

Preconception Health and Health Care and Early Childhood Comprehensive Systems

Opportunities for Collaboration

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The National Center for Children in Poverty (NCCP) is dedicated to promoting the economic security, health, and well-being of America's low-income families and children. Using research to inform policy and practice, NCCP seeks to advance family-oriented solutions and the strategic use of public resources at the state and national levels to ensure positive outcomes for the next generation. Founded in 1989 as a division of the Mailman School of Public Health at Columbia University, NCCP is a nonpartisan, public interest research organization.

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In recent years, the importance of women's preconception health and health care (PCHHC) for improving birth outcomes, especially among high-risk populations, has been highlighted by numerous researchers, advocates, and policymakers. In 2006, the Centers for Disease Control and Prevention (CDC) Select Panel on Preconception Care issued recommendations for improving preconception health and health care.¹ Throughout this report, we refer to preconception health and health care as efforts to promote women's wellbeing and health before, during, and between pregnancies and throughout their childbearing years. A growing body of evidence points to the importance of a woman's physical, mental, environmental, and behavioral health over her life course for her children's birth outcomes, and consequent child development and later life wellbeing. The Early Childhood Comprehensive Systems (ECCS) initiative can play an important role in advancing PCHHC, benefiting women, young children, and families in their communities.

This report will:

- ◆ provide evidence for the causal link between an individual's health at birth and his/her wellbeing in later life;
- ◆ present statistics on existing disparities in birth outcomes across socio-demographic groups in the United States;
- ◆ discuss how improving mothers' preconception health – physical and mental health, as well as behavioral and environmental factors – can influence children's birth outcomes;
- ◆ present examples of how different states and organizations are taking steps to implement the CDC recommendations;
- ◆ discuss how the health care reform bill of 2010, the Patient Protection and Affordable Care Act (ACA), can impact preconception health and health care; and
- ◆ present recommendations for ECCS coordinators and other early childhood policymakers.

Why Health At Birth Matters

A growing body of research across numerous disciplines has identified an important link between individuals' health at birth, in infancy, and in early childhood and their later-life health, educational attainment, and overall wellbeing.² In particular, studies of siblings and twins in several countries, including the United States, show that low birth weight (less than 2,500 grams) children have greater infant mortality rates, lower cognitive test scores, more behavioral problems throughout childhood, and lower IQ scores. They are also less likely to graduate from high school, have lower earnings during young adulthood, and are more likely to take up social assistance during their 20s.³ Further, the adverse effects of low birth weight are exacerbated by poverty and low socioeconomic status.⁴ There is also a wealth of medical evidence that links preterm births (children born at less than 37 weeks of gestation) to increased mortality rates. Other related complications include respiratory distress syndrome, chronic lung disease, injury to intestines, compromised immune system, cardiovascular disorders, hearing and vision problems, psychiatric conditions, and neurological insult.⁵ Both low birth weight and preterm births have been associated with academic underachievement, behavioral problems, and poor executive function.⁶ Finally, early childhood physical and mental health has been shown to have important consequences for cognitive test scores and development throughout childhood and adolescence, and for adult health and earnings.⁷

Given the abundant evidence that emphasizes the significance of health at birth and in early childhood, policies and interventions that can improve these health outcomes are important to consider. The importance of maternal health during pregnancy and the benefits of early prenatal care for children's birth and infant health outcomes have been highlighted by medical experts and public health analysts for the last several decades. More recently, however, there has been a push for a more comprehensive life course perspective that considers the biological, behavioral, environmental, and psychological risk factors in all stages of a woman's life that can affect her children's health.⁸ In particular, maternal wellbeing before, during, and between pregnancies matters for children's health. Further, research suggests that prenatal care's contribution, long considered the key factor in efforts to promote maternal health and reduce adverse birth outcomes, may be mixed.

Some evidence from several countries, including the U.S., suggests that the number of prenatal care visits that a woman has does not have an effect on her child's birth outcomes.⁹ Moreover, the prevalence of preterm births in the U.S. has been increasing over the last decade,¹⁰ and the U.S. fares poorly in rankings with other OECD countries on birth outcomes and infant mortality rates.¹¹ Too many women enter pregnancy in poor health. Thus, there is a growing need for developing policies and programs that emphasize the importance of investing in the health of women of childbearing age as one important way to reduce the risk of adverse birth outcomes.

Disparities in Birth Outcomes in the United States

In 2006, out of 4,265,555 births in the United States, 8.3 percent were low birth weight and 13 percent were premature.¹² Table 1 shows that there are substantial disparities in birth outcomes by race, while Table 2 and Figure 1 additionally show differences in preterm birth rates by maternal age, marital status, and educational attainment. The statistics display a pattern of worse birth outcomes for teen mothers and mothers over 35 years old, unmarried mothers, and mothers with lower educational attainment (who are also more likely to be low-income). Across all socioeconomic and demographic categories, black mothers tend to have the worst birth outcomes compared to other

racess and ethnicities. The reasons behind these disparities are not entirely clear, and researchers have proposed numerous explanations involving socio-demographic differences in socioeconomic status, access to quality health care, maternal behaviors, stress levels, infection rates, and genetics.¹³ Further, black and Hispanic mothers are more likely to give birth as teens, which exacerbates the racial/ethnic disparities in birth outcomes.¹⁴

Importantly, the apparent differences in birth outcomes across socio-demographic groups imply that PCHHC policies must especially cater to women who are in the high-risk groups.

Table 1. Disparities in Birth Outcomes in the United States by Race/Ethnicity

Outcome (rates are per 1,000 births)	All races	White	Black	Hispanic	Asian/ Pacific-Islander	American Indian
Low birth weight birth rate	83	73	140	70	81	75
Preterm birth rate	128	117	185	122	109	142
Infant mortality rate	6.9	5.8	13.6	6.0	4.9	8.1

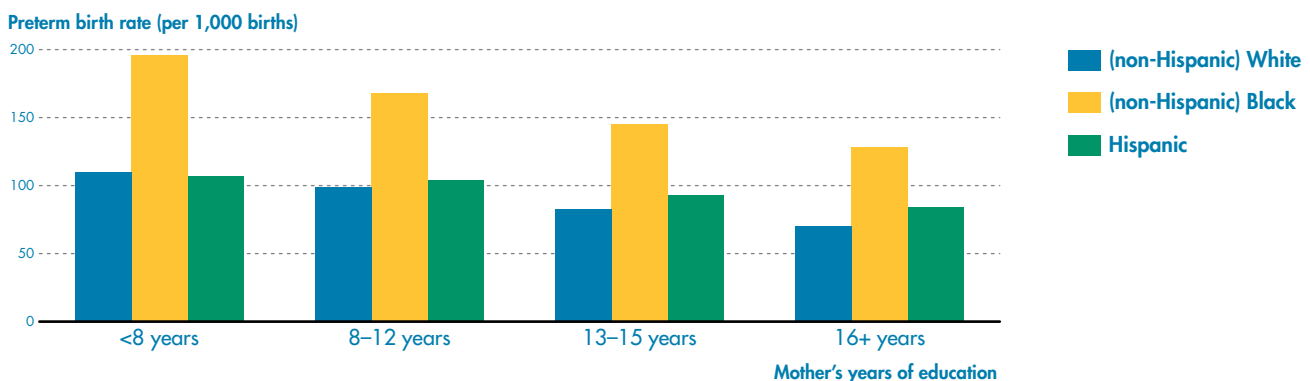
Notes: Data on birth outcomes is from birth records files for 2006, while data on the infant mortality is from linked birth/infant death files for 2005.
Sources: National Center for Health Statistics, Vital Statistics Data for 2006. National Center for Health Statistics Data Brief: Recent Trends in Infant Mortality in the United States. Number 9, October 2008.

Table 2. Disparities in Preterm Birth Rates (per 1,000 Births) by Maternal Marital Status, Age, and Race/Ethnicity

Age	(non-Hispanic) White		(non-Hispanic) Black		Hispanic	
	Married	Unmarried	Married	Unmarried	Married	Unmarried
<20	104	115	137	176	106	127
20-34	79	108	137	167	91	11
35+	86	140	162	229	115	142

Source: Institute of Medicine, 2007. Preterm Birth: Causes, Consequences, and Prevention. Table 4-1.

Figure 1. Disparities in Preterm Birth Rates by Maternal Educational Attainment and Race



Source: Institute of Medicine, 2007. Preterm Birth: Causes, Consequences, and Prevention. Table 4-2.

Maternal Health and How Preconception Care Can Help

Many aspects of a woman's physical and mental health, behavior, genetics, and environment influence her child's outcomes. Maternal risk factors that are linked to child health include chronic physical conditions, nutrition, access to health care, tobacco and alcohol use, and mental health problems such as depression, among others.¹⁵ In 2006, the CDC-appointed Select Panel on Preconception Care issued recommendations for improving preconception health and health care, including policy and program changes such as increased health coverage, reproductive health awareness among men and women, and investment in public health prevention strategies.¹⁶ A national Preconception Health and Health Care (PCHHC) Initiative was formed to accelerate implementation of the 10 recommendations.¹⁷ In 2008, a clinical work group of this initiative published a definitive review of the evidence base for the clinical content of preconception care, which includes: health promotion; infectious disease; medical conditions; psychiatric conditions; parental exposure to alcohol, tobacco, and illicit substances; nutrition; environmental exposure; psychosocial risk; medication; and reproductive history; as well as specific recommendations for certain at-risk groups, such as immigrant populations, women with disabilities, and cancer survivors.¹⁸

Evidence on Maternal Health in the U.S. from the Pregnancy Risk Assessment Monitoring System

While the importance of maternal health throughout life for birth outcomes has been documented widely, comprehensive data on the current state of health for all women in the U.S. is quite limited. The Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance project of the CDC and participating state health departments that attempts to provide extensive data on a wide range of maternal health conditions and behaviors before, during, and after pregnancy. While it is currently the best source for information on women's health and behaviors for a large number of states, it is limited because it relies

on self-reported answers to questionnaires and does not have data for every state. Specifically, each year, the questionnaire is administered to a representative random sample of women who gave birth in the previous year in each participating state, and 40 states have at least one year of data in PRAMS over 1988-2008. Despite its limitations, PRAMS provides some evidence on the prevalence of maternal health factors in the U.S. population and disparities across socio-demographic groups. In addition, in 2007, the Public Health Work Group of the Centers for Disease Control convened a council of policy leaders and epidemiologists from seven states to identify a list of 45 indicators of preconception care, building on population-based, state level data systems including PRAMS and four other sources.¹⁹

Asthma and Diabetes

- ◆ In 2004, about 1.8 percent of women had pre-pregnancy diabetes, 6.9 percent had asthma.
- ◆ 1.2 percent had heart problems.²⁰
- ◆ Diabetes prevalence was highest among black women, women aged 35 and older, and women with Medicaid coverage and no insurance coverage prior to pregnancy.
- ◆ Asthma prevalence was highest among white women with Medicaid coverage, while the prevalence of heart problems did not seem to vary by group.

Weight Factors

- ◆ 13.2 percent of women were underweight prior to pregnancy.
- ◆ 13.1 percent were overweight.
- ◆ 21.3 percent were obese.
- ◆ Underweight prevalence was highest among mothers less than 20 years old with either Medicaid coverage or no insurance coverage.
- ◆ Overweight and obesity prevalence was highest among black mothers older than 20 years old with either Medicaid coverage or no insurance coverage.

Alcohol and Tobacco Use

- ◆ Pre-pregnancy tobacco use had mean prevalence of 23.2 percent.
- ◆ Alcohol use had 50.1 percent mean prevalence.
- ◆ Tobacco use was more prevalent among white mothers less than 20 years old.
- ◆ Alcohol use was more prevalent among white mothers aged 35 and older.

Stress Factors

- ◆ About 18.5 percent of women had experienced at least four out of 13 listed stressful events during the 12 months before childbirth.
- ◆ Stress prevalence was highest among mothers less than 20 years old, black mothers, mothers whose most recent birth was an unintended pregnancy, and mothers with Medicaid coverage.

Medical Consultations

- ◆ Only 30.3 percent of all women reported talking with a healthcare professional regarding preparation for a healthy pregnancy and infant before they became pregnant.
- ◆ Prevalence was higher among white women, women aged 35 or older, women whose last pregnancy was intended, and women with private health insurance coverage.

Broadly, these factors fall into four main categories – physical health, mental health, environmental influences, and behavior. Improving preconception health can impact factors in each of these categories.

Physical Health

Numerous factors determine a woman's physical health, including: chronic conditions and illnesses like diabetes, hypertension, and asthma; her weight and nutrition; and her genetics, and family history. All of these factors can influence her child's health from the time of conception, onwards.²¹ Hence, seeking early intervention and ongoing treatment for chronic conditions, maintaining a healthy weight and nutritional status, and being aware of one's family history are important ways in which

a woman can maximize her physical health and improve the life chances for her children. However, many women, especially among high-risk and low-income groups, face numerous barriers (such as lack of health insurance, lack of education, inability to take time off work to see a doctor, lack of access to healthy and affordable foods, etc.) that prevent them from taking these steps. PCHHC public policies should aim to eliminate these barriers, and thus ensure that a woman is in her best possible physical health at the time of pregnancy and childbirth.

A crucial step to achieving this goal is to incorporate a family planning component. In 2002, approximately one-half of all pregnancies in the United States were unintended.²² Given that maternal health before and during pregnancy is so important for birth outcomes, family planning can enable women to become pregnant at a time that is best for them and their families.

There is also a body of evidence that shows that women with short inter-pregnancy intervals are at a higher risk for adverse birth outcomes. Research has estimated the optimal inter-pregnancy interval for birth outcomes to be 18 to 24 months.²³ Initiatives to improve preconception health should therefore incorporate education about and access to safe birth control methods for all women of childbearing age. Further, by providing information to women about how their physical health and birth spacing can impact the wellbeing of their children, women may be more motivated to plan their pregnancies and achieve better birth outcomes.

A woman's pre-pregnancy weight and nutritional status are physical health factors that can be altered by behavioral changes, at least to some degree. Given evidence that both too low and too high pre-pregnancy weight are detrimental for children's birth outcomes,²⁴ PCHHC initiatives should promote healthy weight maintenance and provide guidelines about safe methods to gain or lose weight if necessary.

Further, PCHHC efforts should provide information about dietary supplements, as studies have

found that iron, folate, calcium, and zinc supplements can reduce the risk of pre-term and low birth weight births, as well as significant birth abnormalities.²⁵ Additionally, 50 to 70 percent of neural tube birth defects can be prevented if a woman consumes 400 µg of folic acid daily before conception and in her first trimester of pregnancy. Universal public health strategies can help to increase nutrient intake among pregnant women, especially in high-risk groups. For instance, mandatory folic acid fortification of many grain products in the U.S. went into effect in January 1998, and studies show that birth defects of the spine (spina bifida) and the brain (anencephaly) have declined significantly as a result.²⁶ Another study predicts that folic acid fortification of corn masa flour in the U.S. would significantly increase folic acid consumption among Hispanic women, and thus reduce disparities in neural tube defects between Hispanic and non-Hispanic white mothers.²⁷

Finally, having access to a medical provider on a regular basis is necessary for maintaining good physical health. Despite the recession that officially began in December 2007, most states were able to maintain or even expand coverage for low-income children, thanks to temporarily enhanced federal assistance provided through the American Recovery and Reinvestment Act, as well as the 2009 reauthorization of the Children's Health Insurance Program (CHIP). Coverage for low-income parents, however, has declined over the decade in 41 of the 50 states.²⁸ Nearly one quarter (22.5 percent) of adults with incomes less than 200 percent of the federal poverty line were uninsured in 2009.²⁹ Expansions in health insurance coverage through the Affordable Care Act will help to assure that more women have coverage and other provisions of the ACA are designed to increase access to primary care through Medicaid incentives, expansion of community health centers, and other mechanisms. Coverage alone, however, will not be sufficient to improve the health of women of childbearing age. Changes in provider practice, with increasing emphasis on preventive care and risk screening as part of regular check-ups for women of childbearing age, are essential steps. Additionally, information about existing state and

federal laws regarding legal time off from work should be widely available, so that working women can see a doctor during business hours without worrying about losing their jobs.

Mental Health

Maternal mental health during pregnancy has been shown to have important consequences for birth outcomes. In particular, excessive maternal stress during pregnancy has been linked to numerous poor birth outcomes,³⁰ including an increased likelihood of a pre-term birth.³¹ While the causal effects of maternal depression during pregnancy on birth outcomes have not been well-established, there is some evidence that depression is an important risk factor for some demographic groups, such as African-American women.³² Additionally, maternal depression in the inter-conception period is detrimental to child development as it threatens two main parental functions: fostering healthy relationships with the children and family, and carrying out the management functions of parenting. As a result, children of depressed mothers are more likely to fall behind in cognitive development, and acquire various behavioral and psychosocial problems.³³

Further, depression can affect women's physical health through behaviors like unhealthy eating, smoking, drug use, or excessive alcohol consumption. Although limited, there is also some evidence of a significant negative association between domestic violence and birth outcomes.³⁴ And, women who experience domestic violence are more likely to suffer from depression. Studies that analyze the cumulative effects of maternal depression, substance abuse, and domestic violence during the year following childbirth find increases in children's behavioral problems at age three.³⁵ Therefore, it is imperative that PCHHC incorporates a substantial mental health component.

In particular, preconception, and particularly interconception, initiatives should assure access to screening, referral, and treatment for depression, anxiety, and other mental health problems. Screening and informational campaigns should be

targeted to women in high-risk groups, who may not receive these services from a regular healthcare provider. Further, among pregnant women, family health professionals are more likely to identify depression than mental health professionals, but there is evidence that they lack information and training on proper referral and treatment.³⁶ Hence women's primary care providers, including ob-gyns, need up-to-date information about available referral resources and mental health treatment options in their communities.

Environmental Factors

In recent years, researchers have become increasingly interested in linking environmental factors to birth and infant health outcomes. In particular, prenatal and at-birth exposure to air pollution has been found to have detrimental causal effects on birth weight, gestation length, and infant mortality.³⁷ These effects are substantially larger for women who smoke and for women who are over 35 years old. In a recent study, Currie and Walker (2011)³⁸ analyze the consequences of the introduction of E-ZPass³⁹ in New Jersey, which reduced traffic congestion and motor vehicle emissions in the vicinity of highway toll plazas. They find significant beneficial effects of emission reductions on birth weight and likelihood of premature birth. In New York City, prenatal and early-life exposure to air pollution from traffic has been linked to low birth weight, respiratory effects, neuro-developmental disorders, and potentially increased cancer risk.⁴⁰ The PCHHC movement can play a role in providing information to women on how to best avoid excessive pollution exposure during and between pregnancies, and promoting policies that reduce pollution levels, especially in poor, urban environments.

Additionally, there is abundant evidence that exposure to toxic substances can occur within the home. In particular, maternal exposure to neurotoxic chemicals like polycyclic aromatic hydrocarbons (PAH), phthalates, mercury, and chlorpyrifos has been linked to restricted fetal growth and preterm birth. These toxins can reach mothers inside their homes through smoke, soot, exhaust, plastics,

fluorescent light bulbs, and pest control products.⁴¹ In 2009, researchers and policymakers attending a conference on children's environmental health sponsored by The Columbia Center for Children's Environmental Health highlighted the ineffectiveness of current legislation, the Toxic Substances Control Act. As a result of that legislation, fewer than 200 chemicals out of the 82,000 on the market are required to be tested. Participants voiced strong support for comprehensive legislative reform. For instance, they argued that the burden of proof should be reversed so that the chemical industry is responsible for establishing the safety of their chemicals instead of requiring the public sector to prove that each new chemical causes harm before it is regulated. PCHHC initiatives should include informational campaigns, targeted to less-educated and low-income women, on the dangers of the toxins in everyday products and availability of safer substitutes. Further, legislation to ban harmful toxins from everyday products on the market, and regulation for establishing the safety of new products on the market should be promoted. Additional information on the risk of exposure to environmental toxins can be found in NCCP's 2010 report, *Environmental Health in Early Childhood Systems Building: Opportunities for States*.

Substance Abuse

Behavioral factors in mothers, such as tobacco use, alcohol consumption, and drug use can have serious consequences for children's health from birth onwards. These behaviors are nevertheless prevalent, especially among certain high-risk populations. For instance, in 2005, 22.5 percent of women reported smoking before or during pregnancy or after delivery, according to PRAMS data. Compared with nonsmokers, women who smoked were significantly more likely to be younger (less than 25 years), non-Hispanic white, have at least 12 years of education, be unmarried, have annual income under \$15,000, be underweight, have an unintended pregnancy, be first-time mothers, have initiated prenatal care later, be Medicaid-enrolled, and be enrolled in WIC during pregnancy.⁴²

A wealth of medical evidence points to a strong association between smoking, drinking, and drug use during pregnancy and low birth weight and the likelihood of a pre-term birth.⁴³ However, a causal relationship is often difficult to determine, as behavioral choices are usually associated with other socio-demographic and environmental risk factors. A few economic studies have tried to isolate a causal effect of these behavioral factors by using exogenous variation in cigarette and alcohol taxes, as well as changes to policies such as the minimum

drinking age laws. Generally, these studies conclude that maternal smoking and drinking during pregnancy lead to poor birth outcomes.⁴⁴ Given that these maternal behavioral factors seem to significantly influence children's health at birth, the PCC initiatives should include information about them and resources for where to seek help. In particular, information about ways to stop smoking, drinking, and drug use should be provided to women, especially in low socioeconomic-status groups who are most at risk for these behaviors.

Examples of Policies and Programs that Implement Aspects of Preconception Health and Health Care

The national Preconception Health and Health Care (PCHHC) Initiative involves numerous public and private sector sponsors including organizations such as the CDC, MCHB-HRSA, March of Dimes, American College of Obstetricians and Gynecologists (ACOG), CityMatCH, Association of Maternal and Child Health Programs (AMCHP), and National Healthy Start Association. Since its inception, it has also engaged hundreds of health professionals, state and local public health agencies, other national organizations, and community leaders. Four work groups of the PCHHC Initiative in the areas of clinical care and health services research, public health surveillance and practice, consumer awareness and health promotion and policy and finance issues have further refined the CDC recommendations to support their implementation at the national, state and local level.⁴⁵ In addition to the workgroups, the Initiative also convenes policy makers, practitioners and researchers for national summit conferences. Presentations from the most recent Third National Summit on Preconception Health and Health Care, many of which expand on the local, state and federal programs and policies described below, can be accessed at: www.beforeandbeyond.org.

State and Local Policies and Programs

Across the country, states have taken steps to improve preconception health and health care. For instance, since 1993, 25 states have instituted a Medicaid “waiver,” which expands eligibility for family planning services to individuals in the state who do not meet the state’s regular eligibility requirements.⁴⁶ Two states, Georgia and Louisiana, now have Medicaid waivers approved by Centers for Medicare and Medicaid Services specifically to offer intensive interconception (interpregnancy) care to women with a prior adverse pregnancy outcome, such as very low birthweight. The Grady Memorial Hospital Interpregnancy Care (IPC) Program was initiated in response to the recommendation of a Georgia State taskforce charged to address the state’s high rates of infant mortality.⁴⁷ The IPC program provides 24 months of coordinated primary health and dental care services through enhanced nurse case management and community outreach. Current Medicaid recipients who have delivered a very low-birth baby have access to intense Resource Mother outreach and case management under provisions of a first-in-the-nation interpregnancy care waiver.⁴⁸

More recently, the CDC and the Commonwealth Fund⁴⁹ have jointly sponsored the Preconception Health Peer-to-Peer (P2P) Learning Project, which is directed by Johnson Group Consulting, Inc. The P2P Learning Project was launched in April 2010, and its purpose is to provide a forum for peer-to-peer learning for state leaders via online meetings and communication. Representatives from different states' Medicaid, Title V, and other organizations and programs convene once a month to discuss the development of policies, programs, and infrastructure that can improve health care quality and outcomes for women of childbearing age. They also learn from one another about opportunities in quality improvement processes, managed care contracting, data systems, waivers, and interagency strategies.

Additionally, several states have organized committees or task forces, and have prepared action plans to expand access to and educate about PCHHC.⁵⁰ In Florida, guidelines on PCHHC regarding access to health care, management of maternal infections and chronic conditions, weight, physical activity, nutritional counseling, optimal baby spacing, substance abuse and smoking, mental health issues, and environmental risk factors were distributed across county health departments. Colorado's Preconception and Interconception Care Initiative, a public/private partnership involving the Colorado Department of Public Health and Environment, Colorado Clinical Guidelines Collaborative (Health Team Works) and the Colorado Healthy Women Healthy Babies Roundtable has fielded its Guidelines for Preconception and Interconception Care⁵¹ for adoption to health care providers. A parallel consumer product, a reproductive life planning tool for women, promotes preconception health by providing consumer-friendly steps to increase healthy behaviors.⁵²

In California, the Preconception Health Council of California, founded in 2006 as a partnership between the California Department of Public Health's Maternal Child and Adolescent Health Division and the March of Dimes California Chapter,⁵³ has a four point agenda which includes: integration of

preconception health and health care in clinical and public health practice; development of financial and public policy strategies to support and sustain preconception health and health care; promotion of key preconception health messages that address physical and psychosocial wellbeing to women and men of reproductive age; and increasing access to preconception care to eliminate disparities in maternal and infant morbidity and mortality. Its website "Every Woman California" (www.everywomancalifornia.org) provides resources for health professionals and clear and easily readable consumer information including numerous resources for women about reproductive planning, maintaining good physical and mental health, and living in a healthy environment, along with printable one-page handouts such as "Guide to Healthier Eating," "Genetic Conditions," "Healthy Relationships," and "Hazardous Materials."

A few states have invested directly in PCHHC services and education campaigns. In Delaware, the Division of Public Health signed almost \$1.5 million in contracts with the Christiana Care Health System and Planned Parenthood of Delaware to provide education, nutrition, and community services for women who face a high risk of having unplanned pregnancies or poor birth outcomes.⁵⁴ In particular, Delaware's program targets women who live in ZIP codes with high infant mortality rates and women with a history of poor birth outcomes and provide public health education on preconception health like the importance of healthy eating and getting treatment for chronic health problems. A number of additional states used funds from the HRSA funded First Time Motherhood/New Parent's grants to conduct social marketing campaigns.

Other states have focused on the importance of women's overall health with more specific interventions. For example, as part of the Illinois Women's Health Initiative, the Family Planning program of the Illinois Department of Human Services' Office of Family Health (OFH) provides counseling and education on pregnancy avoidance and timing, and delivers clinical services such as pap smears, STI screenings, and physical exams to low-income women.⁵⁵ The OFH also works with the Illinois

Chapter of March of Dimes on a statewide campaign to increase awareness about folic acid consumption before and during pregnancy. Further, the Illinois Department of Healthcare and Family Services provides Medicaid reimbursement prenatal and postpartum depression screening and actively encourages these screenings to occur during well-child visits.⁵⁶

In San Diego, California Healthy Behaviors in Women, is conducting interventions that combat obesity among Latina women of childbearing age. These interventions include community outreach campaigns providing education about health problems associated with obesity and practices that lead to healthful lifestyles. Further, the program enrolls a minimum of 300 women in a “Health and Wellbeing Course,” in which they complete baseline measurements and participate in at least one fitness class. Another San Diego project has developed a unique interactive “WHEELS” tool to educate women on preconception health. The County of San Diego’s Health and Human Service Agency has partnered with 18 clinics and 26 organizations to distribute thousands of preconception wheels featuring facts and tips in four categories: eat right, take care, manage stress, and get moving.

Consumers and practitioners have endorsed the tool as a method to increase knowledge and change behavior to improve health and lifestyle choices.

Federal Healthy Start Program

The federal Healthy Start Program, designed to reduce infant mortality and eliminate disparities in birth outcomes, requires that all 104 grantees have an interconception care component.⁵⁷ Focused on communities with high annual rates of infant mortality, the national Healthy Start program funds projects in ethnically, racially, and linguistically diverse neighborhoods. Currently, all 104 grantees are involved in a nationwide Interconception Care Learning Collaborative to increase the quality of their efforts and to apply evidence-based practices in their communities. Healthy Start programs have taken significant steps toward incorporating PCHHC into their agendas and programs. Importantly, many of the programs focus primarily on reaching the populations that are at most risk for poor birth outcomes, and provide examples for how to concretely implement the general CDC guidelines. ECCS leaders can learn from these community specific efforts and help to encourage their statewide adoption in high risk communities.

Health Reform and Preconception Health and Health Care⁵⁸

The Patient Protection and Affordable Care Act (P.L. 111-148, known as the Affordable Care Act, or ACA) was signed into law on March 23, 2010.⁵⁹ ACA aims to expand insurance coverage to 32 million uninsured Americans, prevents insurance companies from denying coverage based on pre-existing conditions, and will create many other changes that aim to make healthcare more accessible and affordable for millions of people by 2014. As they take effect, provisions of this law will have significant impacts on women’s health, and thus will be a major step toward policy that can improve preconception health and health care.⁶⁰

First, the ACA will eliminate gender rating. Currently, most states permit insurers to consider gender when setting premiums and so women can be charged six to 45 percent more than men for identical insurance coverage.⁶¹ By prohibiting insurance companies from discriminating based on gender, the ACA will create an environment where women’s health is treated with the same consideration as the health of the rest of the population. The ACA’s provisions for tax credits to help small businesses offer coverage will also expand access to private coverage for women. Women are more likely than men to work in small businesses that do not offer health insurance benefits. The ACA

will provide tax credits to help small businesses offer coverage, and will institute Health Insurance Exchanges where individuals and small businesses can buy health insurance in a competitive market setting.

One of the most significant ways in which ACA will affect PCHHC is by mandating all states to increase Medicaid eligibility thresholds to 133 percent of the federal poverty level. Currently, many low-income women can get Medicaid coverage while they are pregnant, but they lose it 60 days after giving birth unless they are very poor. By expanding Medicaid eligibility, ACA will enable more poor women to obtain care prior to and between pregnancies. Further, ACA will expand Medicaid coverage of smoking cessation programs and drug therapy for pregnant women.

Another important improvement in access to primary care for low-income women is an increase in funding for community health centers. Many low-income women receive well-woman visits, routine screening, and treatments from health centers, and increased funding for them will benefit the populations they serve. Investments through the Prevention and Public Health Fund will fund additional programs and projects that receive funds will address health risk factors, such as obesity and substance abuse, which are of critical concern to preconception health.

The ACA also establishes a federal grant program for state-based home visiting programs to serve high-risk families during pregnancy and the first three years of a child's life. These programs will connect new and expectant families with trained professionals to provide information on parenting and health, linkages to community resources, and support.⁶² Expanding these home visiting programs to include more at-risk mothers is one more way to improve preconception health for high risk women, following a birth. ACA funds may be used to support any of seven evidence-based models: the Early Head Start Home-Based Option, Family Check Up, Healthy Families America, Healthy Steps, Home Instruction Program for Preschool Youngsters, the

Nurse-Family Partnership, and Parents as Teachers. On many levels the ACA provides support for an emerging shift in orientation toward preventive care that fosters optimal health and wellness. With regard to PCHHC, this is reflected in the HHS announcement in August 2011 of new health plan coverage requirements for women's preventive services. The adopted guidelines reflect the full set of recommendations made by an Institute of Medicine committee convened to review clinical services critical to women's health.⁶³ The eight preventive services that new health plans will be required to provide without cost sharing, starting August 2012, are:

- ◆ well-woman visits, including preconception care;
- ◆ screening for gestational diabetes;
- ◆ human papillomavirus (HPV) DNA testing for women 30 years and older;
- ◆ sexually-transmitted infection counseling;
- ◆ human immunodeficiency virus (HIV) screening and counseling;
- ◆ FDA-approved contraception methods and contraceptive counseling;
- ◆ breastfeeding support, supplies, and counseling; and
- ◆ domestic violence screening and counseling.⁶⁴

While the ACA has the potential to impact PCHHC for all American women (and especially low-income women), there is still more that can be done. The next section presents specific recommendations for ECCS coordinators to make even more improvements in PCHHC for women today.

Promoting Preconception Health and Health Care Through Early Childhood Comprehensive Systems

Effective preconception health and health care initiatives reduce or eliminate barriers to achieving optimal health before and between pregnancies. Many important PCHHC interventions are made at the state level, and there are abundant opportunities for ECCS coordinators and other partners grounded in the early childhood perspective to contribute to comprehensive efforts. The ECCS community is a critical place to promote PCHHC policies, provide education on the importance of all components of PCHHC, and foster awareness of existing resources at both the state and community levels.

Improvements in preconception health and health care are in part dependent on the ability to integrate different service systems (such as physical health providers, mental health providers, child care centers, insurance providers, social services agencies, church organizations, community centers, and many others) smoothly, and thus overcome the large discontinuities in services in the current fragmented system, especially for the neediest populations.⁶⁵ By working with PCHHC leaders in their states to reach women through early care and education settings, ECCS coordinators can provide crucial linkages across different service systems. Ensuring that a larger number of women (particularly in high-risk groups) have access to necessary resources and information that can enable them to be in their best health possible, will also improve the wellbeing of their children from birth onwards.⁶⁶

Below are key PCHHC goals and strategies that can benefit from the strategic involvement of those engaged in early childhood systems building.

Expand Access to Coverage and Care Before and Between Pregnancies

- ◆ Target pre- and post-pregnancy women in health insurance coverage expansions, in particular through efforts to increase Medicaid take-up in early care and education settings.

- ◆ Provide enhanced access to care and care coordination for physical and mental health needs during the post-partum and interconception period.
- ◆ Support and promote family leave policies that offer women adequate time to attend all necessary medical appointments.
- ◆ Develop and disseminate resources that help families secure high quality medical homes for all adults and children.

Educate Women, Family Members, and Providers on Critical PCHHC Topics

- ◆ Highlight family planning options and information on birth spacing strategies that support women's health and family wellbeing.
- ◆ Broadly promote the importance of healthy nutrition and dietary supplements.
- ◆ Infuse social marketing campaigns related to diabetes and obesity with messages on the linkages to preconception health.
- ◆ Encourage women's primary care providers/medical home providers to adopt routine preconception health screening in well woman visits as recommended by the Institute of Medicine.
- ◆ Expand awareness of mental health and substance abuse issues facing women before, during, and between pregnancies.

Address Other Factors Critical to Preconception Health

- ◆ Include the preconception period as a time of special concern in the life course of women and families in efforts to limit exposure to environmental health threats.
- ◆ Promote healthy domestic relationships through early care and education venues.
- ◆ Incorporate PCHHC priorities in decisions on targeting efforts to promote economic and geographic access to healthy foods.

Linking ECCS to Preconception Health: Getting Started

With a diverse set of initiatives under way in states across the country, a number of steps will help the engagement of ECCS leaders in preconception health promotion efforts in your state or region.

1. Learn more about ongoing and emerging efforts in your state and collaborate on a joint action plan.
2. Analyze and assess your state's current PCHHC indicator set and incorporate key indicators into ECCS work as appropriate.
3. Collaborate with existing ECCS partners and engage state and local PCHHC leaders to work on a joint action plan and communication strategy to maximize the capacity to reach families.

Collaborative partners with an early childhood focus can bring an important set of resources and concerns to the table. Among other things, they can recommend particular public and private groups that should be consulted for input and participation to support PCHHC initiatives that directly impact the early childhood population. Many states currently at an earlier stage of development can also benefit from learning from the strategies and experience of states with more advanced PCHHC work.

The importance of well-designed and executed interventions to improve the health of women during their childbearing years is valued now more than ever before. Early childhood leaders are critical partners in collaborative work to shape preconception interventions, and are particularly well-positioned to strengthen interagency coordination on initiatives targeting the interconception period, when their ability to reach young children and families is strongest.

Website for Further Information

Third National Summit on Preconception Health and Healthcare (abstracts and presentations).
<http://www.beforeandbeyond.org/uploads/PHHC.html>

Endnotes

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