

NOVEMBER 18, 2013

Preventing Prematurity

ELLEN SCHLEICHER PLISKA

Director, Family and Child Health, Association of State and Territorial Health Officials

Prematurity is the leading cause of infant and newborn deaths in the United States (CDC 2013). Each year, one out of every nine infants is born prematurely (CDC 2013). For the nearly half a million infants who are born prematurely, or prior to 37 weeks, the Institute of Medicine estimates the associated annual societal economic costs total at least \$26.2 billion, or \$51,600 per infant (National Research Council 2007). Critical growth and development occur throughout pregnancy and especially in the final few weeks. The earlier an infant is born, the more likely he or she is to require special care for preterm-related health problems, not only in infancy but throughout a lifetime. Complications associated with premature birth include: developmental delay, cerebral palsy, breathing and respiratory problems, visual problems, hearing loss, and feeding and digestive problems (CDC 2013).

ASTHO'S HEALTHY BABIES INITIATIVE

In response to the high U.S. infant mortality rate and associated health inequities, the Association of State and Territorial Health Officials' (ASTHO) Healthy Babies Initiative helps state health officials and their staff improve birth outcomes by reducing infant mortality and prematurity. Led by former ASTHO President David Lakey, the objectives of the Healthy Babies Initiative are to (1) focus on improving birth outcomes with state leadership teams that are working with state partners on health and community systems changes; (2) create a unified message that builds on best practices from around the nation that can be adopted by states, U.S. territories, and the District of Columbia; and (3) develop clear measurements to evaluate targeted outreach, progress, and return on investment. Although Lakey's presidential year at ASTHO has ended, the initiative continues to build on the gains made in 2012.

STATES ACCEPT THE CHALLENGE TO REDUCE PREMATURE BIRTHS

In support of the Healthy Babies Initiative, the March of Dimes Prematurity Campaign, and other similar initiatives, ASTHO and the March of Dimes partnered to create a state pledge to reduce prematurity by 8 percent by 2014. As of July 1, 2013, 50 states, the District of Columbia, and Puerto Rico have agreed to the pledge. The participating states agree to publicly announce their state health agency's (SHA) goal to reduce the premature birth rate, initiate and support programs

KRISTEN WAN

Senior Analyst, Prevention and Health Promotion, Association of State and Territorial Health Officials

and policies in their state to reduce the premature birth rate, and build awareness of their state's prematurity rates and other maternal and child health indicators.

Thanks to a robust partnership, ASTHO and the March of Dimes recognize and support the work of states by participating with states on media events and cobranching March of Dimes media campaigns. States that take the pledge are eligible for two awards from the March of Dimes: (1) the Virginia Apgar Award to SHAs that achieve the 8 percent reduction goal by 2014; and (2) the Franklin Delano Roosevelt (FDR) Award to SHAs that achieve a preterm birth rate of 9.6 percent or less by 2020.

STATE PROGRESS TOWARD THE 8 PERCENT GOAL

Common state strategies for addressing prematurity and other poor birth outcomes include reducing early elective deliveries (EED) prior to 39 weeks gestation; expanding access to pre-conception and interconception care; promoting smoking cessation; promoting safe sleep practices; improving perinatal hospital regionalization; promoting health equity; and increasing access to 17-hydroxyprogesterone (17-P), a medication used to prevent repeat premature labor.

To date, several states have accomplished success toward the goal. Alaska, Arizona, Colorado, the District of Columbia, Delaware, Indiana, Massachusetts, New York, Rhode Island, Utah, Vermont, and Wyoming have achieved the Virginia Apgar Award. Alaska, California, Maine, New Hampshire, Oregon, and Vermont achieved the FDR Award. Continued focus on reducing prematurity ensures sustained progress – more babies born at term who are likely to thrive.

Even states that have not met the 8 percent goal are making great progress. SHAs are using data to better target services to areas with the most need to increase access to care. The Georgia Department of Public Health used data to match the mother's residency at delivery against infant deaths to find six clusters of high-risk areas for infant mortality. Through telemedicine, the use of telecommunication and information technologies to give care from distant locations, and innovative practices like Centering Pregnancy, an intensive prenatal care model, Georgia was able to lower preterm births among mothers participating in the program (5.9 percent) compared with mothers delivering at a nearby hospital (20.3 percent). Georgia is currently looking for ways to expand the program to other sites.

When it comes to reducing prematurity and other poor birth outcomes, there should be goals to improve both goodness, improving everyone's rates, and fairness, having the smallest outcome differences between the populations (WHO 2000). An estimated \$230 billion in direct medical care expenditures and more than \$1 trillion in indirect costs associated with illness and premature death would have been saved by eliminating health disparities for racial/ethnic minority groups (LaVeist et al. 2011). The Ohio Department of Health is working with CityMatCH to develop the Ohio Health Equity Institute to counteract the effects of racism and improve social determinants of health in nine of the state's big cities.

States like Oklahoma are working on reducing non-medically indicated or elective labor inductions and cesarean sections prior to 39 weeks (EED). Deliveries between 37 and 38 weeks – also called early term – account for 17.5 percent of live births in the United States (Davidoff et al. 2006). Early-term babies have higher risks of complications than babies born at 39 and 40 weeks (March of Dimes 2013). Some complications include increased neonatal intensive care (NICU) admissions, the need for ventilator support, and difficulty breastfeeding (Main et al. 2010). Oklahoma's health department and partners are working with a voluntary group of hospitals – 55 of 59 birthing hospitals equaling 95 percent of births – to do quality improvement around EED. The state has seen a 70 percent reduction in EED since the program began in January 2011. Because they were able to link decreased prematurity and NICU admissions to cost savings in Medicaid, the SHA received \$1 million for this initiative from the legislature.

ROLES AND OPPORTUNITIES FOR GRANTMAKERS

Funders have a unique opportunity to support innovation and promising practices to improve birth outcomes by working with SHAs. Grantmakers can increase work on health equity, advancements in access to care, and promoting new programs.

- **Improving Infrastructure and Access to Care:**

Foundations have the opportunity to help states improve their infrastructure around data collection and provide avenues for access to care. By using data mapped against birth outcomes, Georgia was able to identify the areas of most need in their state, regardless of county. Because of this, the SHA was able to use limited funding to impact the communities in most need and achieve great results.

- **Health Equity:** Grantmakers have the ability to raise awareness about populations who may have worse outcomes due to many systemic and structural reasons.

Promoting health equity within future grants ensures that resources are distributed to achieve healthy outcomes within groups that experience poor birth outcomes. States like Ohio are committed to ensuring the well-being of all residents, hoping to change the way the state and cities work with partners to tackle prematurity.

- **Promoting Best and Promising Practices:** Best and promising programs and policies are needed to decrease prematurity in states. Grantmaker support for developing new ways of delivering programs or bringing best practices to SHAs helps spur innovation and allows states to leverage funds for continued growth. Oklahoma was able to take successes from a collaborative and turn it into additional state funding to support continued growth of the program.

- **Making the Economic Case:** Providing funding or expertise to support cost impact analysis (such as return on investment, cost savings, and cost avoidance) is a critical asset to SHAs and can help make the case for continued work. States like Oklahoma were able to make the economic case for EED by linking decreases in hospital costs for babies born after 39 weeks due to their program. Some of the best outcomes are where SHAs are able to show their impact on populations and keep or re-direct those cost savings back into their programs.

SOURCES

Centers for Disease Control and Prevention (CDC), "Preterm Birth," <http://www.cdc.gov/reproductivehealth/maternal_infanthealth/PretermBirth.htm>, accessed October 4, 2013.

Davidoff, M.J., T. Dias, K. Damus, et al., "Changes in the Gestational Age Distribution among U.S. Singleton Births: Impact on Rates of Late Preterm Birth, 1992 to 2002," *Seminars in Perinatology* 30(1):8-15, February 2006.

LaVeist, T.A., D. Gaskin, and P. Richard, "Estimating the Economic Burden of Racial Health Inequalities in the United States," *International Journal of Health Services* 41(2):231-8, 2011.

Main, E., B. Oshiro, B. Chagolla et al., *Elimination of Non-medically Indicated (Elective) Deliveries Before 39 Weeks Gestational Age*, <<http://www.cdph.ca.gov/programs/mcah/Documents/MCAH-EliminationOfNon-MedicallyIndicatedDeliveries.pdf>>, California Maternal Quality Care Collaborative Toolkit to Transform Maternity Care Developed under contract #08-85012 with the California Department of Public Health; Maternal, Child and Adolescent Health Division; First edition published by March of Dimes, July 2010.

March of Dimes, "Get Ready for Labor: Why at Least 39 Weeks Is Best for Your Baby," <http://marchofdimes.com/pregnancy/getready_atleast39weeks.html>, accessed October 3, 2013.

National Research Council, *Preterm Birth: Causes, Consequences, and Prevention*, <<http://www.nap.edu/catalog/11622.html>>, 2007.

World Health Organization (WHO), *The World Health Report: Health Systems: Improving Performance*, <www.who.int/whr/2000/en/index.html>, 2000.

VIEWS FROM THE FIELD is offered by GIH as a forum for health grantmakers to share insights and experiences. If you are interested in participating, please contact Osula Rushing at 202.452.8331 or orushing@gih.org.