Prematurity and other birth-related problems, such as low birth weight and birth defects, have profound and lasting effects on individuals, families and society. One in eight babies in the United States is born too soon, resulting in long-term medical, early intervention and special education costs of more than $26 billion annually. Poor birth outcomes also add to the bottom line for Medicaid, the Children’s Health Insurance Program (CHIP) and other public programs.

States are addressing the risk factors that contribute to poor infant and child health by developing strategies that support healthy behaviors and improve access to quality health care. This report provides an overview of 10 policies that:

1. Promote early, high quality prenatal care
2. Reduce early elective deliveries
3. Reduce barriers to breastfeeding
4. Promote newborn screening
5. Promote effective early intervention and treatment for Medicaid-enrolled children
6. Promote safe sleep
7. Promote evidence-based home visitation
8. Reduce preventable childhood injuries
9. Promote oral health for pregnant women and infants
10. Increase child immunization rates

1. PROMOTE EARLY, HIGH QUALITY PRENATAL CARE. Every year, almost half a million babies are born prematurely—at least three weeks before their due dates—increasing the risk of death and a host of long-term health problems. According to a 2007 report published by the Institute of Medicine, the cost of health care, early intervention services and special education associated with pre-term births exceeds $26 billion annually.

Infants born to women who receive late or no prenatal care are twice as likely to have low birth weights as infants born to women who receive prenatal care in the first trimester. The percentage of women who receive late or no prenatal care varies considerably among states (figure 1). Timely prenatal care reduces unhealthy behaviors—such as using alcohol and tobacco—that can harm and even kill babies, and connects moms-to-be with appropriate resources. States have done the following to expand quality prenatal care:

Assess state needs and develop improvement plans. New Jersey and Louisiana, among other states, have studied gaps and challenges in prenatal care and developed plans to address them. In response to a 2008 New Jersey Prenatal Task Force report, the New Jersey Department of Health awarded grants to nine agencies to adopt evidence-based programs, such as patient navigators and doulas, to improve early prenatal care. A 2013 report on first trimester care between 2008 and 2011 found overall improvements, despite racial disparities and other access challenges.
they may choose to cover additional services that are not available under state exchanges were required to cover maternity and newborn care. States are required to provide Medicaid coverage to pregnant women with incomes up to or higher than 185 percent of the poverty limit—an annual income of about $44,000 for a family of four in 2014. The District of Columbia and 31 states have “presumptive eligibility” for covered pregnant women with incomes up to 133 percent of the federal poverty level, and they have the option of extending it to pregnant women with higher incomes. As of April, 37 states provided Medicaid coverage to pregnant women with incomes up to or higher than 185 percent of the poverty level—an annual income of about $44,000 for a family of four in 2014. The District of Columbia and 31 states have “presumptive eligibility” under Medicaid that allows immediate access to prenatal care services for pregnant women while their eligibility is determined (figure 2).

**Target high-risk Medicaid enrollees.** For covered pregnant women, states must provide pregnancy-related services, and they may choose to cover additional services that are not directly related to pregnancy. States also have the option of covering specialized or enhanced prenatal services for high-risk, expectant mothers. For example, Colorado’s Prenatal Plus Program targets high-risk, pregnant women enrolled in Medicaid with early and comprehensive services, such as nutrition counseling, mental health services and care coordination. A 2002 study by the Colorado Health Sciences Center found that every $1 spent on the program saved Medicaid approximately $2.48 in an infant’s first year of life. New York’s Community Health Worker Program provides one-on-one outreach, education and home visiting to uninsured and underinsured pregnant women at risk for poor health outcomes such as low birth weight babies and infant deaths.

**2. REDUCE EARLY ELECTIVE DELIVERIES.** Between 10 percent and 15 percent of all U.S. births are performed early without a medical reason, according to a 2012 report by the Centers for Medicare & Medicaid Services (CMS). Early elective deliveries are associated with increased risks of neonatal morbidity, breathing and feeding problems, blood infections and other complications that may require costlier hospital stays and cause long-term health problems. Early elective deliveries are performed for a number of reasons, including physician or patient preferences to schedule deliveries, mother’s discomfort, lack of understanding about the importance of the final weeks of gestation, a culture of medical intervention and liability concerns.

Reducing early elective deliveries improves health outcomes for mothers and infants and offers an important opportunity to improve health care quality and reduce costs. Because Medicaid finances about 45 percent of all U.S. births, targeted efforts to reduce early elective deliveries within the Medicaid population can be an effective state strategy to promote health and save money. The U.S. Department of Health and Human Services estimates that just a 10 percent reduction in baby deliveries before 39 weeks of gestation would lead to more than $75 million in annual Medicaid savings for associated complications.

States have taken measures to reduce early elective inductions and Caesarean deliveries, such as restricting reimbursement for them, educating patients and providers, monitoring performance and reporting, and coordinating efforts to disseminate best practices to perinatal providers. Illinois, New York, Texas and Washington have passed laws to reduce early elective deliveries. In 2011, Texas enacted HB 1983 to prohibit Medicaid reimbursement to hospitals for early, non-medically necessary deliveries. Washington appropriated $300,000 in 2011 (HB 2058) for the state Health Care Authority to develop guidelines for the appropriate and effective role of Caesarean sections and early induced labor.

As of 2014, at least 33 states had formed perinatal quality collaboratives—networks of hospitals and perinatal care providers, state health department staff and others—to improve pregnancy outcomes and address issues such as early elective deliveries, according to the National Center for Chronic Disease and Prevention and Health Promotion. Ohio’s Perinatal Quality Collaborative (created by providers, state agency staff, policymakers and others in 2007) adopted several interventions as part of its 39-Week Project to reduce early deliveries. Between September 2008 and January 2012, the project reduced admissions to the neonatal intensive care unit, saving...
approximately $27 million in health care costs.

In South Carolina, the Department of Health and Human Services’ Birth Outcomes Initiative, launched in 2011, worked with the hospital association to decrease early elective deliveries among Medicaid enrollees. A 2013 report found a 50 percent reduction in early elective deliveries, fewer neonatal intensive care admissions and savings of more than $6 million in the first quarter of 2013.

In 2011, the Louisiana Department of Health and Hospitals (DHH) launched the 39 Week Initiative to end non-medically necessary deliveries before the 39th week of pregnancy. DHH works with the state medical society, the hospital association and several other health providers to distribute provider and patient tools. Physicians who complete training are eligible for reduced premiums from the state’s malpractice insurance carrier.

3. REDUCE BARRIERS TO BREASTFEEDING. Breastfeeding improves infant health and saves money by reducing infections, asthma, allergies, diabetes, childhood obesity and sudden infant death syndrome. Mothers who breastfeed experience less postpartum bleeding and return to pre-pregnancy weight faster. They also face reduced risks of ovarian cancer, premenopausal breast cancer, postpartum depression and osteoporosis. The American Academy of Pediatrics recommends that infants be exclusively breastfed for at least 6 months, followed by breastfeeding in combination with other complementary foods until at least 12 months.

Forty-nine percent of babies born in the United States in 2011 were breastfed through age 6 months, up from 35 percent in 2000, according to a 2014 breastfeeding report card published by the Centers for Disease Control and Prevention (CDC). Rates for black infants are about 50 percent lower than those for white infants, according to a 2011 report by the surgeon general. Increasing breastfeeding rates to the goals outlined in Healthy People 2020—which as increasing the proportion of infants that are breastfed at 6 months to 61 percent—offers an important opportunity for states to improve public health and reduce medical costs. Meeting recommended levels could save as much as $2.2 billion in yearly medical costs, according to the CDC. State legislatures have taken a variety of actions to promote breastfeeding or to reduce the barriers that discourage or prevent women who choose to breastfeed.

- Laws in 46 states, the District of Columbia and the U.S. Virgin Islands explicitly allow women to breastfeed in any public or private location.
- Laws in 29 states, the District of Columbia and the U.S. Virgin Islands exempt breastfeeding from public indecency or indecent exposure laws.
- At least 25 states have laws relating to breastfeeding in the workplace, typically requiring employers to provide time each day and adequate facilities for a breastfeeding employee.

The Affordable Care Act requires new private health insurance plans to cover specified women’s preventive health services, such as breastfeeding support, supplies and lactation counseling, without cost sharing. Although not required, several
states promote breastfeeding through their Medicaid programs. In a 2008 study, at least 25 state Medicaid programs covered breastfeeding education, 15 covered lactation consultations and 31 covered equipment rentals. Florida’s Medicaid waiver program stresses healthy nutrition and breastfeeding habits in monthly outreach and case management to Medicaid enrollees at risk for birth problems. States also promote breastfeeding by disseminating information via hospitals and social service agencies, promoting breastfeeding in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and encouraging or requiring child care centers to provide safe storage of expressed milk. New York adopted a Breastfeeding Mothers Bill of Rights, which must be posted in maternal health care facilities.

4. PROMOTE NEWBORN SCREENING. State newborn screening programs test about 4 million infants annually for genetic disorders and other health problems, such as hearing or hormonal, metabolic or blood disorders, which may not be apparent at birth. Early detection helps prevent disabilities and additional health problems or death and also saves states and families money by initiating rapid treatment. To detect problems soon after birth, hospitals collect blood samples and administer hearing tests before infants leave the hospital. Newborn screening programs can help affected infants receive appropriate treatment by providing follow-up, diagnosis, management, evaluation and education.

Every state and the District of Columbia operate a newborn screening program. Although states determine their own requirements, they often follow national recommendations developed by the Discretionary Advisory Committee on Heritable Disorders in Newborns and Children. Currently, the committee recommends that all state newborn screening programs test for 31 core and 26 secondary conditions. Guidelines for selecting core conditions consider the tests’ ability to detect the condition soon after birth, the availability of an effective test, and the benefits of early detection and treatment. Secondary conditions are disorders that may be detected through further examination of core condition screening results, but do not meet all the criteria for core condition guidelines, such as an effective existing treatment.

All states currently require screens for at least 26 of the federally recommended core conditions; state testing requirements for the secondary conditions range from none to all 26 tests. The federal advisory committee has added recommendations over time, such as screening for critical congenital heart defects or disease. To date, Connecticut, Indiana, Maryland, New Hampshire, New Jersey, Tennessee and West Virginia have passed laws to require heart screening, and California requires that the test be offered. Some states also require screens through state agency regulations or other means.

5. PROMOTE EARLY INTERVENTION AND TREATMENT FOR MEDICAID-ENROLLED CHILDREN. Early identification of developmental disorders can prevent more costly problems later and help infants and toddlers learn skills and meet developmental milestones during their early years, and it helps to ensure that they receive services to meet their mental, physical, social and emotional needs.

Medicaid’s Early Periodic Screening, Diagnosis, and Treat-
ment Program (EPSDT) benefit package for children covers the costs of periodic, comprehensive screenings, including vision, dental and hearing. Given the large number of children served through Medicaid, ensuring that EPSDT services are delivered effectively and efficiently offers a cost-effective opportunity for states to detect and treat problems early, before they become expensive and difficult to treat.

Some states provide screenings through child health clinics operated by local health departments with funds from the federal Title V Maternal and Child Health Block Grant. Increasing provider participation rates in state Medicaid programs may also increase participation in EPSDT. Some states have informed families about EPSDT services through home visiting, WIC and other programs.

Washington and Maine are among states that have taken steps to promote quality in EPSDT services, including incorporating the American Academy of Pediatrics’ Bright Futures standards into care delivery. Physicians who incorporate these standards receive enhanced reimbursement under MaineCare, the state’s public health insurance program. Virginia’s Department of Health partnered with the AAP’s Bright Futures Education Center to develop parent and caregiver resources on a wide range of topics covered during well-child visits, including nutrition and oral health.

6. PROMOTE SAFE SLEEP AND REDUCE INCIDENCE OF SIDS.

About 4,000 infants die each year in the United States without any immediately obvious cause, according to the Centers for Disease Control and Prevention; about half are attributed to Sudden Infant Death Syndrome (SIDS). The overall SIDS rate in the United States has decreased by more than 50 percent since 1990; however, rates for certain populations, including non-Hispanic black and American Indian/Alaska Native babies, are disproportionately higher.14 Some types of sleep-related deaths, such as suffocation and hypothermia, have increased. This has prompted health experts and some policymakers to call for more comprehensive efforts to promote safe sleep.

States have adopted several strategies to reduce incidence of SIDs, including campaigns to encourage parents and childcare workers to place infants on their backs to sleep. Some states require data collection on SIDS and other Sudden Unexplained Infant Deaths (SUIDs) to monitor trends and develop prevention strategies. For example, when survey data in Michigan showed that black non-Hispanic mothers were 20 percent less likely than moms of other races and ethnicities to place their babies on their backs to sleep, the governor’s office created the “Infant Safe Sleep Campaign,” which included education and public policies to promote safe sleep. In 2013, Florida enacted safe sleep legislation that, among other things, requires data collection and analysis of sudden unexplained infant deaths and also requires hospitals to educate new parents about them.

States provide guidance for coroners or medical examiners and set protocols for autopsies of SIDS and/or SUID victims. Many states also require participation by a SIDS expert in child fatality review committees. In addition, several states have SIDS/SUID advisory councils, education programs or counseling programs. At least 12 states require special training about sudden infant death for child care personnel, firefighters, emergency medical technicians or law enforcement officials—Arizona, California, Florida, Illinois, Indiana, Minnesota, Nebraska, Tennessee, Texas, Washington, West Virginia and Wisconsin.15

7. PROMOTE EVIDENCE-BASED HOME VISITATION. Policymakers have been investing state funds in home visiting for more than a decade. Home visits by a trained provider—such as a nurse or early childhood educator—during pregnancy and in the child’s first year have been found to improve child and family outcomes.16 Through regular and voluntary home visits, trained professionals support expectant mothers and new parents to promote infant and child health, foster healthy child development and improve school readiness. Well-designed programs achieve a wide array of benefits for children and families, while creating long-term savings for states. For every dollar invested, effective home visiting programs can return up to $9.50 in reduced spending in health care, criminal justice, child welfare, and special and remedial education, according to the Pew Charitable Trusts.17

Legislators play important roles in establishing policies and overseeing home visiting services and investments in their states. In addition to establishing and funding programs, legislators have enacted policies to define home visitation goals, promote coordination of early childhood resources across agencies, support high quality programs, strengthen data systems, track public spending on home visiting and require program reporting to help monitor performance and outcomes. Among other policies, states:

- Invest in evidence-based home visiting. Several states, including Arkansas, Iowa, Maryland, Michigan, South Carolina and Washington, target public investments into research-based models that demonstrate evidence of effectiveness. Washington
requires that funds be allocated to evidence-based programs and South Carolina requires communities to target high-risk families, provide a minimum number of visits and participate in ongoing quality assessments.

**Use Medicaid funds to support home visiting.** States also rely on several Medicaid financing mechanisms to support home visiting, including case management, enhanced prenatal benefits, managed care and traditional medical assistance services. A 2010 survey of states by the Pew Center on the States found that 15 states use Medicaid to fund at least one home-visiting program; additional states may use Medicaid to reimburse for individual home-visiting services. For example, 32 states reported offering home visiting as an enhanced prenatal Medicaid benefit for pregnant women in 2007. States can also consider defining a package of home-visiting services offered under Early, Periodic, Screening, Diagnosis and Treatment (EPSDT), Medicaid’s benefit program for children. Minnesota defined a set of children’s mental health services, including individual and family therapy, crisis counseling and the use of a behavioral health aide, to be offered under EPSDT.

**Strengthen data capacity.** Some states establish data and tracking systems to ensure that programs achieve desired results. The Healthy Families Massachusetts home-visiting program created a comprehensive data strategy that includes performance measurement for 27 indicators—e.g., measuring the percentage of participants who have a primary care provider or an individualized family support plan—paired with an independent program evaluation to assess program impacts.

**Promote coordination of early childhood resources.** Several states have integrated home visiting into a comprehensive early learning approach. Connecticut’s Early Childhood Education Cabinet appointed a home-visitation steering committee to study best practices. The cabinet is linking home visiting with other state priorities, including early literacy development, family economic stability and father engagement.

**8. REDUCE PREVENTABLE CHILDHOOD INJURIES.** Unintentional injuries, defined by the CDC as “predictable and preventable when proper safety precautions are taken,” were one of the leading causes of infant death in 2009. Among young children, unintentional injuries are commonly caused by suffocation, drowning, fires and burns, poisoning, motor vehicle accidents and other transportation injuries. Other causes include falls and injuries caused by sports and recreational activities.

The CDC’s 2012 National Action Plan for Child Injury Prevention recommends multiple and cross-cutting policies and actions to reduce child injuries. These include laws and regulations that promote safe environments, as well as data and surveillance, research and dissemination and education strategies.

States have adopted a wide range of policies to promote safe environments, through laws requiring fences around swimming pools, for example, and safe behaviors, such as use of car seats and bicycle helmets. All states have adopted child safety seat laws, for example. In addition, state policymakers support injury prevention strategies, such as the ones recommended by the National Action Plan. These include investing in data and surveillance, research and evaluation and information clearinghouses for disseminating information; providing education and training for health care providers and child care workers; and promoting risk assessments and injury prevention within primary care settings, health care facilities and through home-visitation programs. (See NCSL’s 2009 LegisBrief for additional policies to address specific injury risks.)

**9. PROMOTE ORAL HEALTH FOR PREGNANT WOMEN AND INFANTS.** When a pregnant woman receives good dental care, her child also benefits, and overall health costs are reduced. Dental disease in pregnant women is associated with pre-term birth, low birthweight and gestational diabetes, all of which can harm the baby and may result in a more costly pregnancy. A pregnant woman’s oral health also can affect her children. Dental caries or tooth decay—a chronic, infectious disease caused by bacteria in the mouth that leads to cavities—can be transmitted from mother to child through saliva and usually is established by age 2. Moreover, children whose mothers have poor oral health or high levels or oral bacteria are more likely to have oral health problems themselves.

Despite the importance of dental health for pregnant women, data suggest the majority of pregnant women do not access dental care. It may be because they don’t know how important it is, they worry it might endanger their baby, they lack dental insurance or there’s a shortage of dental health providers in their area. Policymakers have taken several steps to overcome the barriers, including:

**Establish guidelines for perinatal oral health.** The New York State Department of Health convened experts to develop recommendations—contained in a 2006 report—for prenatal, oral health and child health providers. The California Dental Association developed practice guidelines for health professionals who deliver oral health services to pregnant women and children.
Encourage dentist participation in Medicaid and CHIP. To address the low participation rates in Medicaid, several states—including Connecticut, South Carolina, Tennessee and Virginia—have increased reimbursement rates for participating providers. Other strategies for promoting participation in public programs include outreach to dental providers, reduced administrative requirements and streamlined authorization.

Integrate oral health into primary care services. Recognizing that pregnant women and young children are more likely to see a primary care provider than a dental professional, several states are engaging physicians in programs to promote oral health. According to a 2009 report published by the National Academy for State Health Policy, 34 state Medicaid programs reimbursed primary care providers for preventive oral health services, including fluoride application, parent education and guidance, risk assessment and oral examination and screening.

Assure Medicaid and CHIP coverage of dental care for pregnant women. Pregnant women enrolled in Medicaid and CHIP are entitled to “pregnancy-related services,” but dental care is not explicitly identified as one of those services. Some states, including California, Louisiana, Missouri, Oklahoma and Oregon, have established dental benefits for pregnant women enrolled in Medicaid.

10. INCREASE IMMUNIZATIONS. Childhood vaccines have reduced or eliminated many infectious diseases, such as smallpox and polio, and are credited with saving millions of lives. High vaccination rates in children by age 2 have resulted in low rates of most vaccine-preventable diseases, according to a 2012 CDC report. Vaccination of each birth cohort prevents 42,000 deaths and 20 million disease cases in the United States saving almost $14 billion in direct costs and $69 billion in total societal costs.

Maintaining high immunization levels—and increasing immunizations where they lag—is a key public health concern. While almost all children receive at least one shot by age 35 months, rates for children who receive all recommended vaccinations are much lower. Vaccination coverage rates vary across states and among certain populations. Nearly three-quarters of U.S. children between the ages of 19 months to 35 months received the recommended series of vaccines in 2011; state coverage rates varied from 65 percent to 83 percent, according to the CDC.

To bolster immunization rates, states have set requirements for child care and school entry, improved access to immunization services and providers and funded immunization programs and registries.

School requirements. States establish requirements for school and daycare to protect children from vaccine-preventable disease, such as pertussis (whooping cough), which affected more than 10,000 children between January and June 2014. School entry requirements typically correspond with recommendations from the Advisory Committee on Immunization Practices.

Reimbursement and workforce. States also adopt reimbursement and workforce policies to promote access to providers and services. Children enrolled in Medicaid are eligible for immunizations as part of the EPSDT program, so efforts to promote provider participation in Medicaid can have a positive impact on accessibility. Some states have expanded pharmacists’ and other health care providers’ roles to expand the pool of professionals who can administer shots for adolescents and adults. Other strategies involve collaboration between state programs and incorporating screening and referrals into home-visitation programs and WIC.

Immunization systems. States also support immunization delivery through investments in immunization programs and statewide immunization information systems, or registries. Registries—confidential, computerized systems—help track children’s vaccination histories to both improve vaccination rates and avoid duplication. All states and the District of Columbia have at least one regional or local registry; in 2012, 86 percent of all U.S. children up to age 6 participated in a registry.

Education and training. Some states focus on educating parents and health care providers about vaccine recommendations and safety. For example, the Massachusetts Department of Health and Human Services has an online immunization toolkit to inform providers about best practices, current recommendations, vaccine management and reporting, school requirements and other issues.

CONCLUSION

Poor birth outcomes and their long-term economic and societal costs are a serious challenge for states. At the same time, the size of Medicaid and CHIP, and the wide net of children and pregnant women covered by these programs, offer a powerful tool for improving health care quality and achieving healthy results on a large scale.

By investing resources into cost-effective and research-based policies, frequently in partnership with private sector payers and providers, states are achieving significant results in the form of fewer infant deaths and injuries, fewer vaccine-preventable diseases and improved overall health and well-being. Moving forward, states will continue to ensure that public investments and policies support strategies that work to promote healthy babies and moms.
Endnotes


2. Ibid.


11. Ibid, 3.


13. Ibid.


17. Ibid.


22. Ibid.

23. Ibid, 2.

24. Ibid.


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