Innovation Station: Emerging, Promising and Best Practices on Infant Mortality & Improving Birth Outcomes

This table summarizes current practices successfully reviewed and accepted into AMCHP's Innovation Station that relate to infant mortality and improving birth outcomes, including preconception and interconception health. Submitted practices are evaluated on AMCHP's review criteria and included if they meet standards of an emerging, promising or best practice.

Program Name	Practice Category *(Year accepted)*	State	Summary
Infant Mortality and Improving Birth Outcomes			
Every Child Succeeds	Best *(2011)*	Ohio/ Kentucky	A collaborative program providing home visits focused on proper child development for first-time, at-risk mothers, their babies and families on a regular basis from the time of pregnancy until the child's third birthday. Every Child Succeeds (ECS) was founded in 1999 in an effort to address the emerging research of the time describing the critical nature of the 0-3 window for achieving the foundational brain development necessary for long-term successful outcomes in the lives of children. ECS uses two national models of home visiting (Healthy Families America and Nurse-Family Partnership) that are augmented by organizational enhancements including continuous quality improvement, a strong public-private partnership, community collaboration, and integrated supplemental interventions (e.g., Maternal Depression Treatment Program). ECS developed an extensive evaluation and research plan was developed to meet the multiple objectives of the organization. Using the Model for Improvement, ECS systematically collects data on multiple process and outcome indicators to reflect program impact, and promote improvement in all aspects of the program. An especially telling measure of ECS's effectiveness is the demonstrated reduction in infant mortality for ECS children. In a study published in Pediatrics (2007), the authors reported a **60% reduction in the infant mortality rate for ECS participants**, compared to matched controls. A review of participant data collected from 2003-2008, found: of children who were delayed at 3 or 9 months, over 72% are on-track by 27 months, or after approximately two years of home visitation; over 83% of children initially behind in Language are also on-track at 27 months; and of those parents who displayed high-risk parenting attitudes and beliefs at two months, 43-63% move into the average to low risk range by 18 months. Additionally, across seven measurements, the great majority of home environments are in the low risk range at 18 months; and of high-risk homes at 3 months, 78-95% move into the average to low risk range by 18 months.
Nurse Family	Best	National	Nurse-Family Partnership (NFP)® is an evidence-based, community health program that helps transform

Partnership	*(2008)*		the lives of vulnerable mothers pregnant with their first child. Each mother served by NFP is partnered with a registered nurse early in her pregnancy and receives ongoing nurse home visits that continue through her child's second birthday. NFP has been extensively evaluated over the last three decades, including through randomized, controlled trials. For low-income women and their children, the program has been successful in: improving women's prenatal health-related behaviors (especially reducing cigarette smoking and improving diet); reducing pregnancy complications, such as hypertensive disorders and kidney infections; reducing harm to children, as reflected in fewer cases of child abuse and neglect and injuries to children revealed in their medical records; and improving women's own personal development, indicated by reductions in the rates of subsequent pregnancy, an increase in spacing between first and second born children, a reduction in welfare dependence, and reductions in behavioral problems due to substance abuse and in criminal behavior on the part of mothers who were unmarried and from low-income households at registration during pregnancy The model has been extensively published in peer-review journals and has been replicated in over 400 counties in over 30 states.
PASOs (Perinatal Awareness for Successful Outcomes)	Promising *(2011)*	South Carolina	A program to improve health of Latino families in South Carolina by educating Latino parents, caregivers and parents-to-be on issues related to healthy pregnancies and prenatal care, as well as appropriate child development and resources for child health, and by advocating for better, more accessible services for Latinos. The PASOs program began in two counties in South Carolina in 2005 and now operates in 13 counties across the state. PASOs provides free, comprehensive prenatal classes (a 14-hour prenatal empowerment course), community health outreach and individual interventions to Latino families in 13 counties in South Carolina, as well as consultative services for maternal and child health providers and policy makers throughout the state. The program was developed on several theoretical foundations: Social Learning Theory, Social Support Theory and the Ecological Model. Evaluation includes pre- and post-test measures to assess knowledge and behavior related to healthy pregnancies, as well as to identify the strengths and weaknesses of the program. Current evaluation results show significant increases in knowledge in all indicators assessed, such knowledge of what to do with preterm symptoms; level of satisfaction with communication with doctor; reasons for going to prenatal care; knowledge of pre-term labor definition and signs of pre-term labor; knowledge of types of cheese to avoid during pregnancy and the reasons to avoid them; knowledge of folic acid use, including when to begin taking folic acid and daily intake of multivitamins with folic acid; knowledge of iron-rich foods; knowledge of normal fetal movement; knowledge of right moment to go to the hospital for delivery; knowledge that it is normal to feel sad after delivery; and knowledge of the type of anesthesia to use during delivery. Plans are currently in development for analysis of medium and long-term outcomes related to the health of the baby and family.

Partners in Pregnancy	Promising *(2008)*	Virginia	Partners in Pregnancy provides high-risk pregnant women and their infants with the care they need to survive and grow up healthy. The program involves home visits and case management by CHIP nurses and outreach workers, in combination with a medical home and regular nurse consultations provided by Optima. The overall program goal is to improve adverse pregnancy outcomes by decreasing NICU days and dollars. The project serves low-income women in 11 urban, suburban and rural communities in central and eastern Virginia identified from pregnant Optima Health Plan-enrolled women based on a demographic assessment of high risk factors, including past history of pre-term labor, low birth weight and other measures of poor health outcomes. CHIP nurses were trained according to the March of Dimes recommendations for the care of high-risk pregnant women. Great Beginnings Start Before Birth prenatal training was offered to all outreach workers. Bright Futures Guidelines were used by all CHIP nurses and outreach workers as a basis for health supervision activities conducted in the family's home after the child is born. The intervention infants spent less time in the hospital, with 4,584 hospital days/1000 infants compared to 5,444 hospital days/1000 infants for control infants. Healthy behaviors were also impacted by participation in the program, with a 55% decrease in maternal smoking, a 100% decrease in maternal alcohol use and a 70% decrease in stress levels for those who reported high stress levels when they first entered into the program. Program evaluation also showed that the average claims of a participating pregnant woman and her child through the first year of life was $6,658, compared with $8,945 for the control group. This is a net savings of $2,287 per pregnancy, and an overall return on investment of 1.26. CHIP babies spent 44% fewer days in the hospital than the control babies. NICU days per 1,000 were 3,086 for CHIP babies and 6,417 for the control group.
Prenatal Plus Program	Promising *(2008)*	Colorado	Prenatal Plus is a Medicaid-funded program that provides care coordination, nutrition and mental health counseling to Medicaid-eligible pregnant women in Colorado who are at a higher risk for delivering low birthweight infants. The goal is to reduce the number of low birthweight infants born to women in the program. The program uses the Client-Centered Counseling approach with all participants to address a variety of issues that have been shown to have a negative impact on birth outcomes. Providers are required to assist the client in developing a goal during one of the first three visits and then follow-up on this goal at subsequent visits. The key health areas targeted by this program are healthy weight, smoking/cessation and depression. In order to encourage providers to offer model care for all women in the program, the Medicaid reimbursement structure has been adapted to offer a greater monetary incentive for completing the required number of visits (10) for model care. In 2007, the low birthweight rate for infants born to Prenatal Plus participants who remained in the program through delivery was 10.7%; 22.5% less than the expected rate for this population without Prenatal Plus services (13.8%). This reduction in the low birthweight rate resulted in an estimated savings of 2.7 million dollars in health care costs for Medicaid during 2007.

			The Prenatal Plus Program continues to achieve high resolution rates in all five of the risk categories: among women who were smokers when they began the program, 66% quit before they delivered; among women who reported psychosocial problems, 80% resolved their risk during pregnancy; for women with inadequate weight gain during pregnancy, 72% gained the recommended amount of weight before delivery; a total of 92% of the women who reported using drugs quit; and 99% of the women who reported alcohol use abstained during pregnancy. Prenatal Plus services are provided in a variety of different settings throughout the state of Colorado, including county health departments, county nursing services, community health centers and non-profit agencies. Results have been seen consistently at all agencies since the start of the program in 1996.
Mississippi Interpregnancy Care Project	Emerging *(2011)*	Mississippi	Modeling a program implemented in Georgia (Grady Memorial Hospital), the Mississippi State Department of Health (MSDH) implemented pilot programs in two communities among women who delivered a very low birth weight infant. The pilot communities are predominantly African American with high rates of poverty, low birth weight (LBW) deliveries, infant mortality and morbidity combined with low rates of health insurance coverage and access to primary care services. The Metropolitan Infant Mortality Elimination (MIME) and Delta Infant Mortality Elimination (DIME) programs give varying perspectives – urban and rural – of implementing interpregnancy care in Mississippi. The MIME and DIME projects have three aims for program participants: (1) Improve overall health status and optimize child spacing; (2) Reduce subsequent poor pregnancy outcomes; and (3) Share program findings with maternal and child health stakeholders. The projects are highly collaborative, incorporating partnerships and contractual agreements between state, private and community-based resources. Since recruitment began in February 2009, 110 women have enrolled in the projects. Case studies of success stories and challenges are being documented. A large staff dispersed across a large geographic area in DIME provided unique challenges in case management that the urban MIME program did not experience. Extensive evaluation activities are being implemented to assess both health and financial outcomes. Early data suggest improved outcomes and achievement of adequate child spacing.
JJ Way Model of Maternity Care	Emerging *(2009)*	Florida	A culturally relevant midwifery model to women of color and low-income women. The key objectives for this practice are for pregnancies to reach a gestation of 37 weeks or greater and for newborns to have a birthweight of 5 lbs. 8 ounces (2500 grams) or greater. JJ Way™ is built on the strengths of the Midwives Model of Care to reach populations that do not typically seek midwifery services. The model incorporates a team approach, which includes all program staff, the baby's father, friends and family. All members share the explicit goal of helping the mother achieve a healthy, full-term pregnancy. Consistent health messages are delivered by all staff. The team also works together to identify any gaps or barriers to the client's success and begins gap management triage. Clients receive information from peer educators as well as group learning processes. Educational

			messages and delivery approaches are tailored to the clients, and they focus strongly on post-partum education. Another difference between this model and the typical midwifery model is that the labor and delivery can take place in any location the woman feels most comfortable. If she prefers to birth at the hospital with an OB, program staff works with physician partners to ensure a smooth transition of care. Evaluation results showed 4.8% of babies in the program were born with low-birth weight, well below the Orange County rate of 9.1% during the years 2005-2007. The study also found 4.7% of JJ Way™ babies were preterm compared to 15.4% of babies born in Orange County from 2005-2007. Two satellite sites operate in neighboring counties. One site has a larger Hispanic population while the other a larger African-American population.
Tampa Bay Doula Program	Emerging *(2008)*	Florida	A doula program that provides free perinatal services to low income pregnant women that are at risk for poor birth outcomes. The goal of this program is to give women the necessary tools (education, support, and counseling) to improve birth outcomes. Program services include community based childbirth education classes, labor and delivery support, postpartum mom/baby care and instruction focusing on mom/baby attachment, extension of breastfeeding duration and inter-conceptional care. A pregnant client can sign up for doula services at any time prior to delivery, however, the average young woman begins attending classes in her first trimester and stays with the program through 3-6 months postpartum. Clients are able to participate and receive doula services if they are low income, and socially/medically at risk. In comparison to the Hillsborough County average of 12.4 black infant deaths per 1,000 births from 2005-2007, black participants in the Doula Program experienced a lower infant mortality rate (1 per 1,000 black infant deaths reported). The program's Client Satisfaction Survey found that: 91% of the new mothers in the Doula Program breastfeed solely or in combination with bottle feeding; 99% of doula clients receiving postpartum support report and demonstrate positive transition relating to mother and infant bonding; 98% of clients receiving clinic based doula instructions demonstrate competence of pregnancy related topics; and 97% of delivering mothers that were provided supportive labor/delivery services report positive birth experiences. During the years that the funding was provided by the Ounce of Prevention Fund, the program was replicated in three other sites statewide.
The Clinic & Community Connections Project (Fetal Alcohol Syndrome)	Emerging *(2008)*	Minnesota	This project is designed to bring medical providers into FASD prevention by assisting and training clinical staff to incorporate comprehensive maternal alcohol screening, counseling, support and referrals. Prenatal exposure to alcohol is one of the leading causes of preventable birth defects and developmental disabilities, and FASD prevention programs are particularly scarce, therefore the Hennepin County developed the Clinic and Community Connections Project with the Native American Community Clinic. The program identifies health care providers within clinics who are interested in enhancing the

			alcohol screening practices, and provides FASD training for the health care providers. This includes introducing the Maternal Alcohol Screening Tool, assisting clinics in implementing the new screening protocol, providing selected FASD patient teaching materials, and assisting clinics in developing a follow-up protocol for children exposed to prenatal alcohol. Additionally, a Connections workgroup made up of regional partners was formed to assess the gap in community services for treatment for pregnant women who need help to stop drinking alcohol. Results have shown a marked increase in the rates of maternal alcohol screening and advisement at initial and subsequent prenatal visits in the participating clinics. Eight community clinics and seven WIC clinics have successfully implemented maternal alcohol screening protocols. Staff members are currently working with clinics outside of the Minneapolis area in surrounding suburbs to implement the use of these protocols.
Preconception and Interconception Health			
Healthy Women, Healthy Futures	Promising *(2011)*	Oklahoma	Offered at early childhood education centers , this program aims to improve the physical, emotional, social, dental and vision health of at-risk women living in poverty before they become pregnant again, thereby minimizing their risk of future premature birth or infant death. HWHF is based in Life Course Theory (LCT), and attempts to reduce participants‟ risk factors, which diminish health, and improve their protective factors by improving their equity to primary care and other health services, through health education and care coordination. Participants attend weekly one hour classes offered in Spanish and English on site at the ECECs, and develop health and reproductive life plans while consulting with HWHF staff during home visitation. Participants have provided written and verbal feedback about the program from inception. Comments are reviewed by all the HWHF staff and consideration for program revision. Classes have been modified and services modified to meet participants‟ needs or health interests. Evaluation data to this point have show health improvements due to improved knowledge and resultant behavior change; lifestyle improvements, such as increased exercise and better nutrition; and healthy, full-term pregnancies among participants. Additionally the program has an 85% retention rate in a population frequently characterized as non-compliant, apathetic, disinterested, mobile and difficult to retain in a program.
Power Your Life Preconception Campaign	Emerging *(2011)*	Utah	A social marketing campaign to raise awareness of preconception health and increase consumption of folic acid. Developed using the social marketing model and Transtheoretical Model, the campaign ran from June 2010 through January 2011. During that time, radio/television/print/web advertisements and Spanish/English media were used to promote the Power Your Life website (www.poweryourlife.org) as a resource for health information. When women visited the site, they had the opportunity to register for a 90-day supply of vitamins. Approximately 10,000 Power Bags with a 90-day supply of folic acid vitamins and other resources, such as a health magazine (derived from Life Course topics) and campaign bracelets were distributed through the campaign. Community outreach was conducted through health

			fairs, cultural celebrations and community partnerships. Additionally, a continuing medical education (CME) workshop was held for healthcare professionals to help them promote preconception health and consumption of folic acid in their daily practice. Evaluation included pre and post campaign telephone surveys, Google Analytics, an Internet survey of those who ordered vitamins, and evaluation of the continuing education workshop. The state-wide telephone survey findings indicated that awareness of folic acid advertisements increased by 13 percentage points between pre-wave and post-wave. Respondents aware of the campaign were three times more likely to consider "taking folic acid" important and seven times more likely to be taking a daily vitamin with folic acid than those who were not aware of the campaign. Respondents from the campaign's target audiences reported significantly higher rates of daily vitamin intake in the post-wave than in the pre-wave: 18-25 year-olds' daily intake increased by 20% (14% to 34%); those from non-white, minority groups increased intake by 35% (9% to 44%), and pregnant respondents reported a 60% increase in intake between pre- and post-campaign surveys (35% to 95%).
Baby Blossoms Collaborative Preconception Health Program-Now and Beyond	Emerging *(2009)*	Nebraska	A joint effort of 8 local agencies, this collaborative aimed to improve the health of women and infants by eliminating disparities and reducing fetal-infant mortality. Title V funding was received for a preconception health program entitled *Now and Beyond,* which educated women about the importance of a healthy lifestyle and the value of planning a pregnancy. Seven sites were trained and 80 women were educated. From 2005-2008, maternal health/prematurity was addressed through the *Now and Beyond* preconception health program. First, a train-the-trainers approach was used to train BBC partners on how to use components of the *Now and Beyond* toolkit to educate clients in a clinic setting. The training tools (flip books) emphasized planning for a healthy pregnancy before becoming pregnant and a healthy lifestyle throughout pregnancy. The tool contains 22 risk reduction strategies for healthy birth outcomes. The collaborative developed a brief intervention message focused on the top three health issues determined by the participants. The top three behavioral improvement goals chosen by the participants were: daily exercise, improved eating habits, and achieving best weight. During the pilot, 100% of the women chose goals to improve their health. During the 9 month follow period more than half maintained success. While the *Now and Beyond* is no longer funded, the coordinating agency did receive infrastructure funding for the collaborative.
Women's Health, Now & Beyond Pregnancy	Emerging *(2009)*	Wisconsin	This program integrates interconception care into existing public health services and normalizes family planning as a component of public health programming. The Women's Health Now and Beyond Pregnancy Project enhances Medicaid Prenatal Care Coordination services to include a focus on interconception care before future pregnancies. The Women's Health Now and Beyond Pregnancy pilot project was implemented in five local public health departments in Wisconsin. Services expanded statewide in 2010 in community-based family planning clinics. Providers implemented the following interventions during the third trimester of pregnancy and the postpartum period: 1) provide condoms for dual protection against pregnancy and

			sexually transmitted infections, 2) provide emergency contraception in advance of need, 3) assure access to a primary method of birth control prior to delivery, 4) assist with enrollment in the family planning waiver, and 5) provide multivitamins with folic acid. Pilot sites received group education, individual consultation, resource materials, and supplies. The project expanded in 2010 when the Family Planning Program established standards of care to provide third trimester pregnancy planning, reproductive life plans, and contraception to ensure timely initiation of contraception following delivery. The project also developed a toolkit that provides educational materials on the following topics: reproductive life plans, folic acid, emergency contraception, birth spacing, birth control after childbirth, birth control while breastfeeding, women's heath issues, and the Wisconsin Family Planning Waiver. The pilot project changed provider practices and improved integration of family planning into prenatal/postpartum services. Variables of interest for evaluation underway are provision of vitamins with folic acid, provision of contraception, and inter-pregnancy interval.
Women Together for Health	Emerging *(2008)*	Arizona	A free, community-based program that addresses modifiable lifestyle behaviors to improve the health of women and their families, including healthy weight, physical activity, proper nutrition, stress management, and tobacco use in women of childbearing age. WTFH was offered though a 10-hour (one day per week for eight to ten weeks) format available in English or Spanish, and was co-facilitated by a registered dietitian and a health educator. The curriculum focused on women learning skills to make sustainable lifestyle changes for health improvement by emphasizing physical activity and proper nutrition. All WTFH lessons were designed for low-income families. Pre/Post assessments regarding lifestyle behaviors were administered during the first and last class. Of the women that completed the program in 2008, 65% reported increasing physical activity by 2,000 steps or more over the course of the program; 100% made at least one dietary improvement; >60% of women either maintained or decreased their BMI over the course of the program; and 71% maintained regular physical activity, healthy eating habits, and regularly used stress management techniques three months after the completion of the program. The 2008 percentages of change were consistent with other years.

Success Stories: Infant Mortality & Improving Birth Outcomes

This table summarizes success stories highlighted in AMCHP's PULSE newsletter. These articles featured successes of our members related to infant mortality and improving birth outcomes, including preconception and interconception health. Articles included were published in PULSE from 2008-2011.

State	Success Story Summary	Date published
Maryland	**The Babies Born Healthy Initiative:** Babies Born Healthy (BBH) is a collaborative, interagency program focused on three primary strategies for improving birth outcomes – healthier women prior to and between pregnancies (i.e. interconception); early enrollment in prenatal care; and post-delivery follow-up for high-risk infants and mothers. Efforts have been targeted to jurisdictions where infant mortality and racial disparities in pregnancy outcomes are highest. A new comprehensive women's health model has expanded family planning services to include risk assessment and screening for chronic diseases. Through close partnership with Medicaid, a new Accelerated Certification of Eligibility (ACE) process assures Medicaid-eligible women that they will have access to prenatal care as early as possible and a Quickstart prenatal care visit is offered at health departments in the target jurisdictions. To ensure that high-risk babies and mothers receive post-partum follow-up, a statewide standardized post-partum discharge referral process is being developed and a post-partum Infant and Maternal Referral Form has already been implemented statewide. Promoting safe sleep has also been an integral component of the program. A safe sleep video developed by the B'More for Healthy Babies program in Baltimore City has been distributed widely around the state. Key partners in all of these efforts have been the Department of Health and Mental Hygiene Office of Minority Health and Health Disparities, the Governor's Office on Children, the Maryland Department of Human Resources, the Community Health Resources Commission, the Maryland Patient Safety Center and Carefirst.	Sept. 2011
Delaware	**Delaware's Efforts to Reduce the Infant Mortality Rate** For the past five years, the Delaware Healthy Mother and Infant Consortium (DHMIC) has been working toward implementing 20 recommendations aimed at reducing infant mortality in Delaware. The recommendations were originally issued in 2006 by a governor appointed Infant Mortality Task Force. The DHMIC and its working subcommittees are composed of a consortium of public health professionals including neonatalogists, maternal-fetal medicine specialists, registered nurses, internists, hospital administrators, nonprofit organization directors, federally qualified health care center directors, state legislators, concerned citizens, researchers and staff at the Delaware Division of Public Health. The Infant Mortality initiative is allocated state general funds dedicated to research and support of evidence-based interventions aimed at reducing infant mortality. Since the initiative began, the Delaware Division of Public Health has worked toward implementing evidence-based interventions during the preconception prenatal, postpartum and interconception periods for women considered high-risk (i.e., uninsured or underinsured, member of a minority, residing in a ZIP code identified as having a high proportion of infant deaths, living with a chronic disease, or experienced a previous poor birth outcome such as premature delivery, low birth weight delivery, stillbirth, fetal or infant death). These interventions provide preconception and interconception wellness visits for women and supplemental care during pregnancy and up to two years postpartum for mothers and infants. The high-risk criteria were developed through research using state vital records data, CDC recommendations for preconception care, and Fetal Infant Mortality Review pilot data. As of June 2009, the prenatal and postpartum program has served more than 4,700 pregnant women in Delaware. In a state that averages about 13,000 births per year, the program has impacted almost 20 percent of all live births. During the same time period, almost	Sept. 2010 and Sept. 2008

	25,000 women have been served in the preconception component of the program. Evaluation of the effectiveness of both programs is in progress; however, preliminary results suggest significantly lower rates of pregnancy complications and infant deaths among these high risk women. Statewide, the infant mortality rate has dropped from 9.2 per 1,000 live births during the 2001-2005 time period to 8.5 per 1,000 in the 2003-2007 time period.	
Kentucky	**Healthy Babies are Worth the Wait:** Healthy Babies are Worth the Wait® (HBWW) is a collaboration of March of Dimes and Johnson & Johnson. It was implemented as a pilot project with the Kentucky Department for Public Health in 2007 to address the rising rates of preterm birth. Kentucky was chosen for the project due to a high rate of preterm births, modifiable risk factors and strong collaboration among state perinatal leaders. The goal was to prevent "preventable" preterm birth using a community based, real-world, ecological design, by bundling interventions and implementing as many interventions known to reduce prematurity as possible. Kentucky had identified that their rising rate of preterm birth was due to late preterm infants, and this coincided with the national attention to late preterm. The HBWW demonstration project targeted three communities in Kentucky over a three-year period (2006- 2009). HBWW brought together implementation teams of health department and hospital perinatal leaders and staff. These teams worked together on local systems of care to provide consistent messaging, increase referrals to support programs (smoking cessation, home visiting, Centering Pregnancy, substance abuse, etc.) and bring the most recent research on prematurity prevention to providers, which included the increased risks of late preterm infants. The late preterm brain development became a primary message for providers, patients and the public. This informed reducing elective deliveries less than 39 weeks, and the public engagement was important in reducing the pressure on obstetricians to schedule early elective deliveries. Although data for the study period is not finalized, preliminary results indicate that Kentucky saw a drop in preterm singleton births of 9.4 percent and a drop in late preterm singleton births of 10.1 percent. With the success of the pilot, March of Dimes continued the program, and has now rolled out HBWW in Kentucky to a total of eight sites. The decline in preterm birth has continued in the original intervention sites, and the year after HBWW was implemented in the comparison sites, they also have begun to decrease their preterm birth rates. The success of HBWW in Kentucky has generated great interest, including the new formation of collaborative sites in New Jersey and Texas. **Health Access Nurturing Development Services (HANDS) program:** This statewide home visitation program provides services to first time parents that are at-risk or overburdened. Established in 1998 to address high rates of child abuse, the program goals are to increase positive pregnancy and child health outcomes, optimize child growth and development, reduce child maltreatment and improve family functioning. Previous outcome studies have shown lower rates of preterm birth, child abuse/neglect, and infant mortality among participants. In state fiscal year 2009, 11,171 families received HANDS services. **Jefferson County Project:** The Jefferson County Infant Mortality Pilot Project was coordinated by the Kentucky Office of Health Equity and the Center for Health Equity at Louisville Metro Public Health and Wellness. It was developed to address the role of contextual factors in the increasing infant mortality rates among African Americans. Focus groups were conducted with participants from the West End of Jefferson County in Louisville. Numerous priority themes emerged including safety, neighborhood appearance/environmental hazards, poverty, housing, local assets, social services, teenage pregnancy/parenting, health access, education, physical fitness opportunities and substance use. The pilot results will be used to inform future programming focused on eliminating health disparities in infant mortality.	Nov. 2011 and Sept. 2010
Michigan	**Maajtaag Mnobmaadzid Michigan Inter-tribal Council Healthy Start & Title V partnership** Prior to funding of the Inter-tribal Council of Michigan Healthy Start project in 1997, no state or federally funded maternal and child	Sept. 2010

	health (MCH) programs in Michigan had targeted the American Indian population. The Inter-tribal Council of Michigan Healthy Start project provides home visiting to at-risk families and also builds awareness of American Indian maternal and child health issues. Collaboration with the state continues to grow as a successful and important aspect of the program. The project has made great strides toward increasing awareness and institutional commitment, as well as toward building capacity at its eight Tribal and Urban Indian service delivery sites across the state. Engaging with partners to address structural and policy-related issues that impact infant mortality is a key strategy of the Healthy Start national model. Over the past 12 years, examples of collaboration with Title V include: • Establishment of a statewide Fetal and Infant Mortality Review (FIMR) Committee to review selected American Indian infant deaths in Michigan. While project staff coordinate and manage data related to FIMR, the state has supported this effort through training, technical assistance, access to records, and financial contribution toward medical case abstraction costs. • Membership of a State Infant Mortality program staff member on the Healthy Start project consortium to facilitate communication; • Presentation of American Indian data by Healthy Start staff at state-sponsored Infant Mortality and Maternal Mortality meetings; • Inclusion of American Indian infant mortality as a priority issue and goal in the Michigan Title V Needs Assessment and Five Year Plan; • Signing of data use agreements with the State Vital Records Division to provide access to de-identified birth and infant death records to enhance surveillance of American Indian birth outcomes, maternal risk factors and infant deaths as part of Healthy Start project evaluation. For more information visit: http://itcmi.org/services/child-and-family-services/healthy-start.	
Virginia	**Virginia's Commissioner's Working Group on Infant Mortality** State Health Commissioner Karen Remley, MD, MBA, FAAP formed the Commissioner's Working Group on Infant Mortality in 2008 to address Virginia's infant mortality rate. The workgroup brings together leaders from the health care industry, community and faith organizations, the business community, insurers, educators and associations such as AARP, March of Dimes and NAACP. The goal of the workgroup is to improve Virginia's infant mortality rate by engaging key stakeholders to work jointly with the Virginia Department of Health (VDH) through the development and implementation of creative/innovative prevention. The workgroup has used a number of innovative approaches to improve Virginia's infant mortality rate including a social networking site was used to gain members and keep them informed. Once the group was well established, a link on the Virginia Department of Health's website was created to facilitate the sharing of current resources and post workgroup activities. Slides were made available to all members who were encouraged to make local presentations and increase awareness of infant mortality in their localities. In addition, the presence of AARP on the workgroup evolved into a project focused on grandparents as caregivers and trusted sources of information for their daughters and granddaughters. The grandmothers' campaign resulted in fact sheets developed by VDH being placed on AARP's website addressing such topics such as talking to your daughter about pregnancy, infant safe sleep and SIDS, and injury prevention for children. Likewise, AARP launched an online forum, "Ask the Commissioner," in which forum members were able to ask the State Health Commissioner questions about child and maternal health. The workgroup came together to support and implement text4baby, a new free mobile information service providing timely health information to pregnant women and new moms through a baby's first year. Members of the workgroup with other key stakeholders formed the implementation team and	Sept. 2010

	participated in the testing of the service prior to the national launch. The workgroup continues to meet regularly and is dedicated to not only reducing the overall infant mortality rate but also the racial disparities. Efforts to improve access to early and timely prenatal care, increasing professional and families' knowledge of available resources, and engaging the historically black colleges and universities as key partners are continuing.	
Wisconsin	**Wisconsin's Efforts to Eliminate Racial and Ethnic Disparities in Birth Outcomes** Wisconsin's initiative to eliminate racial and ethnic disparities in birth outcomes continues to gain momentum. A new legislative special committee on infant mortality began September 2010. The committee will examine the causes of infant mortality; evaluation of public and private efforts; coordination between public health and Medicaid; successful programs in other states; the public health costs of not addressing the problem; and developing a strategic proposal, including any necessary legislation, addressing in particular disparity rates in different geographic areas of the state. The Title V MCH Program has been instrumental in keeping infant mortality as a priority in the state. The recently released Healthiest Wisconsin 2020 state plan includes an overarching focus on health disparities. The Healthy Growth and Development section describes the life-course approach, including the contributors to poor outcomes, and the interventions needed in our work. Reducing racial and ethnic disparities in birth outcomes, including infant mortality has become a 2020 objective and one of the departmental priorities that is tracked and monitored. Other recent developments in the state include the funding of 4 MCH Collaboratives in the communities of Beloit, Kenosha, Milwaukee, and Racine. The Wisconsin Partnership Program of the University of Wisconsin School of Medicine and Public Health has begun its $10 million Life-course Initiative for Healthy Families (LIHF) to address the high incidence of African-American infant mortality in the state. The Title V Program is an active partner in these efforts.	Sept. 2010 and Sept. 2009
Florida	**Florida's Preconception Health Initiative** In terms of measurement, Florida created its first preconception health indicator report in 2010 to measure preconception health status, using indicators recommended by a national working group. The report serves to educate health care providers and the public by providing a comprehensive look at the preconception health status among Florida's women of childbearing age. The report serves as a resource in planning strategies and activities to improve preconception health in Florida. To promote awareness about preconception health, Every Woman Florida was implemented to raise awareness about preconception health at the individual, healthcare provider, and health system levels. A social marketing and awareness campaign was launched that included marketing materials and the website, everywomanflorida.com. The website serves as an information portal for both healthcare providers and consumers about up-to-date information on preconception health. It also provides health tips, assessment tools, printable patient education handouts, and guidance for providers on the provision of preconception healthcare services. To further promote awareness among healthcare providers, Florida received a March of Dimes grant in 2010 to fund statewide hospital grand rounds. With the aim of improving preconception health, the grand rounds encourage healthcare providers to screen and educate women of childbearing age at every health care visit. By the end of September 2010, four grand rounds were completed, with Florida fetal-maternal medical specialists serving as speakers for each presentation. The goal of reaching 120 physicians throughout the state has already been exceeded, and more than 350 toolkits focusing on preconception health have been	Nov. 2010 and Nov. 2009

	distributed.	
Alaska	**The Alaska Infant Safe Sleep Initiative** After reviewing the circumstances of almost every infant death in Alaska 1992-2004, the Maternal and Infant Mortality Review committee has consistently recommended safer sleep environments to prevent many postneonatal deaths. In response, WCFH started the Alaska Infant Safe Sleep (ISS) Initiative in 2009. The ISS initiative: • Builds on work done by the National Institutes of Health-approved Healthy Native Babies program to develop a relevant Alaskan infant safe sleep policy statement and social marketing message • Designs educational products • Helps plan and execute an Alaska Infant Safe Sleep Summit • Promotes integration of safe sleep messages and activities among key groups A planning group has met to outline the initiative. In preparation, the group conducted a statewide health facility assessment on infant safe sleep. They found a lack of policies and standardized up-to-date education materials and practices. In particular, information about risk reduction while bed sharing, which 43% of Alaskan mothers of newborns practice always or almost always, is conspicuously absent from most educational materials. The initiative was launched at a half-day statewide task force meeting on September 29, 2009, to coincide with Infant Mortality Awareness Month.	Sept. 2009
Oklahoma	**Preparing for a Lifetime, It's Everyone's Responsibility:** As part of Oklahoma's Infant Mortality Campaign, the State Department of Health with multiple partners has launched this statewide public education initiative to help reduce infant mortality, adverse birth outcomes and racial disparities for such outcomes. The campaign's toolkit provides information of numerous issues related to infant mortality & birth outcomes, as well as resources lists and directories, brochures, flyers, and public services announcements. Key messages emphasize the important of preconception & interconception health, full-term pregnancies, breastfeeding, screenings and treatment for STDs and postpartum depression, safe sleep positions and environments, and other information a couple needs to know before and after they become pregnant. Tools for the initiative are available here.	Nov. 2009
Wyoming	**Coming of the Blessing, a Pathway to a Healthy Pregnancy**: An informational booklet specific to both major tribes represented in Wyoming, will continue to be distributed to American Indian clients. Culturally sensitive information includes the role of the father during pregnancy and postpartum, the importance of preconception health, nutrition (including folic acid use), risk of substance use and domestic violence to birth outcomes, preterm labor signs and symptoms, and importance of prenatal care.	Nov. 2009
CA, FL, IL, NY, TX	**March of Dimes Big 5 State Prematurity Collaborative :** Together, five states (California, Florida, Illinois, New York and Texas) account for nearly 40 percent of all births and 36.8 percent of preterm births in the United States. Known as the "Big 5", these states not only share high birth rates, they also face many of the same challenges in implementing programs to improve birth outcomes. The foundation of this collaboration began with a meeting spearheaded by the March of Dimes in 2007. MOD invited Big 5 state representatives from a cross section of provider disciplines, including state maternal and child health leadership, hospital systems, as well as leading prematurity experts participated in a three-day summit to identify potential areas for ground breaking change to reduce preterm birth. Now more formally organized, the March of Dimes Big 5 State Prematurity Collaborative is exploring data	Nov. 2009

	driven perinatal quality improvement through the development and adoption of evidence based interventions and the data systems and tools required to track changes in specific perinatal issues and indicators. Recent efforts in California, Kentucky, New York, Ohio, North Carolina, and other states have led to innovative population-based data driven approaches that provide information on potentially effective initiatives. Lessons have been learned in states that have implemented such approaches and the Big 5 have reviewed these and other efforts to identify a shared agenda focused on eliminating elective deliveries < 39 weeks.	
DE, HI, MO, NC, LA	From 2004-2006, AMCHP partnered with the Centers for Disease Control and Prevention (CDC) and the National March of Dimes Birth Defects Foundation to form the State Infant Mortality Collaborative (SIMC). This three-year project supported five multidisciplinary state teams, as they investigated the infant mortality problem in their jurisdictions and made plans to address it as they deemed feasible and appropriate. The five teams included Delaware, Hawaii, Missouri, North Carolina and Louisiana and represented five of 13 U.S. states with unusually high, stagnant or increasing infant mortality rates in 2004, the year the project began. The overarching goal of the Collaborative was aimed at bringing the nation's experts together to work with these teams. Additional information on the SIMC can be found at http://www.amchp.org/publications/Downloads/SIMC_Report.pdf.	Sept. 2008
Alabama	**State Perinatal Program:** The Alabama Department of Public Health, State Perinatal Program (SPP) provides and initiates activities to strengthen the perinatal health care system throughout the state. Provider education is one initiative the program utilizes to enhance perinatal health. The program provides outreach education for physicians and their office staff with the support of the March of Dimes. One-hour continuing education sessions are available to family physicians, obstetricians and pediatricians and their staff on varied topics, including: • the importance of preconception healthcare counseling to all women of childbearing age; • smoking cessation-counseling training targeting pregnant women and families of infants; • importance of folic acid supplementation for all women of childbearing age; • importance of optimal weight prior to pregnancy; • substance abuse patient education; • safe sleep for infants; and • the importance of breastfeeding promotion. These educational programs have proven to be beneficial to the providers and the recipients of perinatal health care in Alabama.	Nov. 2008
Minnesota	Since 2006, Minnesota's MCH staff has been actively promoting preconception/interconception health to improve birth outcomes and promote women's health. Recognizing the need to work across many disciplines, the preconception planning group includes representatives from the March of Dimes, University of Minnesota, health care systems, local public health, the Medicaid program, and Healthy Start project. The challenge of integrating pre and interconception care into practice involves changing consumer knowledge and behaviors, clinical practice, public health programs and health care financing. One strategic approach has been holding annual professional education conferences. The planning for the November 2008 conference began with a Diversity Round Table Structured Discussion with professionals representing and working with populations of color and American Indians. Their guidance regarding how different populations view preconception care, child spacing and other preventive health measures provided valuable input for the 2008 conference. The group described what culturally appropriate accessible care would look like, barriers within their communities, and suggested how to frame preconception care messages. Their ideas are included as presentations for the Second Annual Preconception Conference: Reaching Diverse Communities. We anticipate 200-300 attendees and to make important progress toward our goals of improving birth outcomes and women's health, and	Nov. 2008

	reducing disparities.	
New York	**Spaces for Harlem:** Through clinical and group education intervention of the Northern Manhattan Perinatal Partnership (NMPP), a not-for-profit organization, and its Central Harlem Healthy Start Program, over 9,500 women and their children have been linked and maintained in care. Since the program's inception in 1990 when the infant mortality rate (IMR) was 27.7 infant deaths per 1,000 live births, the IMR in Central Harlem has plummeted to 5.2 infant deaths per 1,000 live births in 2004, much better than the national IMR of 6.78; from 2001 to 2007 on average, there had been less than 10 infant deaths per 1,000 live births within the community. The agency also actively advocated for reforms in urban services that directly affect the health of its target population. NMPP embarked on a campaign to reduce the number of bus depots in the Harlem community because of the established correlation between the type of air quality and diesel engine fumes emitted by buses with low birth weight. It likewise supported the building of supermarkets that provide healthier foods to its constituents while ensuring that the bid of the New York City government to construct 165,000 affordable housing is realized. A number of its Healthy Start consumers have availed of the over 82,000 units that had been built so far and are now raising their families in a decent and secure environment. To sustain their family's economic and physical well-being, NMPP introduced a job readiness program that had placed over 890 women in full-time and part-time employment. At the policy level, it supported the empowerment-zone legislation initiated over a decade ago which infused Harlem with up to $300 million in block grants for community revitalization and job-creation projects. With the advent of gentrification and its social and economic cost on poor and working class residents, NMPP coalesced with like-minded groups to put pressure on local public leaders and private sector representatives to increase the growth of affordable housing and help boost the business acumen of local vendors so they could compete with larger stores that have settled on 125th street.	Nov. 2008