for the state decreased from 8.0 to 7.2 per 1000 births in 2009, reaching the 2012 goal early. The black infant mortality did not change over this time period. Consequently, the governor called attention to the need to address black infant mortality specifically. In 2010, the Maryland state 2012 goals for reducing black infant mortality were surpassed. Black infant mortality had a 13 percent rate decrease, from 13.6 to 11.8 percent and the overall infant mortality rate in Maryland decrease from 7.2 to 6.7 percent. The state is seeking continued reductions in infant mortality. In 2011, the record low overall infant mortality rate of 6.7 per 1,000 live births was sustained.

Ongoing Work

DHMH also partners with local jurisdictions and academic medical centers to implement systems changes to enhance access to health services for women, improve the quality of care, and disseminate health promotion messages throughout the community. Examples include:

- Establishing a "Perinatal Collaborative" with the Maryland Patient Safety Center, bringing Maryland birthing hospitals together to share best practices and quality improvement strategies. The collaborative's work resulted in a dramatic decrease in early elective deliveries between 2009 and 2011 among participating Maryland birthing hospitals.
- Making high-risk pregnancy telemedicine consultations available to local OB providers around the state under a partnership between the University of Maryland and Johns Hopkins University Schools of Medicine.
- Updating the voluntary standards for perinatal care in Maryland hospitals in collaboration with the Maryland Institute for Emergency Medical Services Systems.
- Improving the delivery quality and timeliness of delivery data reporting with web-based electronic birth certificate developed by the Maryland Vital Statistics Administration.
- Reviewing and reporting hospital-specific VLBW outcomes to hospitals annually.
- Developing a hospital breastfeeding policy for Maryland hospitals to use as a model.
- Soliciting public comment and convening an advisory committee to review data on benefits and risks of crib bumpers. DHMH also proposed a ban on sale of traditional crib bumpers starting in 2013.
- Regularly convening prenatal care providers in each targeted jurisdiction to discuss prenatal and maternity care coordination, resource sharing, challenges, and overcoming obstacles or barriers to care.

Under the Affordable Care Act, DHMH is also working with the Governor's Office for Children, Youth & Families and several other agencies and partner organizations to expand and implement evidence-based home-visiting programs in at-risk communities across Maryland. These programs serve expectant parents, young children, and their families and caregivers to strengthen attachment, enhance parenting, provide optimal development, promote safety and health, and reduce the potential for child maltreatment.

Future Opportunities

To continue reducing infant mortality in Maryland, CareFirst BlueCross BlueShield has provided a $1 million grant to sustain the "B'more for Healthy Babies" campaign in Baltimore through 2013. Maryland allocated funding and resources to Baltimore due to the city's high black infant mortality rates. The state expanded the eligibility for Medicaid family planning services to women at or below 200 percent of the federal poverty level. The state also plans to develop a standardized hospital postpartum discharge process and wants to develop a statewide infant and child health outcomes database to discover at-risk groups for targeted interventions.

Donald Shell says, "It would be wonderful in the future if women served at STD, HIV, immunization, WIC, dental, substance abuse, mental health, or other public health clinics could all have the opportunity to have women's health incorporated, addressed, or promoted into the overall care they receive from the programs. Each of these clinical encounters provides a great opportunity for public health to address comprehensive preconception women's health to improve birth outcomes."

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