

*White Paper for Wisconsin Partnership Program Special Funding Initiative*

## **“Elimination of Racial and Ethnic Disparities in Birth Outcomes in Wisconsin”**

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## PREFACE

In the spring of 2007, the University of Wisconsin School of Medicine and Public Health (UWSMPH) through the Oversight and Advisory Committee (OAC) of the Wisconsin Partnership Program - announced its intention to invest special funding into a long-term initiative aimed at reducing health disparities in birth outcomes in Wisconsin. The purpose of the initiative, as initially framed by the Partnership Program, is to finance and support culturally appropriate and evidence-based interventions that have potential to directly improve birth outcomes among disparate populations. The initiative will be community and asset-based, integrated with existing efforts, and have considerable input from the populations and communities most affected.

In July 2007, the Program commissioned me to produce a white paper for this initiative. I am a Board-Certified Masters of Public Health AAP Fellow Pediatrician with 30 years of experience in Maternal and Child Health. I served as Medical Consultant and Chief Medical Officer for Family and Community Health at the Wisconsin Division of Public Health from 1988 to 2002.

This paper provides information, analysis, and recommendations to assist the OAC to make recommendations and provides overall guidance to the OAC on funding options to address the problem, including the following:

1. A brief overview of the problem, gaps, and identification of crucial issues.
2. A list of promising, innovative, or evidence-based interventions and solutions.
3. Identification of the collective expertise and activities of providers, state and local organizations, families, and communities in the state.
4. A set of policy directions, recommendations, and program strategies for Wisconsin and all key stakeholders to work together to best address the problem.
5. Opportunities for leveraging other matching resources from private foundations and other partners (government, community organizations, provider organizations, corporations) so as to significantly increase the amount and value of the Partnership's investment.

Over a six month period ending in January 2008, I collected information from a wide array of people throughout Wisconsin who share, from various perspectives, a commitment to creating equity in healthy birth outcomes for all infants, mothers, and families in the state. I attended meetings of some of the groups that are working on this issue. I reviewed literature, data, and research for evidence-based and best practices. I reviewed current efforts and initiatives. I interviewed several state and national experts. With humility, I acknowledge that, due to time constraints, my outreach was not all-inclusive.

I wish to acknowledge Dianne Jenkins, MSSW, Senior Policy Analyst for the Wisconsin Department of Health and Family Services (DHFS) Office of Policy Initiatives and Budget, and Patrice Mocny Onheiber, MPA, Program Director of the Disparities in Birth Outcomes Program at the Division of Public Health of DHFS, who provided me with invaluable research and other support for this project. Further, for the first section, I drew substantially from an October 2007 Policy Brief written by Traici N. Brockman, MPH, University of Wisconsin-Madison Population Health Fellow, and Ms. Onheiber.

It is clear that the elimination of racial and ethnic birth outcome disparities in Wisconsin requires a sustained, multi-faceted, and multi-system approach, with contributions from multiple sectors of society beyond public health. It is neither feasible nor appropriate for the Wisconsin Partnership Program to bear full responsibility for the public health role. Guided by the OAC, I have focused on practical health-related recommendations that fall within the scope of the School of Medicine and Public Health

(SMPH). Further, while I have concentrated my recommendations on African American infant mortality, I wish to clarify that my concentration on reducing African American infant mortality does not in any way diminish the importance to also address birth outcomes among American Indians and other populations disproportionately affected by disparities. I chose to focus on African American infant mortality because the disparities affecting this population are significantly greater than those for other groups, and because they have not improved over time.

Consistent with the core functions of public health, I have also assumed that everyone involved in the initiative will reach out and partner with the other advocates, organizations, systems and sectors that have a stake and responsibility to address this issue. I hope that this paper will stimulate statewide dialogue on the catalyst role of the UW SMPH in addressing this issue, and in inspiring and supporting actions that are most likely to have a positive impact on this serious issue.

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February 2008

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## I. EXECUTIVE SUMMARY

Infant mortality is defined as the death of a baby during the first year of life. It is a critical indicator of the overall health of a community or society. Although Wisconsin is a leader among states for its low white infant mortality rate (number of infant deaths per 1,000 live births), the infant mortality rate for African Americans in Wisconsin is the highest in the nation. While American Indian infant mortality in Wisconsin has declined by more than half over the past 20 years, the rate of black infant deaths has remained at the same level. In 2004, a total of 420 Wisconsin infants died during the first year of life. Of these, 245 were white, and 125 were African American. If African American infant mortality were reduced to the white infant mortality level, 96 of the 125 black deaths would have been prevented. The primary contributor to this gap is the high rate of prematurity and low birth weight among black babies.

Since infant mortality is a sentinel indicator of a community's overall well being, the factors that contribute to racial and ethnic birth outcome disparities relate to all sectors of society. The neighborhoods in Wisconsin with the highest rates of black infant mortality are characterized by hyper-segregation, unemployment, economic hardship, and inadequate housing. Systems that serve children and families in these communities are often fragmented, burdensome, culturally and linguistically disrespectful, and deficit-based.

Racial and ethnic disparities in access to and quality of health care in the United States have been extensively documented. An Institute of Medicine (IOM) Report, *Unequal Treatment*, found that people of color tend to receive a lower quality of healthcare than whites, even when access-related factors, such as patients' insurance status and income, are controlled for. Women of color often perceive that their health concerns are dismissed and that they are not treated with respect and dignity. Research also shows that birth outcome disparities transcend social and economic class, and that race is an independent risk factor for prematurity and low birth weight. Further, an emerging body of research suggests that chronic stress from racial discrimination and other traumatic events throughout a woman's life has intergenerational biological consequences that put her and her own children at risk for adverse birth outcomes.

Although defining its exact role and responsibility is beyond the scope of this paper and will require thoughtful and collaborative dialogue, the University of Wisconsin School of Medicine and Public Health has an opportunity to become a leader in responding to this challenge. Through the Special Initiative of the Wisconsin Partnership Program, it can finance and support culturally competent and best practice interventions that have the potential to directly improve birth outcomes among disparate populations, and, in particular, among African Americans. This initiative should: 1) Include service, research, and educational components; 2) Incorporate the life course model and other bodies of research described in this paper; 3) Honor, respect, and include families and communities in all phases; 4) Tap into strengths and resiliency not only among those immediately affected and their communities but also among providers, and health care systems and organizations; 5) Demonstrate the courage to address the influence of racism and advance much needed research on racial and ethnic disparities; 6) Challenge people from all walks of life and all kinds of agencies and funders to rise to the occasion and put this issue front and center on their agenda; 7) Integrate with existing efforts; and 8) Inform and inspire a new generation of leaders to carry on this work into the future.

## **The specific recommendations are the following:**

- A. Improve the health and safety of African American women, and their families, over their entire life span.
  - 1. Provide a model system of interconception care for African American women with prior adverse birth outcomes, and their families.
  - 2. Provide a model system of preconception care for African American women who have had a prior adverse birth outcome.
  - 3. Improve a model quality of prenatal care for African American women.
- B. Promote cultural and linguistic competence in health care provision.
- C. Maximize cooperation among diverse agencies and stakeholders.
- D. Support and strengthen existing infrastructure.
- E. Advance research and higher continuing medical education in ending racial and ethnic birth outcome disparities.

Finally, this paper touches only briefly on the critical and essential need for leveraging other matching resources from private foundations and other partners so as to significantly increase the amount and value of the Partnership's investment.

To effect a sustainable end to racial and ethnic birth outcome disparities requires all stakeholders to contribute their resources in a heightened way. Such an effort is neither easy nor comfortable. It is a long-term process that challenges individual and organizational biases, promotes opportunities for shared learning, and respects and strengthens the voices of all, especially those of the babies, mothers, families, and communities directly affected. The University of Wisconsin School of Medicine and Public Health can provide a model through a process that develops a Request for Proposals in a way that ends up financing and supporting efforts that have built-in community-based evaluation, flexibility to change course as fiscal, federal, political or public issues arise, and assurance of commitment through the long haul.

There is no single inoculation to catalyze the level of collaboration needed to save babies' lives. But there is an opportunity here, at this moment, for all stakeholders to humbly acknowledge and move beyond deep-seated and emotional experiences that shape their judgments and actions. Throughout it all, by keeping a shared vision of health equity at the heart of the work, significant progress in eliminating disparities is within our reach. The courage to accept and welcome participation at all degrees of expertise, combined with the need to pursue data and science in a field of study that requires a new framework, will determine whether it happens.

## **II. INTRODUCTION**

In recent years, it has become clear that the health care system in the United States is not providing the same quality of care for racial and ethnic populations of color that it does for the majority white population.<sup>1</sup> Racial and ethnic disparities in access to and quality of health care have been extensively documented. The Institute of Medicine (IOM) Report, *Unequal Treatment*<sup>2</sup>, found that racial and ethnic people of color tend to receive a lower quality of healthcare than whites, even when access-related

factors, such as patients' insurance status and income, are controlled. The IOM concluded that the sources of these disparities are complex, rooted in historic and contemporary inequities, and involve many participants at several levels, including health systems, their administrative and bureaucratic processes, healthcare professionals, and patients. In the clinical encounter itself, the study committee found evidence that stereotyping, biases, and uncertainty on the part of healthcare providers can all contribute to unequal treatment. The conditions in which many clinical encounters take place – characterized by high time pressure, cultural complexity, and pressures for cost-containment – may enhance the likelihood that these processes will result in care poorly matched to the needs and strengths of patients of color. Such patients often experience a range of other stresses related their health care, even when insured at the same level as whites, including barriers of language, geography, and cultural familiarity. Further, financial and institutional arrangements of health systems, as well as the legal, regulatory, and policy environment in which they operate, may have disparate and negative effects on the ability of people of color to attain quality care.

In the summer of 2007, a special commission of the Joint Center Health Policy Institute of the Joint Center for Political and Economic Studies released its findings on infant mortality in the United States, with a particular focus on babies born to women of color. The Joint Center is the only national research and policy institution whose work focuses exclusively on issues of particular concern to African Americans and other people of color.<sup>3</sup> The report - *Race, Stress, and Social Support: Addressing the Crisis in Black Infant Mortality* – examined why the United States, with its highly technological medical system, continues to rank near the bottom of the major industrialized countries in its high rate of infant death. Why do high rates of infant death continue to affect our nation, even in the face of dedicated efforts to address this problem? The Joint Center examined the impact of stress and stress mediators on pregnancy outcomes for African American women and recommended policy support and funding for culturally sensitive, race-and-gender specific research and interventions.<sup>4</sup>

Further, a documentary entitled *Unnatural Causes: Is Inequality Making Us Sick?* will, for the first time on television, examine in depth America's glaring socio-economic and racial inequities in health - and the search for root causes. The four-hour series (slated for PBS broadcast and 2008 DVD release in March 2008) sifts through the evidence to discover there is much more to our health than individual behaviors, health care, or genes. The social conditions in which we are born, live, and work profoundly affects our health and longevity.<sup>5</sup>

In Wisconsin, infant mortality rates - particularly among blacks - have shown widespread disparities for decades; the African American rate has in fact persisted in spite of numerous projects, programs, and system changes. This ongoing disparity has had a devastating impact on hundreds of families, neighborhoods, and communities in Wisconsin. It is, first and most importantly, an unconscionable and largely preventable loss of life. It is, secondly and also importantly, a serious and urgent problem in Wisconsin as a whole that requires immediate, substantial, and sustained action by all sectors of society.

This paper will focus on the infant mortality gap between whites and blacks and how this gap has increased over time. Wisconsin's black infant mortality gap will be compared to other states and the national average. Further discussion will explore new research, promising practices, and challenges and opportunities unique to Wisconsin. The final section of the report provides a set of recommendations to the Wisconsin Partnership Program on how best to direct and implement its Special Initiative to Eliminate Birth Outcome Disparities.

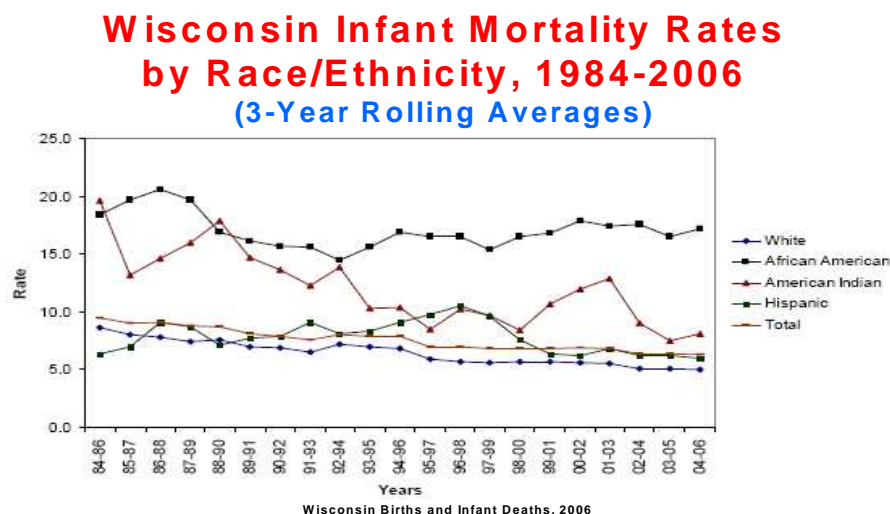
### III. WISCONSIN'S BIRTH OUTCOME DISPARITY CRISIS<sup>6</sup>

Infant mortality is defined as the death of a baby before reaching his or her first birthday. It is a critical indicator of the overall health of a community. Although Wisconsin is a leader among states for its low white infant mortality rate (number of infant deaths per 1,000 live births), the infant mortality rate for African Americans in Wisconsin is among the highest in the nation. Some of the conditions that cause this disparity are preventable, and much work needs to be done to better understand and to improve conditions that will reduce birth outcome disparities and allow all infants a better chance for a healthy birth and first year of life. Emerging research, described below, suggests that a healthy birth outcome is associated with good health throughout the life span.

Wisconsin's overall infant mortality rate has been steadily decreasing for the past 20 years, as had the U.S. infant mortality rate, until the U.S. rate recently started to increase.<sup>7</sup> In 1985 the infant mortality rate in Wisconsin was 9.2 deaths per 1,000 live births and has improved to a rate of 6.4 deaths per 1,000 live births in 2006. To put these numbers in a different perspective, the Healthy People 2010 national goal is an infant mortality rate of 4.5 deaths per 1,000 live births. While the overall decrease in infant mortality is laudable, and the white rate met the 2010 goal in 2004, this rate masks important and alarming disparities among racial and ethnic population groups within Wisconsin, particularly among African Americans, as illustrated in Figure 1.

In 2004, 420 Wisconsin infants died during the first year of life.<sup>8</sup> Of these, 245 were white, and 125 were African American. If African American infant mortality were reduced to the white infant mortality level in 2004, 96 of the 125 black deaths would have been prevented.

Figure 1.





- A. Leading causes of infant mortality in Wisconsin: Roughly two-thirds of infant deaths in Wisconsin can be attributed to three main causes: disorders related to preterm birth and low birth weight, congenital malformation or birth defects, and Sudden Infant Death Syndrome (SIDS). Other less frequent causes include Respiratory Distress Syndrome, other newborn complications, and maternal complications. Even when stratified by race, these three conditions remain as the top contributors to infant mortality. The difference is that for African American babies, the leading cause of infant mortality is related to high preterm birth and low birth weight rates. For white babies, the leading cause is congenital malformations or birth defects.
- B. Disparities by Race: In Wisconsin, the burden of infant mortality is carried disproportionately by its African American residents. Although the infant mortality rate has decreased for the total population, the black rate has essentially been the same for the past two decades, at roughly 18 per 1,000 live births. A comparison of three year averages of infant mortality rates by race and ethnicity (Table 1) over a 20-year period reveals a significant decline by more than one-half among American Indians from 19.6 to 8.1 and among whites from 8.6 to 5.0. Although much improved, the American Indian rate is still higher than the white rate.

**Table 1: 3-year Infant Mortality Rates by Race and Ethnicity**

<b>Infant Mortality</b>	<b>1984-1986</b>	<b>2004-2006</b>
American Indian	19.6	8.1
African American	18.4	17.2
Hispanic	6.4	6.0
White	8.6	5.0
<b>Total</b>	<b>9.5</b>	<b>6.3</b>

**Source:** Wisconsin Department of Health and Family Services, Division of Public Health, Bureau of Health Information and Policy. Wisconsin Interactive Statistics on Health (WISH) data query system, <http://dhfs.wisconsin.gov/wish/>.

- C. Racial and Ethnic Disparities by Geography in Wisconsin: An examination of where infant mortality is most likely to occur also shows that the burden is not distributed equally throughout the state. Most blacks in Wisconsin live in the southeast region of the states, and most black infant deaths (92 %) occur in that region. Seventy seven percent of black infant deaths occur in the City of Milwaukee. Further analysis shows a concentration of Milwaukee City black infant deaths occurring in a geographic area covered by a few zip codes.

IM rates for the five-year period of 2002-2006 show the City of Madison with the lowest black rate (7.15). In contrast, the City of Racine had the highest black rate (23.4), with the Cities of Beloit (19.2), Kenosha (18.0), and Milwaukee (17.3) following in rank.

**Table 2.**

### Infant Mortality Rates , 2002-2006

State/County City	White	Black	Hispanic	B/W Ratio
<b>Dane</b>	<b>3.8</b>	<b>6.45</b>	<b>5.5</b>	<b>1.7</b>
Madison	3.2	7.15	6.3	2.2
<b>Kenosha</b>	<b>4.1</b>	<b>18.0</b>	<b>3.35</b>	<b>4.4</b>
Kenosha City	3.4	17.5	3.6	5.2
<b>Milwaukee</b>	<b>5.8</b>	<b>17.3</b>	<b>7.15</b>	<b>3.0</b>
Milwaukee City	6.7	17.2	7.2	2.6
<b>Racine</b>	<b>7.65</b>	<b>23.4</b>	<b>10.5</b>	<b>3.1</b>
Racine City	6.9	23.0	8.9	3.3
<b>Rock</b>	<b>4.5</b>	<b>18.8</b>	<b>5.0</b>	<b>4.1</b>
Beloit	6.6	19.2	X	2.9
<b>Wisconsin</b>	<b>5.2</b>	<b>17.0</b>	<b>6.3</b>	<b>3.3</b>

Note: 'X' denotes less than 5 events and is not reported.

WISH (Wisconsin Interactive Statistics on Health), Infant Mortality Module, accessed 10/8/07.

- D. Disparities by Socioeconomic Status: Socioeconomic status is a long known determinant of infant mortality. The level of maternal education, obtained from the birth certificate, has long been used as a proxy for socioeconomic status. Overall in Wisconsin, babies born to mothers with an education level of high school or less have an infant mortality rate of 9 deaths per 1,000 live births, compared to 5.7 per 1,000 live births for mothers with some college or technical school, and 3.9 per 1,000 live births for mothers who are college graduates.

However, education alone does not explain the stark disparities depicted in Table 2 below. African American mothers with more than a high school education have nearly twice (15.7) the infant mortality rate as white mothers who never completed high school (8.3) (Table 2). This confirms research showing that race is an independent factor contributing to infant mortality.<sup>9</sup>

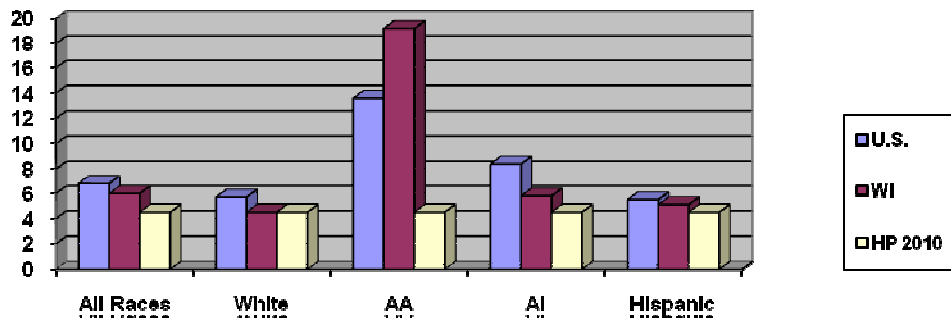
**Table 3: Infant Mortality Rate by Race/Ethnicity and Education Level 2004-2006**

	African American	White	Disparity Ratio
Less than high school	16.9	8.5	2.0
High school graduate	15.4	5.8	2.7
More than high school	15.8	3.9	4.1

**Source:** Wisconsin Health Facts: Racial and Ethnic Disparities in Infant Mortality, Wisconsin Department of Health and Family Services, January 2006. <http://dhfs.wisconsin.gov/healthybirths/pdf/InfantHealthFactSheet.pdf> (Accessed 9/28/2007)

- E. Other Maternal and Infant Characteristics to Consider: Infant mortality rates also differ by certain maternal and infant characteristics: age of the mother, in particular for white teens; the trimester in which prenatal care was initiated; the mother's smoking status; the baby's weight at birth; the baby's gestational age (preterm or full term); and the age of the infant. The rate at which low birth weight babies at a given weight are comparable among black and white babies, but at normal birth weights, African American infants die at between 2 to 4 times the rate of equal weight white infants. Thus, the much higher rates of low birth weight and preterm birth among blacks combine with the higher mortality at normal birth weight to account for the black to white disparity in Wisconsin. Further, medical and behavioral risk factors account for only about 35 to 45 % of the disparity.<sup>10</sup>
- F. National Comparison: Wisconsin infant mortality rates are slightly better than the national averages for each population group, with the notable exception of African American babies. During the 2001-2003 period, Wisconsin ranked 39<sup>th</sup> – last among reporting states and the District of Columbia – for its infant mortality rate for African American babies. Also notable is that for the year 2004, Wisconsin achieved the Healthy People 2010 goal of 4.5 deaths per 1,000 live births for white infants, although it did not achieve that rate in 2005 and 2006. In 2004, the black to white infant mortality ratio exceeded 4 to 1, compared to the national black to white ratio of slightly more than 2.5 to 1.

**Figure 2: 2004 Infant Mortality Rates in Wisconsin and the U.S.**



**Source:** America's Children: Key National Indicators of Well-Being 2007, Federal Interagency Forum on Child and Family Statistics. [http://childstats.gov/pdf/ac2007/ac\\_07.pdf](http://childstats.gov/pdf/ac2007/ac_07.pdf) (Accessed 10/03/2007); and Wisconsin Health Facts: Racial and Ethnic Disparities in Infant Mortality, Wisconsin Department of Health and Family Services, January 2006. <http://dhfs.wisconsin.gov/healthybirths/pdf/InfantHealthFactSheet.pdf> (Accessed 9/28/2007)

In summary, Wisconsin does well in its infant mortality rate among the white population. However, infant mortality among African Americans in Wisconsin is the highest in the nation. While American Indian infant mortality in Wisconsin has declined by more than half over the past 20 years, the rate of black infant deaths has remained at the same level. A reduction of African American infant mortality to the current white rate could save the lives of nearly 100 black babies per year. The primary pathway to creating such equity in birth outcomes is to reduce the high rates of prematurity and low birth weight among black babies.

#### IV. RESEARCH RELATED TO BIRTH OUTCOME DISPARITIES AND WHY INFANT MORTALITY REMAINS SO HIGH AMONG BLACK

New research and increased focus on earlier research are giving us more information on the reasons for these disparities and are starting to form an evidence base for new approaches to ending this tenacious problem. They are briefly summarized here, and form the foundation for the recommendations that follow:

- A. Life Course Perspective: Research focusing on the life course perspective by Michael Lu and others presents a multi-level, longitudinal, and intergenerational approach to preterm birth and low birth weight, both of which contribute to the black to white gap in birth outcomes. The rationale for the life course perspective lies in the concept of allostasis, which refers to the body's ability to maintain stability through change. This perspective considers the intersection of chronic stress, including that produced by racism, throughout the lifetime and how it leads to women having premature babies who are more likely to die in infancy and, if they survive, to experience increased morbidity and mortality all the way through adulthood.<sup>11</sup> This perspective posits that the effects of chronic stress throughout the lifetime pose a significant preconceptional risk that even an optimal pregnancy and the best prenatal care may not undo.<sup>12</sup> Among the take-home lessons from the life course perspective is the concept that high quality prenatal care and healthy individual behaviors during pregnancy are necessary but not sufficient to reduce birth disparities.
- B. Stress and Biology: According to this model, in the face of chronic stress, including that of racism starting in childhood, the body loses its natural ability for self-regulation.<sup>13</sup> The biological pathways (hypothalamus-pituitary-adrenal axis) that enable the body to reset itself and maintain allostasis in response to stress become accelerated. This acceleration may shut down the endocrine feedback system that enables cortisol levels to return to normal after successful adaptation to a stressful event. Chronically high levels of cortisol suppress immune function, making the woman more vulnerable to a series of events during pregnancy that are precursors to preterm birth and LBW. Further, the continued and often exacerbated stresses that occur during pregnancy may program the fetus in a similar way, setting up a compromised ability to self-regulate throughout the life span.<sup>14</sup> The inequitable distribution of conditions and resources in which people can be healthy, such as education, housing, and economic well being, are multiplied by the effects of health care discrimination.
- C. The Adverse Child Experiences (ACE) Study: Conducted from a database of 17,337 adult enrollees in the Kaiser Permanente Health Plan in California, began to publish its research in 1998.<sup>15</sup> Stated simply, it uses a retrospective design that shows a strong association between 10 adverse childhood experiences (ACEs) and major risk factors for chronic diseases, both physical and emotional, in adulthood. The 10 ACEs include several categories of child abuse and neglect, and home environmental conditions related to substance abuse, severe mental illness, exposure to violence, incarceration, and loss of one parent. The researchers found that ACEs are widely prevalent and transcend social, economic and racial and ethnic boundaries. Further, a recent paper, "The Enduring Effects of Abuse and Related Adverse Experiences in Childhood", reviews data to support the concept that the mechanisms for biological impairment in brain and endocrine function among children with multiple ACEs are comparable to the mechanisms from the life course perspective studies.<sup>16</sup>

- D. Racism: Race is a social construct, not biological, that has been used to divide the world's people. The interaction of stress and biology has been researched and studied, and it is particularly important to consider the role of racism as a stressor. However, the historical misuse of biology, medicine genetics, and social sciences has unfairly pathologized communities of color. It has led to a false dichotomization that fails to take into account the full strengths and capacity of such communities to survive, heal, and thrive.
- E. Race and racism are independent stressors that have an impact on health outcomes: Racism can be conceived of as occurring at different levels.<sup>17</sup> Personally-mediated racism is defined as prejudice or discrimination rooted in often unconscious stereotypes of different groups of people. For example, the IOM Report<sup>18</sup> cites studies that demonstrate how health care providers apply differential assumptions or attitudes about others according to their race. For example, an African American pregnant woman who presents with possible signs of preterm labor may be more likely to be sent home than her white counterpart due to biases by healthcare providers about African Americans' misuse of the health care system. As a result, she may experience feelings of being dismissed, not listened to, and not treated with respect, which may have an impact on her decision to present for care in the future. The health care system may support such biases, whether unconsciously and unintentionally, through policies and other institutional practices. Research supporting the life course perspective and the impact of chronic stress, including that of racism, on health has gained considerable momentum since initial studies showed that college-educated African Americans have low birth weight (LBW) babies at rates much higher than college-educated whites.<sup>19</sup> Actually, the rate of LBW among blacks with greater than 16 years of education was found to exceed that of white women who had not completed high school. Another study pointing to the intergenerational effect of racism examined LBW among first generation Africans in the U.S.<sup>20 21</sup> It showed that first generation African mothers had LBW rates comparable to those of their white counterparts, but that by the second generation, the birth outcome disparities experienced by African Americans began to emerge. The researchers concluded that environment, not genetics, is the primary factor in what has become unequivocal, i.e. that race has an independent association with LBW and infant mortality.<sup>22</sup> A third study<sup>23</sup> found that among a group of black women of comparable age, education, and health status, those who had the perception of discrimination in their prenatal care did worse than those who did not share that perception.
- F. Social Capital: A growing body of research on the concept of social capital shows that the extent to which we feel meaningfully connected to each other and to our communities is a powerful determinant of health status.<sup>24</sup> Social capital encourages formal and informal social support networks, civic engagement, and a heightened sense of community. It refers to the processes between people that establish networks, norms, and social trust, and facilitate coordination and cooperation for mutual benefit. Such connections enrich our physical and emotional health, and provide a deep well of protection from stresses and adversity. These connections have been shown through numerous studies to strengthen the immune system. A study by Haggerty more than 40 years ago showed that among a group of children harboring the Streptococcal bacillus in their throats, those living in more stressful households were more likely to become symptomatic. Ron David, a member of the Joint Center Health Policy Institute's National Commission on Infant mortality, has further elaborated on this concept of social connectedness by hypothesizing that "relationships are primary; all else is derivative."

- G. Resiliency: Resiliency refers to the ability to bounce back from adverse experiences and to avoid their long-term negative effects; the power of people to recover, heal, grow, and succeed in the midst of stress, often overwhelming in nature. Studies of concentration camp survivors, of people with special health needs, and of children in violent unsafe environments demonstrate the potential for human beings to bounce back from severe hardship and stress. For example, it has been shown that resilient children and youth are highly flexible and adaptive<sup>25</sup> and skillful as planners and problem solvers<sup>26</sup>. They also tend to possess an internal sense of power and purpose, and have an engaging social temperament. Resilient families support individual children through the presence of an enduring and loving relationship with at least one adult; hold high and clear expectations for the child and confidence that she can do it; and encourage and expect children to feel that they are valued participants. Schools that promote resilience have a wide array of resources to affirm the unique learning style and strength of students; tap into their imagination and creativity; involve students in real life experience; strengthen their decision-making skills; and provide teachers who affirm and inspire that spark in a student and tell her again and again, “You can do this”. Resilience promoting communities are rich in social support networks and have active and vibrant associations and organizations.<sup>27</sup> A resilience promoting community has a clear vision for its children and youth and is equipped with the resources essential to support healthy growth and development – health care, child care, parent education, home visitation, family resource centers, job training, employment, and housing.
- H. Conditions for Productive Dialogue and Action: Research in the social sciences has resulted in leadership and planning tools that are more likely to bring out the cooperative and collaborative action that is essential to eliminating birth outcome disparities. For example, synthesizing 80 years of social sciences research, Weisbord and Janoff<sup>28</sup> identified four principles that foster the high level of collaboration needed for systems change on complex and tenacious problems such as birth outcome disparities, and especially in communities where racial and other tensions are high. The four principles are: 1) Get the “whole system” in the room—those with authority, resources, expertise, information, and need—all in the same conversation. 2) Explore the whole before seeking to fix any part; 3) Put common ground and future action front and center; and 4) Set up meetings so people can do the work for themselves. These broad principles may help in thinking through further the potential methods by which joint action in Wisconsin can be encouraged effectively, with the obvious recognition that this is easily recognized as a need and not so easily enacted in practice for many reasons.

## **V. WHY WISCONSIN IS POISED TO TAKE ON THIS CHALLENGE**

A convergence of recent events, dynamic leadership at the state and local level, and the ongoing work of dedicated people and organizations have created an opportunity for Wisconsin to seize the moment and demonstrate the political and public will that are essential to making a real and sustained change. The two federally funded Healthy Start Projects – Milwaukee Healthy Beginnings and Honoring Our Children – have built strong coalitions in Milwaukee and in tribal communities that put into practice a style of leadership that honors and involves the families and neighborhoods affected by birth outcome disparities and their cultures. The Milwaukee Fetal and Infant Mortality Review (FIMR) Program, funded by the Black Health Coalition’s Milwaukee Health Beginnings project, has brought into clear view a number of systems and policy challenges. The Medicaid Prenatal Care Coordination Benefit, statewide system of home visitation, and Community Health Centers are examples of current efforts in direct service that are operating in ways that reflect components of the recommendations presented here.

Beloit, Racine, and Kenosha each have a community health center and other community-based organizations addressing infant mortality.

Strong leadership by the Department of Health and Family Services and, in particular, its Division of Public Health, has led to a number of positive actions, elucidated in *Wisconsin's Framework for Action to Eliminate Racial and Ethnic Disparities in Birth Outcomes: 2006 Progress Report*.<sup>29</sup> At the federal level, the Health Resources and Services Administration (HRSA) conducted a Performance Review for Milwaukee in 2006, and released a report entitled, *Community Strategic Partnership Report for Milwaukee, Wisconsin*. A Milwaukee Leadership Council formed in the fall of 2006 to follow up on its recommendations.

Also at the local level, the City of Racine has come together and formed an Infant Mortality Coalition whose Chair is a community member. FIMR is starting up in that city, and two Racine legislators were successful in directing \$250,000 in General Purpose Revenue in the 2007-2009 biennial state budget to improve racial disparities in birth outcomes. Beloit, which developed one of the state's first "one-stop shop" models almost 20 years ago, also has a community wide coalition. The Infant Death Center of Wisconsin has played an important role in catalyzing Racine and Beloit. A Black Health Coalition has formed in Kenosha. The City of Madison and Dane County as a whole have shown a remarkable decline in their black to white birth outcome gaps. The success of the American Indian community in reducing its infant mortality rate from 21 to 8 over the past two decades is a powerful example of the potential for real change. Although the most recent American Indian rate is still higher than the white rate, the opportunity exists to understand and apply the lessons learned from the decline.

The Center for Health Equity (City of Milwaukee Health Department), the Center for Urban Population Health, the Center for the Underserved Child at the Medical College of Wisconsin, and the University of Wisconsin Population Health Institute represent resources for education and research in racial and ethnic disparities. Planning for a University of Wisconsin – Milwaukee School of Public Health is well underway. These are all needed to advance the knowledge base and to prepare and inspire a new generation of leaders. The UWSMPH has committed to a Central City Medical Academy in Milwaukee. Further, large health care organizations have also demonstrated concern and a desire to focus efforts in this area, including partnerships and funding with City Public Health Department effort.

In recent years, the academic-community health partnerships funded by the Medical College of Wisconsin and the UW-Madison School of Medicine and Public Health have also fostered attention to strategies that promote the health of the public and reduce disparities in general. Because of the complex factors that influence birth outcomes, it is important to remember the value of this broader lens, while moving forward with more specific initiatives focused on reducing disparities in birth outcomes.

A major theme for this report is that, while the Special Initiative should be bold, innovative, sustained, and intense in its direction, it should build upon and not reinvent the well of resources and efforts that currently are in place and making progress.

## **VI. WISCONSIN SPECIFIC CHALLENGES**

Interviews from July 2006 through January 2008 confirmed that the factors holding Wisconsin back from ending birth outcome disparities are numerous, inter-connected, complex, and deeply systemic and engrained. Since infant mortality is a sentinel public health indicator of a community's overall well being, the factors that contribute to racial and ethnic birth outcome disparities relate to all sectors of society and require their buy-in and commitment to action. The neighborhoods with the highest rates of black

infant mortality are characterized by hyper-segregation, unemployment, economic hardship, lack of male involvement in child rearing, inadequate housing, and crime. The systems that serve children and families in these communities are often overwhelmed, fragmented, burdensome, culturally and linguistically disrespectful, and/or deficit-based. Health can't do it all, but needs to be at the table.

The result is the kind of chronic and unrelenting stress, described earlier in this report that feeds an intergenerational cycle of disproportionate risk, morbidity, and mortality. Further, in the context of these conditions, the capacity for people and organizations to work together in a meaningful way for the common good is diminished. Indeed, a prevailing atmosphere of mistrust, fear, and at times hostility make it almost impossible for the discovery of common ground and shared aspirations to emerge. However, in the absence of a shared vision, fruitful dialogue on the really tough issues such as racism often get buried or denied, and the wounds are left to fester. When there is a lack of trust and healthy dialogue rooted in what we agree upon rather than in what divides us, effective action – family-centered, culturally competent, and resiliency-based – becomes almost impossible at all levels. The Special Initiative can take clear and evidence-based steps to foster the conditions for the kind of dialogue and cooperation that will be essential to all efforts at ending racial and ethnic disparities.

## **VII. BEST AND PROMISING PRACTICES**

This report is informed by a review conducted by the author of what has worked in reducing racial and ethnic disparities in Maternal and Child Health (not just birth outcomes). The enclosed appendices provide more detail about many of the programs across the nation that are promising examples, and some of the related work already underway in Wisconsin. For purposes of this report, “success” is defined as either achieving an actual reduction in the disparity or, and much more frequently, a change in one or more intermediate measures that represent precursors to a reduction and for which there is a logical pathway to achieving those actual reductions in the future.

This report focuses primarily on “promising practices” because most of the interventions that can be observed have not been subject to rigorous random controlled studies to prove efficaciousness. The random controlled study of the effects of a nurse home visiting program (Nurse Partnership Program) is often cited as one of the few examples.<sup>30</sup> In truth, application of this type of “standard of evidence” for these programs is probably unrealistic at the present time, because of the multiple factors and complexity of the pathways related to poor birth outcomes. It would be negligent to insist on such a high standard for evidence when it does appear there are ways and means to make a meaningful difference in birth outcomes, and the need to do so is so pressing. At the same time, some modesty of our knowledge base must be incorporated into our thinking and strategies as we continue to learn and adapt actions to best knowledge.

Logically, a public health program must first define what processes lead to the desired outcome and then ensure that they address those processes. For example; if a health problem is caused by 5 conditions, all five conditions must be addressed by the program (or within the program service area) to achieve an impact on the health problem. The challenge of infant mortality is that it is caused by many conditions and risks, often inter-related, and each has an etiologic pathway that can begin at multiple time periods in a woman's or infant's life cycle. The Life Course Perspective shows that it is not enough to study pathways during the prenatal period. Many adverse birth outcomes, including infant deaths, have etiologic pathways that begin long before pregnancy or very early in gestation, before a woman enrolls in prenatal care. Thus, in its most basic form, any model for preventing infant mortality must include a component that addresses key aspects of women's health before pregnancy, in fact going all the way



back to the circumstances of her own birth. This further complicates research designs that will lead to an evidence base. Further, for infants who are born alive and survive long enough to be discharged from hospital care, there remain factors in the home and the external environment that may put them at risk for later causes of death such as SIDS or injuries. According to the Life Course perspective, the infants' own exposures during pregnancy and in early life can also predispose them to reproductive challenges as adults. We thus have a model of several processes and time periods that contribute to infant death on a population level, making the search for evidence based interventions for disparities a significantly different process from that for individual causes or risk factors. For example, the research leading to the Back to Sleep Movement resulted in lower rates of SIDS for the whole population, but did not have an effect on the black to white disparity.<sup>31</sup>

The reason to go in depth on this distinction here is that efforts to eliminate racial and ethnic birth outcome disparities cry out for more research that is specific to the question of how to reduce the gap. Further, such research requires a partnership with communities affected by the disparities, which is often new territory for both researchers and the communities.

The need for more research must also be accompanied by actions. We can be optimistic that actions can make a difference, based on the dramatic success in Central Harlem, the American Indian population in Wisconsin, and other best or promising practices as referenced after each item.

Before discussing some substantive areas of potential focus for collaborative work to reduce disparities in birth outcomes in Wisconsin, it is important to note that there are some underlying characteristics and values in successful efforts that are important to success here as well. We recommend that the following set of assumptions and practices be incorporated into all work to reduce disparities, whether it be related to policies, systems, programs, and services; research; and teaching:

- Honor and respect the dignity of all people involved, and of their cultures (Black Infant Health Program of Los Angeles<sup>32</sup>, Honoring Our Children with a Healthy Start<sup>33</sup>, The Magnolia Project – Jacksonville, Florida<sup>34</sup>, Community Health Worker Program – New York State<sup>35</sup>).
- Consider that everyone is an "expert" and honor all voices, especially those who have historically not been included in the design of the policies that affect them (Genesee County REACH 2010 - Michigan<sup>36</sup>).
- Include families and communities as equal partners from start to finish (Interpregnancy Care Program - Atlanta<sup>37</sup>, Harlem Children's Zone - NYC<sup>38</sup>).
- Use simple and clear, non-jargon, and non-bureaucratic language and communication (Black Infant Mortality Resource Center – New Jersey<sup>39</sup>, National Friendly Access Program<sup>40</sup>).
- Draw on the strengths, resiliency, and resources of all people involved (Black Health Coalition of Wisconsin<sup>41</sup>, Tool Kit for Health and Resilience in Vulnerable Environments<sup>42</sup>).
- Collect, follow, analyze, and use data in an honest, clear, and accurate way that is faithful to the core functions of public health and that serves as the foundation for action (Wisconsin Division of Public Health<sup>43, 44</sup>).
- Build and sustain public and political will for action.(California Black Infant Health Program<sup>45</sup>, Boston Disparities Project<sup>46</sup>, Harlem – New York City<sup>47</sup>).
- Stay faithful to the purpose of public health, which is not only to end disparities but also to create equity for all people, regardless of race, ethnicity, income, gender, religion, and nationality (Center for Health Equity - Milwaukee<sup>48</sup>).
- Be non-judgmental, and realize that behind every statistic, every risk factor, every death is a real human being, with all the complexity, magnificence, and potential for good that is in each of us

(Sisterhood of Birthing Projects<sup>49</sup>).

- Stay relationship-centered, that is, carry out the work within a context that appreciates the vital role of loving and thoughtful human relationships in promoting health, safety, and justice (Seven Principles Project, San Francisco<sup>50</sup>, Every Child Succeeds - Ohio<sup>51</sup>, Empowering Families - Milwaukee<sup>52</sup>, 100 Intentional Acts of Kindness Toward a Pregnant Woman – Los Angeles Baby Collaborative<sup>53</sup>).

## VIII. RECOMMENDATIONS TO OAC

As noted in this paper, the disparities are by far greatest for African American birth outcomes, and are especially concentrated in southeast Wisconsin, including cities such as Milwaukee, Racine, Kenosha and Beloit. Focusing on this population, and the health of women in the context of their families and communities, does not, however, diminish the need for Wisconsin to support efforts that will sustain the decline in American Indian infant mortality.

The following recommendations, rooted in the research described above, represent an attempt to match best and promising practices with feasible and realistic actions that the Wisconsin Partnership Program is poised to take or areas in which the Partnership Program could play a role as catalyst, convener, or shareholder with other organizations to address disparities in birth outcomes. In no way do these recommendations constitute a comprehensive multi-faceted and multi-system statewide strategy. They are meant to build on, not replace, existing efforts in Wisconsin that show promise. Rather, they are offered in the hope that they will be a catalyst to leverage comparable initiatives and resources by others as part of a coordinated effort.

- A. Improve the health and safety of African American women, and their families, over their entire life span: These recommendations address the needs and strengths of African American women for culturally competent healthcare not only during pregnancy, but from preconception to interconception and across the lifespan. Healthcare can play a vital role in closing the gap, but only if it goes beyond the nine months of pregnancy and begins to address the healthcare needs and strengths of African American women before, after and in between pregnancies, and over their entire lifespan.

- 1) Provide a model system of interconception care for African American women with prior adverse birth outcomes, and their families:

The health of women between pregnancies receives far too little attention. Often the only health care visit for the new mother is a post-partum check with the prenatal care physician. Other interventions focus on the infant rather than the parents. While interconception care should ideally be provided to all women, this recommendation focuses on African American women who have experienced an adverse pregnancy outcome, because they are at substantial risk for adverse birth outcome in their next pregnancy. In light of the research discussed in this report, the focus should be not only on low-income African American women whose pregnancy-related Medicaid coverage generally ends at 60 days postpartum but also on all black women.

The system should include four components: 1) Risk and resiliency assessment; 2) Medical and psychosocial interventions; 3) Outreach; and 4) Care coordination and education.

The risk and resiliency assessments must seek to understand, honor, and respect the culture of the woman and her family, and engage her as a partner in health care. It should include screening for medical conditions such as hypertension, diabetes and vaginal infections; mental health conditions such as maternal depression; and oral health conditions such as periodontal disease. It should identify strengths and resiliency in the woman, family, neighborhood, and culture. The assessment should be ongoing throughout the interconception period and guide the development of a plan of care unique to each woman. The care plan should specifically address known biological pathways to adverse birth outcomes, with a particular focus on the impact of stress on the woman and her own perception of racial discrimination.

Components of intervention should include the following:

- Develop a sustained trusting relationship between the woman and health care provider, so that she has confidence in her own power to heal and sustain health going into her next pregnancy, and that she is more likely to follow through on medical and other health care.
- Assure continuity so that the woman, to the extent possible, sees the same physician and care coordinator.
- Allocate time and personnel that takes into account the reality of the complexity of needs and challenges that a woman experiences.
- Provide multi-faceted care coordination that includes, for example, health and parenting education. It should be available in a setting and at a time that are most comfortable and safe for the woman.
- Flexibility. While a one-stop shop model combined with home visitation may, indeed, be optimal for the majority of women, alternative arrangements should be available for women in especially difficult situations such as addiction and domestic violence.
- Strategies for stress reduction should be tailored to the circumstances of the individual woman, tap into her resiliency, and mobilize her social support networks within the family and community.
- Mental health screening, diagnosis, and treatment – especially for maternal depression – should be interwoven into the care plan.

### **Best and Promising Practices (See Appendix 1, Page 3):**

- Denver- **Interconception Health Promotion Initiative.** The program evaluation suggests that women who participate in a comprehensive home visitation and care coordination program after a poor birth outcome have higher rates of compliance with post-partum care and family planning, and have longer interconception intervals and better birth outcomes as measured by NICU admission and cumulative low birth weight rates.
- Atlanta- the **Interpregnancy Care (IPC) program** at Grady Memorial Hospital in Atlanta provided primary health care and dental services, enhanced care coordination, and other outreach services to African-American women who delivered a very low birth weight infant at the hospital and who qualified for indigent or charity care. A preliminary evaluation of the 22 women in the pilot program indicated that one-third of them were affected by unrecognized or poorly managed

chronic health problems. All developed a reproductive plan for themselves, and none wanted to become pregnant during the next 2 years. None became pregnant in the immediate nine months following delivery of their LBW infant.

- Jacksonville, FL (Pinellas County)– The **Magnolia Project**, a Federal Healthy Start Program uses outreach, care coordination, risk reduction, social support, well-woman prenatal care, health education and community development activities. It had a success rate of greater than 70 percent in resolving two priority risks: Sexually Transmitted Diseases and unintended pregnancy, the black to white infant mortality ratio was better for the babies born to women participating in the project as compared to national rates.

- 2). Provide a model system of preconception care for African American women and their families: Every interaction with health and human services prior to conception should be viewed as an opportunity to provide preconception care and to support African American families in preparing for pregnancy and parenthood. Thus, one can envision that this recommendation would result in support for a wide array of programs such as but not limited to the following:
  - a. An Early Childhood Program that encourages systemic cooperation and collaboration between agencies in caring for families and that explicitly promotes resiliency at multiple levels, and that includes families and communities in all aspects of planning and implementation.
  - b. A Medical Home Program that assures screening, referral, and treatment for adverse childhood experiences (ACEs) such as a history of child sexual abuse, substance abuse, untreated mental illness, and incarceration in the household. Program integrates culturally and linguistically competent mental health care into the primary care practice, including routine screening for maternal depression in particular.
  - c. Home Visitation in the neighborhoods most affected by black infant mortality, with the particular model determined through a collaborative community-based process, and that encourages and inspires formal and informal networks of social support within the context of African American customs, traditions, and history.
  - d. Fetal and Infant Mortality Review (FIMR) that identifies a systemic issue such as the need for male involvement and that catalyzes and inspires a community movement to address this need.
  - e. A school-based health center or other widely accessible setting that provides a safe environment for students to seek and receive risk and resiliency screening and referral.
  - f. Community mobilization through organizations like the March of Dimes that advance preconception care to the same extent as prenatal care as a key strategy for reducing future preterm birth, low birth weight, and infant mortality.
  - g. Collaboration among the State Maternal and Child Health Program, Medicaid, managed care organizations, community partners, families, and local health departments to provide systemic incentives to improve preconception health care that includes mental health, nutrition, stress reduction, and other factors that are specific to adverse birth outcomes among African Americans in Wisconsin.
  - h. A program that provides preconception care to particularly vulnerable populations such as African American women who are homeless or incarcerated.

## Best and Promising Practices (See Appendix 2):

- Washington State Department of Health used **PRAMS** (Pregnancy Risk Assessment and Monitoring System) to monitor prenatal care provider discussions with women about maternal risk behaviors. Based on this data, they developed a statewide project to improve women's preconception care and prenatal health education by their health care providers.
- **Family Planning Waivers**— 26 states (including Wisconsin) currently have Family Planning Waivers, which allows them to expand Medicaid eligibility to women who otherwise do not qualify for Medicaid; these waivers have proven effective in reducing unintended pregnancies among participants. The programs include coverage of family planning services and supplies, counseling services and patient education, examination and treatment, laboratory examinations and tests, and medically approved contraceptive methods and infertility services.
- Other – California, Colorado, Delaware, Florida, Georgia, Illinois, Maryland, Missouri, Nebraska, New York and Oklahoma all have **statewide initiatives in preconception health**.

### 3) Improve the quality of prenatal care for African American women:

Prenatal care is necessary, but not sufficient, to improve birth outcomes and reduce disparities. Because the chronic stress of racism is such an important contributor to the black to white gap, the content of prenatal care needs to incorporate services to reduce such stress. Since the content of prenatal care has historically not focused on this area, it provides the Partnership with a timely opportunity to stimulate and evaluate innovative approaches. The focus should be on explicitly incorporating into prenatal care specific culturally respectful strategies to reduce stress. Also important are group interventions such as therapeutic and informal support groups that can serve to increase protective and resiliency factors such as social support. At the community level, interventions that honor and respect pregnant women can help strengthen their sense of dignity and self-confidence. Intentional acts of respect toward pregnant women and new mothers, such as allowing them to get to the front of lines at the grocery store can make an impact. The public education (social marketing) program recently initiated by the Division of Public Health, through New Concept of Milwaukee, could play a role in helping communities decide on what kinds of messages, from a cultural and language perspective, are most likely to have an impact.

Second, it falls within the scope of the University of Wisconsin School of Medicine and Public Health to support efforts to assure quality health care, and such a role certainly applies to the prenatal period and the clinical medical care needed to prevent preterm birth and low birth weight. The UW has the opportunity to show leadership by engaging with and supporting groups that currently focus on upgrading the quality of Wisconsin's medical care delivery, such as the Wisconsin Collaborative on Health Care Quality, the Wisconsin Medical Society, Wisconsin Hospital Association, and the State Department of Health and Family Services, particularly its BadgerCare Plus Pay for Performance (P4P) measures related to birth outcomes.

### Best and Promising Practices (See Appendix 2):

- Vermont – The **Improving Prenatal Care in Vermont (IPCV)** project engages prenatal care providers to decrease the rate of premature and low birth weight babies, using a 3-tiered approach: timely assessment, quality intervention, and consistent follow-up. A Toolkit provides prenatal care providers with practical advice on how to easily implement tools, track improvements and build needed partnerships with existing community resources.
- El Paso, CO - The **Healthy Generations: Volunteer Health Educators in the African American Community** project is a train-the-trainer model to empower African-American volunteer health educators to disseminate information related to healthy life style choices, risk factor reduction, resiliency promotion, and community resources to other African American women within their social networks.
- San Diego CA - The **Black Infant Health** Social Support and Empowerment model links pregnant and parenting African American women and various health, social service, religious, family and other services, addressing social factors that impact birth outcomes and providing a framework to teach specific skills while increasing support networks and access to health care.
- **Los Angeles County CA** – The Department of Public Health’s **Prenatal Care Guidance/Nurse Family Partnership Program** provides prenatal outreach and care coordination, nursing case management, social support, empowerment classes, and strengthening family services for women during pregnancy and up to 24 months following delivery, as well as parenting support for young fathers.
- The Rhea and Lawton Chiles Center at the University of South Florida’s **Friendly Access** program helps health care delivery institutions and staff collaborate with community residents and stakeholders from the public and private sectors. Its goal is to improve access to and use of quality maternal and child health services in order to reduce health disparities and improve population health. It consists of a consortium of programs that use staff training to emphasize patient care that is culturally, racially and gender sensitive.
- Michigan - **The Genesee Project** is collaboration between the University of Michigan, public health workers, health agencies, and the private sector to use cultural competency training, inclusive of the adverse effects of racism on health, to improve prenatal services. Community residents serve as advocates to respond to the array of needs of expectant mothers.

- B. Promote cultural and linguistic competence in health care provision and address racism: As noted earlier, race is a separate variable related to poor birth outcomes. It’s worth re-emphasizing here that race is a social not biological construct, and that racism can be conceived of as occurring on three levels: internalized, personally-mediated and institutionalized. Internalized racism is defined as acceptance by members of the stigmatized races of negative messages about their own abilities and intrinsic worth. Personally-mediated racism, referenced above, is defined as prejudice or discrimination, that is, differential assumptions about or actions toward others according to their race. Institutionalized racism is defined as differential access to the goods, services and opportunities of society by race. It can manifest as differential access to quality education, sound housing, gainful employment, appropriate medical facilities, and a clean environment. Residential segregation exemplifies institutionalized racism, as cities that are more racially segregated have greater black-white infant mortality disparities. Disparities are

cumulative, rooted in early experiences and unequal treatment over time. Upward socioeconomic mobility has been found to contribute to improved birth outcomes among infants born to white women, but the same does not hold true for African American women at the population level.

Key principles for implementing cultural competency include community representation and feedback at each stage of implementation, integrating cultural competency into all systems of a health care organization, and particularly in quality improvement efforts, and ongoing staff training.

The Partnership could make an important contribution in this area by supporting institutional self-assessments in key agencies to determine where racial discrimination is occurring and how inequities are being perpetuated by and within the institution. These key organizational self-assessment results can provide a roadmap for making equity achievable. The selected institutions should then serve as a model for all other institutions to do similar self-assessment and quality improvement work. Consultation with experts in cultural competence such as the National Center for Cultural Competence<sup>54</sup> and with local experts in graduate medical education could enrich this activity.

- C. Maximize cooperation and coordination of efforts among diverse agencies and stakeholders and the trust and teamwork needed for this to succeed: Most people interviewed for this report believe that a lack of cooperation among and between individuals, organizations, and systems is widely prevalent and interferes with efforts to reduce the black to white birth outcome inequity in Wisconsin. They report having attended dozens of meetings with noble intentions that led to deeper separation, fragmentation, and pessimism. Indeed, the ability to have meaningful and honest dialogue about the role of race in causing disparities is a skill that cries out for education and practice.

To that end, the Partnership should support an initiative to change the way that people and organizations involved in perinatal health interact with each other in meetings and other settings for dialogue. They should have an opportunity to learn about current practice for making meetings meaningful and minimizing the cynicism and frustration that people feel. Substantive social sciences research clearly identifies a set of conditions that are most likely to elicit cooperation and action for the common good. These principles have been tested throughout the world and proven to work, if applied with intention and authenticity.<sup>55 56</sup>

In particular, this recommendation could lay the foundation for developing and strengthening the partnerships between academic institutions and the communities affected by birth outcome disparities.

It will be particularly important for this effort to have the involvement of multiple stakeholders and at all levels – including families – from start to finish, that it be carried out with cultural and linguistic competence, and that accountability for change be measured and expected.

More discussion and reflection is needed to carefully consider the exact role that the UW Partnership Program can play in this endeavor, the relationship of that role to those of many others, and the best ways to develop the underlying trust, teamwork, and practical methods of collaboration that will work.

### Best and Promising Practices:

- The Interfaith Conference of Greater Milwaukee's **Institute for Racial Justice** and recently held a Common Ground Conference.<sup>57</sup>
- The **Disparities Project** of the Boston Public Health Commission – The Mayor's Task Force framed racism as a leading public health problem, and issued 12 recommendations to eliminate racial and ethnic health disparities; of the 12, eight had a healthcare focus and four had an environmental or societal focus. In October 2007, the CDC awarded the Public Health Commission a five year, \$4 million grant to implement its recommendations, matched by \$1 million in private funds raised by the Task Force.
- **Northern New Jersey Maternal/Child Health Consortium** – Established in 1992, and focused on underserved communities in Bergen, Essex, Morris and Passaic counties, the Consortium is a not for profit health planning agency that provides family planning, prenatal, postpartum, gynecological and pediatric health care services. It has been a leader in promoting cultural competency and the elimination of racial/ethnic disparities in its health and education programming.
- **Genesee County REACH 2010 Team** – A community action plan to mobilize community resources to improve healthcare services for infants and reduce racism at the individual, institutional and systems levels. Team consists of 12 community groups responsible for implementing the plan.

- D. Support and strengthen existing infrastructure: It is well established that systems change requires a basic foundation of resources and capacity in order to be effective. In the case of racial and ethnic disparities in Wisconsin, the time is ripe for supporting the building of such a foundation. The HRSA Performance Review in Milwaukee in the summer of 2006 led to the establishment of a Milwaukee Leadership Council. It is currently staffed by the Black Health Coalition. Further, the new Infant Mortality Coalitions in Racine and Beloit and the new Black Health Coalition in Kenosha, while supported in their individual identity and community-specific work, could collaborate with the Milwaukee Leadership Council. The State Division of Public Health (DPH) has developed an excellent website on birth outcome disparities in Wisconsin and has established a statewide advisory committee with sub-committees that focus on policy and funding, evidence based practices, data, and communication and outreach. The Honoring Our Children Project of the Great Lakes Inter-Tribal Council organizes an annual meeting among stakeholders involved in reducing American Indian infant mortality. Supporting such a meeting and follow-up action would fit under this recommendation.
- E. Advance research and education: There is a compelling need for translational and community based research to help in the effort to address the black to white disparity, not only in Wisconsin but also throughout the United States. There is also a strong need for education of medical and other health profession students and residents on this issue. Positive signs in Wisconsin to address these needs have emerged in the past decade at the Medical College of Wisconsin, University of Wisconsin School of Medicine and Public Health, UW-Milwaukee, and City of Milwaukee Health Department. It is a timely opportunity for the Partnership Fund to be a catalyst for such research and education. Further, it represents a chance for the University of Wisconsin to build capacity in the maternal and child health area within its School of Medicine and Public Health.



The author recognizes that these areas of focus for the UW Partnership Fund and its OAC to consider would need to be further refined to clarify the best means by which UW could contribute to a broader community effort. Consultation with other state and community partners, including families, about that desired role would be an important and essential part of the next steps.

## **IX. CONCLUSION**

This report does not presume to offer a detailed description and analysis of racial and ethnic birth outcome disparities in Wisconsin. It does represent an effort to frame the disparities, especially the black to white gap, within a context that incorporates the life course perspective and other areas of emerging research. Such a framework provides a challenge to everyone in Wisconsin who has a stake in this issue – private and public, local and state – to come together and leverage the commitment and resources to reduce birth outcome disparities and create equity for all of the state’s mothers, infants, fathers, and families. This will require the courage to explore territory that people of color are all too familiar with, but which the majority white population has too often denied or ignored – the impact of race on birth outcomes.

It’s not that we as a state and society have to solve racism, poverty, education deficits, and the issues of health care quality and accessibility as a prerequisite for eliminating racial and ethnic disparities. Harlem, indeed, is an example of an urban setting in the United States where black infant mortality declined without forever ending racial discrimination and other underlying social and economic determinants of poor health. Nevertheless, Wisconsin is challenged to collectively and explicitly recognize the intergenerational effects of racism on maternal and infant health as part of its strategy to reduce and prevent infant deaths. To the extent that the Wisconsin Partnership Program can serve as a catalyst for this and other challenges described in this paper, it will not only strengthen its responsibilities and leadership as a school of medicine and public health but also contribute to addressing a situation that requires the urgent and sustained attention of the whole state.

## **X. APPENDICES**

Attached to this report are four appendices that expand on the research, best practices and current Wisconsin efforts briefly addressed in this paper. Appendix 1 provides the name, description, and contact information for best practices. Appendix 2 frames Michael Lu’s 12-Point Plan within the context of research and best practices. Appendix 3 highlights current Wisconsin efforts to address racial and ethnic birth outcome disparities. Appendix 4 has information on academic institutions and centers that are resources. Appendix 5 summarizes research gathered from a literature review. Appendix 6 summarizes an in-process effort to document evidence-based clinical practice for quality medical care to promote equity in birth outcomes.

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## Appendix 1

### Best Practice Models for Reducing Racial/Ethnic Disparities in Birth Outcomes/ Improving Birth Outcomes 2008

Program Name	Implementer/ Contact Info	Summary
<b>ALASKA</b>		
Healthy Native Babies	Native American Management Services, funded by NICHD Contact: Marilyn Pierce-Bulger, Consultant 907-333-4242 or Debbie Golden, Alaska Division of public Health 907-334-4494 www.healthynativebabies.org	Goal is to train professionals to reduce SIDS rates among Native Americans and Alaska Natives. Program provides train the trainer model, including customized and boilerplate health promotion and media materials. Training goals are to provide updated SIDS information, networking and mutual support to local MCH leaders, to strengthen project evaluation skills and to transfer project management skills. Focus is on practical action steps, streamlining the disbursement format for ease of use and appropriate implementation of media projects. Offers a stipend designed to encourage innovation. Trainees implement local outreach projects. Evaluation is pre and post test of trainings.
Nutaqsiivik Program	Organization Contact: Tina Anliker RN, LCDR, USPHS Clinical Coordinator/Nutaqsiivik Program Home Based Services Southcentral Foundation 4160 Tudor Centre Dr. Anchorage, AK 99508 (907) 729-6188	Collaboration between the Alaska Native Medical Center, Southcentral Foundations and others. Currently managed by Southcentral Foundation, a Native health corporation. Goals are to: *promote safe home environments for all AK Native and American Indian families of childbearing age either expecting or who have an infant less than 12 months of age. *provide client-centered, risk-based interventions that would support families in efforts to move toward self reliance *increase Anchorage community partnerships and awareness of the program's goals and activities *collect data to determine the nature and extent of need among Native families in Anchorage for program planning and evaluation Women are referred pre and post-natally and all mothers, regardless of parity, of Native American or Alaska Native infants are eligible for services. The intervention features rely on regular nurse home visits (including tent, car or hotel) until infant's first birthday. Nurses follow a standardized but flexible educational program. Evaluation: Evaluation targeted 500 Alaska native infants born in Anchorage and showed reduced post neonatal infant mortality rate based on "Days between Deaths" run chart approach. Pre-program average of every 55 days to an average of 114 days between 2000 and June 1994 when clinic and home visiting services began. Lactation goals meet standards for Healthy People 2010 and mothers are 98% compliant with immunizations.

Program Name	Implementer/ Contact Info	Summary
		Ongoing process evaluation, including a flow chart approach, and reassessment of client satisfaction and needs (mental health transportation, etc.) has identified (e.g., inflexible system entry points and intake processes.) and rectified (e.g., incoming system wide referral network.). There are future plans to integrate messages from South Central Foundation*s obesity initiative as an additional intervention.
<b>CALIFORNIA</b>		
Seven Principles Project – A REACH 2010 initiative	<p>Virginia Smyley, Principal Investigator, Community Programs, San Francisco Dept of Public Health, 30 Van Ness Ave., Suite 2300 San Francisco, CA 94102 415-581-2400  <a href="mailto:Ginger.smyly@sfdph.org">Ginger.smyly@sfdph.org</a></p> <p>Website:  <a href="http://www.sevenprinciples.org/home.htm">http://www.sevenprinciples.org/home.htm</a></p>	The SevenPrinciples Project has implemented three interventions that have shown promise in reducing disparities and improving infant survival rates among African Americans in San Francisco: (1) community awareness campaigns that address the lack of knowledge among African Americans about their community's health and the disparities in infant death rates; (2) activities designed to improve community health by addressing social factors that have been linked to high infant death rates, including violence, substance abuse, crime, poor nutrition, food insecurity and lack of community unity and leadership and (3) skills training and workshops for health care providers to improve patient-provider interactions, promote mutual respect and examine the impact of race and racism on health disparities and health outcomes.
California Black Infant Health (BIH) Program	<p>California Black Infant Health Program Evaluation Report: Program Planning and Implementation 1994-1998: September 2001  <a href="http://www.mch.dhs.ca.gov">www.mch.dhs.ca.gov</a></p> <p>CA Department of Health Services</p> <p>See also:  <i>Lower Rates of Low Birthweight and Preterm Births in the CA Black Infant Health Program.</i> WO Willis, CH Eder, SP Lindsay, G Chavez and ST Shelton: Journal of the National Medical Association, Vol. 96, No. 3, 2004</p>	<p>The Black Infant Health Program (BIH) was created at the State level as a result of California Senate Bill 165 of the Budget Act of 1989 (Alquist, Chapter 93, Statutes of 1988) and funded with Title V MH block grant. (Initial appropriation was \$1.4 million; annual appropriation in 2000 was \$8 million.)</p> <p>The bill was enacted to address the high rate of infant mortality for African American families. (In 1989, the infant mortality rate for African Americans in CA was 19.2 deaths for every 1,000 live births.).</p> <p>In 1993, the state authorized an assessment of initial implementation, which resulted in the documentation of effective local practices and common features across sites in the state. Assessment concluded that a coordinated uniform approach across programs would yield maximum impact; it further supported the design, development, testing, coordination, implementation and evaluation of uniform effective practice interventions. These were defined as Prenatal Care and Outreach, Case Management, Health Behavior Modification, Social Support and Empowerment, Prevention, and the Role of Men.</p>

Program Name	Implementer/ Contact Info	Summary
		<p>In 1994, a subsequent competitive process led to contracts with five agencies for the development of effective practice model interventions in these areas that were subsequently implemented statewide.</p> <p>Evaluation concluded that “when a set of interactive interventions that operate synergistically are implemented in a coordinated manner, better birth outcomes are realized.”</p>
Black Infant Health of San Diego County	<p>Contact: (619) 266-7466 <a href="http://www.bihsandiego.org">www.bihsandiego.org</a></p>	<p>Black Infant Health (BIH) of San Diego County aims to reduce the infant mortality rate among African-American infants in the County through community leadership, innovative public health, and early consistent prenatal care. The Social Support and Empowerment intervention model is designed to link pregnant and parenting African-American women and various health, social service, religious, family and other services. The model was developed in response to the fact that lack of information alone is not the major reason for poor pregnancy outcomes. It addresses social factors and provides a framework to teach specific skills. It increases the clients’ support network and improves the African-American woman’s access into the health care system.</p>
Black Infant Health Program Of LA	<p>LA County Dept of Health Services Contact: Cynthia Harding MPH , MCAH Director Los Angeles County Department of Health Services, 600 South Commonwealth, Suite 800 Los Angeles, CA 90005 Phone: (213) 639-6400 Fax: (213) 639-1033 Website: <a href="http://www.lapublichealth.org/mch/BIH/bih.htm">www.lapublichealth.org/mch/BIH/bih.htm</a></p>	<p>This program provides services to pregnant and parenting African-American women ages 18 and older who are at high risk of negative birth outcomes. The model is based on social support empowerment model and services include health education, doctor referrals, self-esteem classes, and networking with community outreach services. Five organizations contract to implement the program county wide. Evaluation: 780 women a year receive case management services. Community Outreach Workers conduct follow-up support and interviews with women. Data are entered into State-linked database. After a formative and summative evaluation of the program, it was shown to heighten community awareness, increase self-esteem, and reduce the rate of infant mortality. LA County’s “in house” performance measures are birth weight and gestational age.</p>
Nurse Family Partnership	<p>LA County Department of Health Services, in collaboration with UCLA and CA Hospital Medical Center Contact: LA County Health Department (213) 639-6433 or (213) 639-6434 Website: <a href="http://www.lapublichealth.org/mch/nfp/nfp.htm">http://www.lapublichealth.org/mch/nfp/nfp.htm</a></p>	<p>This empirically evaluated model program was developed by Dr. David Olds in Elmira, New York over 25 years ago. The program has broad holistic objectives, which promote healthy and safe parenting and home environment. Program enrollment is open to low income, first time mothers prior to the 28th week of pregnancy. In the Building Blocks program, trained and experienced registered nurses, with strong interpersonal skills and a maternal-child health background, provide home visits. Home visits begin prior to the 28th week of pregnancy and continue for two years after the child is born. Home visitors see families at home every 1-2 weeks, based on the stage that the mother is in the program. The nurses focus simultaneously on the mother's personal health, environmental health, life</p>



Program Name	Implementer/ Contact Info	Summary
	Nurse Family Partnership National information: <a href="http://www.nursefamilypartnership.org">http://www.nursefamilypartnership.org</a>	course development, the maternal role, family and friends, and quality of care giving. This program is funded by MCH, Prop 10, and the Department of Public Social Services (DPSS). In 2006 more than 250 moms enrolled throughout LA County. Eight other California counties have Nurse Family Partnership programs. Evaluation: Fidelity to the model program is required for implementation. Outcomes repeatedly seen in trials across the U.S. include: improved prenatal health; fewer childhood injuries; fewer subsequent pregnancies; increased intervals between births; increased maternal employment; improved school readiness.
Healthy Births Learning Collaboratives Los Angeles County	Los Angeles County Department of Health Services	This is a network of providers, consumers, researchers, public health professionals, community leaders, advocates and other stakeholders whose primary aim is to improve birth outcomes in their local communities. The collaboration is guided by the principles of community-based participatory research, and the goal is to bring both MCH and non-MCH partners together regularly for networking and resource sharing.
Prenatal Care Guidance/Nurse Family Partnership Program	Los Angeles County Department of Public Health	Provides prenatal outreach and care coordination, nursing case management, social support and empowerment classes and strengthening families' services in order to reduce the infant mortality, low birth weight, and SIDS rates in the African-American community. Offers support for women up to 24 months following delivery as well as parenting support for young fathers.
Comprehensive Perinatal Services Program (CPSP), Los Angeles	<a href="http://www.lapublichealth.org/mch/cpsp/cpsp2.htm">http://www.lapublichealth.org/mch/cpsp/cpsp2.htm</a>	CPSP integrates nutrition, psychosocial, and health education assessments, interventions, and perinatal education with basic obstetrical care. Provider participation in the program requires a formal application process and certification by the State Department of Health Services. The Comprehensive Perinatal Services Program (CPSP) was implemented in 1987 as a Medi-Cal fee-for-service program for low income pregnant women. Effective July 1, 1997, with the implementation of the Two-Plan Model for Medi-Cal Managed Care in Los Angeles County, all pregnant women enrolled in Medi-Cal Managed Care must have access to comprehensive perinatal services.
<i>One Hundred Intentional Acts of Kindness toward a Pregnant Woman</i>	Healthy African American Families (HAAF) <a href="http://www.haaf2.org/">http://www.haaf2.org/</a>	A media campaign developed by Healthy African American Families and implemented in South and Central Los Angeles. Pregnant women identified actions that families, friends and strangers could take to make their pregnancies better. The list generated was printed and widely disseminated in the community through various media; currently being evaluated, a new list of acts that support postpartum women is in development.
San Mateo County Prenatal Advantage Black Infant Health	Organization Contact:: Bernistine Benton, Prenatal Advantage Black Infant Health Project	Provides prenatal outreach and care coordination, nursing case management, social support and empowerment classes and strengthening family services in order to reduce the infant mortality, low birth weight, and SIDS rates in the African-



Program Name	Implementer/ Contact Info	Summary
Program	(650) 363-7850 <a href="http://www.co.sanmateo.ca.us/smc/departments/home">http://www.co.sanmateo.ca.us/smc/departments/home</a>	American community. Offers support for women up to 24 months following delivery as well as parenting support for young fathers.
Contra Costa County	<i>Women's Health and Preconceptional Care between Pregnancies: Development of Prenatal Care Programs.</i> Milton Kotelchuck: Presentation University of Alaska, October 2006. Access at <a href="http://www.ihs.gov/medicalprograms/mch">www.ihs.gov/medicalprograms/mch</a>	
<i>Hope Street Family Center, Los Angeles</i>	For additional information: Vickie Kropenske, Director <a href="http://www.healthychild.ucla.edu/HopeStreetFamilyCenter">www.healthychild.ucla.edu/HopeStreetFamilyCenter</a>	Founded in 1992 with a research and demonstration grant from the federal Head Start Bureau, the Hope Street Family Center (HSFC) was established as a collaborative venture between the California Hospital Medical Center and CHCFC. The center employs an ecological approach to service delivery that focuses on both the child and family and social environment in which the child lives. As such, the program strives to enhance and optimize child outcomes by providing appropriate high-quality child and youth development programs and services to strengthen family stability and economic self-sufficiency. Housed on the grounds of the California Hospital Medical Center, HSFC is reminiscent of a turn-of-the-century settlement house and provides a continuum of on-site educational, medical, and developmental services that guide and support children and families from birth through adulthood. During the critical developmental period from birth to age 3, families at HSFC can utilize various early childhood services and programs such as prenatal care, health care, Early Head Start, and on-site child care. Preschool-age children are eligible to participate in HSFC's Child Development Center as well as enroll in a family literacy program with their parents.
<b>COLORADO</b>		

Program Name	Implementer/ Contact Info	Summary
Interconception Health Promotion Initiative	<b><i>The Interconception Health Promotion Initiative: A Demonstration Project to Reduce the Incidence of Repeat LBW Deliveries in an Urban Safety Net Hospital.</i></b> Lucy Loomis and Mary W. Martin: <b>Family &amp; Community Health, October 2000. Vol. 23, No. 3, pp. 1-16. Also see <i>Interconception Health Promotion Initiative Final Report.</i> Denver: Colorado Trust, 2003. Accessed at <a href="http://www.coloradotrust.org">www.coloradotrust.org</a>.</b>	A five-year demonstration program funded by the Colorado Trust Foundation, the initiative used a home-based case management approach for women with a previous poor birth outcome with the goal of improving outcomes of future pregnancies. Services were initiated at the time of delivery of a LBW infant. Enrolled women received a comprehensive evaluation and intensive, relationship-based home visitation services that focused on several life domains, such as parenting, reproductive health issues, medical issues and social relationships. The women were served for up to three years, with the intensity and frequency of contact reduced over time and as risk levels declined. The program evaluation suggests that women who participate in a comprehensive home visitation and case management program after a poor outcome birth have higher rates of compliance with post-partum care and family planning, and have longer interconception intervals and better outcomes as measured by NICU admission and cumulative low birth weight rates.
Healthy Generations: Volunteer Health Educators in the African American Community	El Paso County Department of Health and Environment Linda Archer 719-578-3103 or <a href="mailto:lindashort@epchealth.org">lindashort@epchealth.org</a>  Brenda Burnett 719-575-8514 or <a href="mailto:BrendaBurnett@epchealth.org">BrendaBurnett@epchealth.org</a>	The Healthy Generations project is a train-the-trainer model to empower African-American volunteer health educators to disseminate information related to healthy life style choices, risk factor reduction and community resources to other African American women within their social networks. Program objectives include identifying best practices for population-based health behavior education; selecting health related topics based on racial and ethnic disparities; developing a train-the-trainer curriculum, and enlisting volunteer health educators. Curriculum addressed four areas: risk factors for pregnancy complications and poor birth outcomes; healthy lifestyle choices for women; chronic disease management; and tailoring messages to fit individual personalities and delivery styles.
El Paso County Human Services	A Vision for Eliminating Poverty and Family Violence: Transforming Child Welfare and TANF in El Paso County, Colorado. Rutledge Q. Hutson: CLASP, January 2003 <a href="http://www.clasp.org">www.clasp.org</a>	The TANF and the Child Welfare agencies within the county department of human services were integrated to provide seamless, family-centered services regardless of how the families came to the Department's attention.
<b>FLORIDA</b>		
The Magnolia Project <b>Jacksonville, FL</b> (Pinellas County)	<b><i>Promising Practices in Preconception Care for Women at Risk for Poor Health and Pregnancy Outcomes.</i></b> J. Biermann, A. Dunlop, C. Brady, C. Dubin, A. Brann Jr.: <b>Maternal &amp; Child Health Journal, Vo. 10 2006.</b>	The Magnolia Project, a Healthy Start program, aims to reduce key risks in women of childbearing age, such as lack of family planning and repeat STDs, through outreach, case management, risk reduction, support, well-woman prenatal care, health education and community development activities. The model engages high risk women through an empowerment model that promotes improved wellness and health, rather than future childbearing. Intensive case

Program Name	Implementer/ Contact Info	Summary
		management is offered to a subset of women who have specific risk factors identified through FIMR, including previous fetal or infant death or delivery of a LBW infant; repeated STDs; lack of family planning; substance abuse; first pregnancy before age 15; and lack of access to health care. Intensive case management services include comprehensive assessment, collaborative development of a participant care and goal plan, ongoing monitoring and service coordination, and anticipatory guidance, health education and advocacy. It had a success rate of greater than 70 percent in resolving two priority risks: STDs and family planning, and the black to white infant mortality ratio was better for the babies born to women participating in the project as compared to national rates.
<b>GEORGIA</b>		
Interpregnancy Care (IPC) Program	<p>Grady Memorial Hospital, Atlanta, GA  <i>The Interconception Health Promotion Initiative: A Demonstration Project to Reduce the Incidence of Repeat LBW Deliveries in an Urban Safety Net Hospital.</i> Lucy Loomis and Mary W. Martin: Family &amp; Community Health, October 2000. Vol 23, No. 3, pp. 1-16.</p> <p>Also see <i>Interconception Health Promotion Initiative Final Report.</i> Denver: Colorado Trust, 2003.  Accessed at <a href="http://www.coloradotrust.org">www.coloradotrust.org</a>.</p>	<p><b>Atlanta</b><sup>1</sup> – the Interpregnancy Care (IPC) program at Grady Memorial Hospital in Atlanta provided primary health care and dental services, enhanced case management and other outreach services to African-American women who delivered a very low birth weigh infant at the hospital and who qualified for indigent or charity care. The IPC program provided 24 months of primary health care and dental services, enhanced nurse case management, and outreach in the community setting via a Resource Mother. Health care visits were offered every 1 -3 months and address 7 key areas linked to LBW delivery: (1) poorly –controlled chronic diseases; (2) short interpregnancy intervals; (3) reproductive tract infections, including bacterial vaginosis; (4) periodontal disease; (5) nutritional disorders; (6) substance abuse; and (7) psychosocial stressors, including depression and domestic violence. Group educational experiences are integrated into IPC health care visits. Home visits and telephone contact by the Resource Mother are offered twice monthly. Primary care and outreach services are delivered by a team comprised of a family physician, nurse midwife/family nurse practitioner, periodontist, nurse case manager, and Resource Mother. A preliminary evaluation of the 22 women retained in the pilot program indicated that approximately one-third of them were affected by unrecognized or poorly managed chronic health problems. All developed a reproductive plan for themselves, and none wanted to become pregnant during the next 2 years. None became pregnant in the immediate nine months following delivery of their LBW infant.</p>

<sup>1</sup> *Promising Practices in Preconception Care for Women at Risk for Poor Health and Pregnancy Outcomes.* J. Biermann, A. Dunlop, C. Brady, C. Dubin, A. Brann Jr.: Maternal & Child Health Journal, Vo. 10 2006.

Program Name	Implementer/ Contact Info	Summary
Morehouse Community Physicians' Network	<i>The Community Physicians' Network (CPN): An Academic-Community partnership to Eliminate Healthcare Disparities.</i> Elizabeth Ofili, Priscilla Igbo-Pemu, et al. <i>Ethnicity &amp; Disease</i> , Vol. 15, Autumn 2005.	The Morehouse Community Physicians' Network is a consortium of primary care and multi-specialty community-based healthcare practitioners in partnership with Morehouse School of Medicine. Its goal is to eliminate health disparities through innovate educational programs, practice-based interventions and clinical research participation, and its mission is to promote evidence-based medical care through participation in quality improvement programs and to foster the highest standards of clinical research and good clinical practice.
Project MIND	<a href="http://www.youthfutures.com/component/healthystart/maleinvolvement.asp">http://www.youthfutures.com/component/healthystart/maleinvolvement.asp</a>	In partnership with the Chatham-Savannah (GA) Youth Futures Authority (created to implement the New Futures Initiative, a five-city effort designed to reduce school dropouts and school failure, teen pregnancy, and youth unemployment), the Chatham-Savannah Healthy Start developed a male responsibility initiative called Project MIND (Males Involved in Nurturing and Development). The initiative focuses on African-American males between the ages of 10 and 29, and includes a Males Only Clinic and Male Responsibility Curriculum.
<b>ILLINOIS</b>		
Illinois Medicaid/DPH initiative	<i>Women's Health and Preconceptional Care between Pregnancies: Development of Internatal Care Programs.</i> Milton Kotelchuck: Presentation University of Alaska, October 2006. Access at <a href="http://www.ihs.gov/medicalprograms/mch">www.ihs.gov/medicalprograms/mch</a>	
Child-Parent Center (CPC) Program, Chicago	<i>Effects of a School-Based, Early Childhood Intervention on Adult Health and Well Being: A 20 Year Follow Up of Low-Income Families.</i> Reynolds, et al: Discussion Paper 102, Early Childhood Research Center, August 2006 <a href="http://www.earlychildhoodrc.org">www.earlychildhoodrc.org</a> <i>Early Childhood Programs for a New Century.</i> AJ Reynolds, MC Wang, HJ Walberg, eds. Child Welfare League of America, 2003	The Chicago Child-Parent Center (CPC) Program (n = 989 children) provides comprehensive education, family, and health services and includes half-day preschool at ages 3 to 4 years, half- or full-day kindergarten, and school-age services in linked elementary schools at ages 6 to 9 years. Findings from longitudinal studies of participants provide strong evidence that established high quality early education programs can positively influence the adult life course in several domains of functioning. Children's participation was linked to better health and well-being, higher rates of school completion, higher rates of attendance in 4 year colleges, higher likelihood of health insurance, lower rates of arrest and incarceration and lower rates of out of home placement. For parents, participation was associated with higher educational attainment, lower rates of parental disability and higher employment.
<b>MARYLAND</b>		

Program Name	Implementer/ Contact Info	Summary
Maryland Plan to Eliminate Minority Health Disparities		
<b>MASSACHUSETTS</b>		
The Disparities Project	<p>Mayor's Task Force Blueprint: A plan to eliminate racial and ethnic disparities in health</p> <p>Boston Public Health Commission, June 2005</p> <p><a href="http://www.bphc.org/disparities">www.bphc.org/disparities</a></p>	<p>In 2005, Boston's Mayor declared racial health disparities as the city's most urgent issue. Formed a Mayor's Task Force to Eliminate Racial and Ethnic Health Disparities, (an eighteen-month effort). The task force's charge was to (1) examine the full range of causes of health disparities, including such areas as racism and poverty; (2) develop recommendations for action steps to eliminate racial and ethnic health disparities; and (3) develop an immediate action plan to mobilize resources to implement the recommendations. Twelve recommendations were issued, of which eight had a health care focus and four had an environmental or societal focus. Task force raised \$1 million in private funding during its deliberations that is being used to fund the recommendations via a request for proposals.</p> <p>In October 2007, CDC awarded Boston a five-year, \$4 million grant to further implement its recommendations.</p>
Boston Internatal Care Program	<p><i>Women's Health and Preconceptional Care between Pregnancies: Development of Internatal Care Programs.</i> Milton Kotelchuck: Presentation University of Alaska, October 2006. Access at</p> <p><a href="http://www.ihs.gov/medicalprograms/mch">www.ihs.gov/medicalprograms/mch</a></p>	
Health Care for All – Transforming Health Disparities Research into Action	<p><a href="http://www.hcfa.org">www.hcfa.org</a></p> <p>(Massachusetts Medicaid program)</p>	<p>HCFA seeks to create a consumer-centered health care system that provides comprehensive, affordable, accessible, culturally competent, high quality care and consumer education for everyone, especially the most vulnerable. We work to achieve this as leaders in public policy, advocacy, education and service to consumers in Massachusetts.</p> <p><u>Core Values</u></p> <p>We bring social justice values into the health care system. Our methods and philosophy can be applied to other social inequities as well. Our social change philosophy is best expressed by our Core Values, adopted by our Board of Directors in 2007:</p> <ul style="list-style-type: none"> <li>• Collaboration and Community: We value community building and collaboration among our staff, board of directors, partners, and consumers as our source of strength and as our key to positive change.</li> </ul>

Program Name	Implementer/ Contact Info	Summary
		<ul style="list-style-type: none"> <li>• <b>Consumer Voice:</b> We supply strategies and tools to empower the consumer voice in the work of improving the health care system for everyone.</li> <li>• <b>Diversity:</b> We value acceptance of and respect for each individual and community and strive to achieve representation of the communities we serve in our staff, board and coalitions.</li> <li>• <b>Education and Awareness:</b> We value educating consumers about their rights and options in the health care system so they can access the resources they need.</li> <li>• <b>Equity:</b> We believe health care should be a basic human right for everyone.</li> <li>• <b>Inclusiveness:</b> We value participation from our directors, staff, outside partners, and communities in our work.</li> <li>• <b>Quality of Work Life:</b> We value a work environment that is enjoyable, respectful, safe, inclusive, family-friendly, work/life balanced, and supportive for all staff.</li> <li>• <b>Transparency:</b> To build trust among all stakeholders, we believe everyone should have fair and equitable access to information and processes about all aspects of the health system, including our own work.</li> </ul>
<b>MICHIGAN</b>		
Genesee County REACH 2010 Team – a REACH 2010 Initiative	Tonya Turner, REACH 2010 Coordinator., Genesee County Health Dept 630 S. Saginaw St. Flint, MI 48502-1540 Ph. 810-257-3194 <a href="http://www.gchd.us">http://www.gchd.us</a> <a href="mailto:tturner@gchd.us">tturner@gchd.us</a> See also: <i>A Partnership to Reduce African American Infant Mortality in Genesee County, Michigan</i> . R. Pestroni and M. Franks: Public Health Reports Vo. 118, July/August 2003.	A community action plan designed to mobilize community resources to improve health care services for infants and reduce racism at individual, institutional and systems levels. Team is a coalition of 12 groups responsible for implementing the plan. Activities include community dialogue sessions, workshops that address racism, a media campaign, parenting skills and educational classes for parents, cultural competency classes for health care providers, and use of maternal and infant health advocates to mentor and support women from pregnancy through their child's first birthday, including helping them to navigate the medical system.
Olds Model	State Health Dept using in 3 – 5 counties	

Program Name	Implementer/ Contact Info	Summary
<b>MINNESOTA</b>		
Save 10	Minnesota Health Department See also: <i>Community Health Worker National Workforce Study: An Annotated Bibliography</i> . Health Resources Services Administration, March 2007	Strategic approach uses a combination of a provocative social marketing campaign, a broad collaborative approach and efforts to increase the representation of minorities in the health system, including community health workers. MN has lowest statewide African American infant mortality rate (8.9 per 1000 in 2001-2003, per CDC)
<b>NEW JERSEY</b>		
Northern New Jersey Maternal / Child Health Consortium	<p>Established in 1992 with the mission to improve the physical and mental health of women and children. All obstetrical (including Ambulatory Care Facilities which provide family planning, prenatal, postpartum, gynecological and/or pediatric services) services in New Jersey are required by New Jersey Department of Health and Senior Services (NJDHSS) regulations to belong to one of the six currently licensed regional Consortia. The State requires Consortia to become legally incorporated agencies and to secure non-profit status from the Internal Revenue Service. NNJM/CHC is an independent 501 (c) (3) non-profit health planning agency to be the hub of regional obstetric and pediatric health care services for women and children in Bergen, Essex, Morris and Passaic counties.</p> <p>NNJMCHC 17 Arcadian Ave, Suite 204 Paramus, NJ 07652 Tel: 201-843-7400 Fax: 201-843-4988 <a href="http://www.maternalchildhealth.org">www.maternalchildhealth.org</a></p>	<p>Focused on the underserved communities, the Northern Consortium has been a leader in promoting cultural competency and the elimination of racial/ethnic disparities in health and education.</p> <p>Its mission is to create opportunities to improve maternal and child health. This is accomplished through the analysis of health statistics and the identification of community needs, resources, and system deficiencies. The Consortium stimulates innovative program development; facilitates public and private sector partnerships; disseminates scientifically based information; and measures health outcomes. Committed to continuous quality improvement and program evaluation, the Consortium promotes multi-faceted activities that ensure maternal and child well being in a culturally supportive / sensitive environment.</p> <p>The objective is to effect change by providing analysis of data and providing expertise to public health officials, legislators, hospital chief executive officers, community based organization directors, and managed care organization executives on maternal and child health issues.</p> <p>Programs include: Abbott Family Worker Supervision and Training Program - in conjunction with the nationally recognized Parent as Teacher (PAT) training, provides supervision to family workers serving Abbott contracted child care centers in Irvington and Passaic, New Jersey. Northern Consortium MSW's provide family workers with training, mentoring, support and feedback regarding individual cases, referrals and interventions. The MSW's ensure that PAT training for each family worker becomes a vital set of skills that can impact positively on the many challenging psychosocial and health issues facing each child and family. In turn, the family workers serve as an educational resource for the parent/caregiver/guardian to bring an awareness of the importance of early childhood development into the home.</p> <p>Black Infant Mortality Resource Center - The BIMRRC is a repository of information on Black infant mortality and racial disparities for consumers and healthcare providers across the nation.</p>



Program Name	Implementer/ Contact Info	Summary
		<p>Reduce Stress for Babies Best is a program which runs out of the BIMR Center providing stress management training to pregnant Black women to reduce the incidence of low birth weight and premature birth.</p> <p>Diabetes – “Knock out Diabetes,” a diabetes disparities program</p> <p>Early Childhood Mental Health – “Play, Grow, Heal” - trainings for Family Workers and workshops for parents to educate them to identify the behavioral and mental health needs of children. Mental Health screenings in daycare facilities and child care provider homes enable professionals to identify children and ensure their treatment.</p> <p>Other programs: Early Hearing Detection and Intervention; Fetal Infant Mortality Review; Lead Poisoning Prevention; Literacy; “Success by Six” mobile screening program (developmental, hearing, vision and dental screens for children in childcare and WIC settings); Perinatal Addiction Prevention; Post Partum Depression</p>
<b>NEW YORK</b>		
Northern Manhattan Perinatal		
Harlem Children's Zone:	Geoffrey Canada, CEO <a href="http://www.hrz.org">www.hrz.org</a>	<p>Founded in 1970, Harlem Children's Zone, Inc. is a pioneering, non-profit, community-based organization that works to enhance the quality of life for children and families in some of New York City's most devastated neighborhoods. Formerly known as Rheedlen Centers for Children and Families, HCZ Inc.'s centers serve more than 13,000 children and adults, including over 9,500 at-risk children. The emphasis of the work is not just on education, social service and recreation, but on rebuilding the very fabric of community life. The Children's Zone intentionally develops programs where other agencies are not located and poor children and families have no one, or even a place, to go for help.</p> <p>Part of NYC's Citywide Coalition to End Infant Mortality, funded at \$7.5m (state and local funds). Reduced infant mortality rates in Harlem from 28 per 1000 in 1990 to 5.1 per 1000 in 2004; combined Healthy Start, community health worker, and other components with academic and hospital/healthcare partners.</p> <p><u>2007 update:</u></p> <p>At the start of its fourth decade, the Harlem Children's Zone has become a national standard-bearer for this simple but far-reaching idea: It is difficult, often impossible, to raise healthy children in a disintegrated community. Without local institutions that draw families and young people together around common interests and activities — religious, social, and recreational organizations, effective schools, safe and well-used public spaces — even the most heroic child-rearing is likely to</p>



Program Name	Implementer/ Contact Info	Summary
		<p>fail. Conversely, by gathering and organizing members of the community around activities of common interest — particularly the healthy development of children — even the most devastating conditions can be reversed. The Harlem Children's Zone's mission is to concentrate that kind of activity on well-being of children in Central Harlem, where poverty and unemployment are many times higher than national averages, education and student achievement fall well below U.S. and New York City levels, and the rate of foster care placement is the highest in the state. Behind this mission lie two main tenets: First, children from troubled communities are far more likely to grow to healthy, satisfying adulthood (and to help build a better community) if a critical mass of the adults around them are well versed in the techniques of effective parenting, and are engaged in local educational, social, and religious activities with their children.</p> <p>Second, the earlier a child is touched by sound health care, intellectual and social stimulation, and consistent guidance from loving, attentive adults, the more likely that child will be to grow into a responsible and fulfilled member of the community. Intervention at later stages is still important - and must be adjusted as the person progresses through the various stages of youth. But later intervention is more costly and less sure of success. Families will need these later efforts to a lesser degree and in declining amounts if the earliest intervention is effective.</p> <p>These twin principles — a critical mass of engaged, effective families, and early and progressive intervention in children's development — have led the Harlem Children's Zone in recent years to concentrate more of its activities on the families in a 24-block region of Central Harlem called the Harlem Children's Zone Project. Taking this concentration of effort to its logical fulfillment - reaching a greater percentage of residents in the Zone with a wider, more effective mix of services, particularly at earlier ages - is the goal for the next phase.</p>
Community Health Worker Program	New York State Health Department See also: <i>Community Health Worker National Workforce Study: An Annotated Bibliography</i> . Health Resources Services Administration, March 2007	<p>Statewide community health worker program for targeted high risk counties in New York. Community health workers provide outreach, education, referral and follow-up, case management, assistance in navigating the health and social services system, advocacy and home visiting services to women who are at highest risk for poor birth outcomes, particularly low-birth weight and infant mortality. The CHWP is targeted to specific communities with high rates of infant mortality, out-of-wedlock births, late or no prenatal care, teen pregnancies and births, and births to low-income women. The program's focus is on getting pregnant women into early and consistent prenatal care and ensuring their families receive primary and preventive health care services.</p> <p>The Monroe Plan in Rochester NY decreased NICU admission rates with targeted, culturally competent outreach, education and family planning services for high risk teens.</p>

Program Name	Implementer/ Contact Info	Summary
Universal Prenatal/ Postpartum Care and Home Visitation: The Plan for an Ideal System in New York State, October 2007	White paper prepared by the Schuyler Center for Analysis and Advocacy for New York State	Describes a "model neutral" system of support and services that supports new families by promoting optimal health, mental health, family functioning and self-sufficiency. Includes universal contact/screening of all pregnant women and new families; assessments for parent, child and family health, mental health, developmental, social, literacy and other service needs; early intervention and referrals to an array of coordinate supports and services; and home visiting services of varying duration and intensity as needed. Reflects a pyramid-type structure wherein all pregnant women and new mothers/ families receive general services, those with identified needs receive more targeted services and those at high-risk receive very specific, intensive services. The system would utilize proven practices and, in high-risk or high-need situations, evidence-based practices.
Neighborhood Networks	<i>Community Collaboration in New York City: Charting the Course for a Neighborhood-Based Safety Net.</i> Andrew White, Nancy Rosenbaum, Sharon Lerner and Sasha Nyary: Center for New York City Affairs, Milano Graduate School of Management and Urban Policy, New School University, March 2005.	A community collaboration in New York City that provides an infrastructure for collaboration among organizations that work with children and families to integrate and coordinate services
Monroe County Child and Family Health Initiative	<i>Master Contracting with Comprehensive Service Providers: A Tool to Simplify Administration and Promote Outcome-focused, Integrated Services.</i> Susan Lepler and Kimberly Uyeda: UCLA Center for Healthier Children, Families and Communities and the Center for Governmental Research Inc, October 2006	Advances a comprehensive strategy that embraces several important policy priorities -- funding and service integration, accountability based on outcomes, greater local flexibility, and streamlined administration. The effort involves an integrated service delivery system driven by family needs rather than categorical funding requirements, where resources are aligned to achieve desired improvements in health and developmental outcomes.
<b>OHIO/KENTUCKY</b>		
Every Child Succeeds	A Healthy Families home visiting program serving first time, low income pregnant women and mothers in Southwest Ohio and Northern Kentucky  Scientific Director: Robert T. Ammerman, PhD, ABPP; Division of Behavioral Medicine and Clinical	In 1999, Cincinnati Children's Hospital Medical Center, Cincinnati Hamilton County Community Action Agency and United Way of Greater Cincinnati partnered to form Every Child Succeeds (ECS) to address the needs of at-risk, first-time mothers and their children in Southwest Ohio and Northern Kentucky. To date ECS has served more than 8,500 families with over 177,500 home visits. Based on scientific principles correlating appropriate brain stimulation during the first 3 years with the achievement of full social, mental, and physical development, ECS maximizes the development of high-risk children. The program provides intensive

Program Name	Implementer/ Contact Info	Summary
	<p>Psychology, Cincinnati Children's Hospital Medical Center 3333 Burnet Avenue, MLC 3015 Cincinnati, OH 45229 Phone: 513-636-8209 <a href="mailto:robert.ammerman@cchmc.org">robert.ammerman@cchmc.org</a></p> <p>Has published several articles about the home visiting program, focused on retention and treatment of maternal depression child abuse prevention, maternal depression, retention in prevention programs, and quality assurance approaches to prevention services</p>	<p>home visitation first-time high-risk mothers and their infants for three years. ECS strives to decrease abuse and neglect, reduce unintentional injuries, strengthen the parent-child relationship, improve utilization of diagnostic services, encourage health promotion, link families with primary care services and promote an optimal environment for learning and emotional growth.</p> <p>ECS is supported through public-private partnering. Public contributions include Medicaid as well as state and county funding. United Way of Greater Cincinnati agencies, corporate and individual sponsorships augment public funding. A comprehensive evaluation is integral to ECS. Data are systematically collected in areas such as child development, child health, maternal health, and maternal self-sufficiency. The evaluation promotes continuous quality improvement in all aspects of the program.</p> <p>Preliminary findings demonstrate that ECS has been extremely effective. Ninety-eight percent of mothers in the ECS program have a medical home. 93% of ECS infants function at developmentally normal levels. Of mothers with smoking histories, 79% quit or drastically reduce tobacco use during pregnancy. Of the 29% of mother who enter ECS with clinically significant levels of depression, half are no longer depressed after nine months in the program. Observational data suggest that the ECS injury prevention component significantly reduces hazards to the child. Over 97% of mothers state that they are satisfied with the service received. ECS prenatal referrals have increased from 40% when the program began to almost 60% at the present time. An infant mortality rate for ECS families of 2.8 per 1,000 births, less than one-third of the Hamilton County infant mortality rate.</p>
<b>PENNSYLVANIA</b>		
Philadelphia Collaborative Preterm Prevention Project		
Healthy Start of Chester County, PA – Ten Year Outcomes Report	<p>October 2007 <a href="http://www.ccmchc.org">www.ccmchc.org</a>.</p>	<p>In Chester County, Pa., the Healthy Start program of the Maternal and Child Health Consortium provides countywide prenatal and postpartum home visiting and case management to help promote safe pregnancies and deliveries for low-income women and prompt enrollment of children into pediatric care and health insurance programs. At the heart of Healthy Start are 11 Family Health Advocates, most of whom are bilingual and bicultural. Reflecting the ethnic and cultural characteristics of their communities, Advocates provide a culturally</p>

Program Name	Implementer/ Contact Info	Summary
		<p>sensitive link between expectant mothers and a complex health care and social service system. In a 10-year outcomes report, birth records from 2,435 births (1996 to 2005) to Healthy Start participants were compared with data of Chester County “non-participants” who gave birth during the same period. The participants that enrolled into Healthy Start were women at highest risk for poor health outcomes (for example, 81 percent were Latino or African American). Healthy Start participants had rates of low birth weight and preterm birth that were consistently better than national, state, and local rates. For the time period of 1996-2005, the preterm birth rate for Healthy Start participants was 7.3 percent and surpassed the Healthy People 2010 objective to reduce preterm births to 7.6 percent of all births. For the same period, 5.6 percent of Healthy Start infants were born at a low birth weight. This was just above the Healthy People 2010 national goal that low birth weight rates be reduced to 5 percent. However, the average low birth weight rate for African American Healthy Start infants was 7.8 percent, much lower than the average low birth weight for African American infants residing in the community area (12 percent) that were not enrolled. The average low birth weight rate for Latino Healthy Start infants was also significantly lower (4.5 percent than the low birth weight rate for Latino infants residing in the community area (7.9 percent). The factors contributing to success include: culturally responsive staff; strong outreach component; co-location with a network of five accessible, community based offices; a comprehensive training program for home visitors; and tangible services that women value (home visits, access to health insurance, medical interpretation services, and transportation services).</p>
UPMC for You – Medical Home Model	<p><i>Closing the Divide: How Medical Homes Promote Equity in Health Care – Results from the Commonwealth Fund 2006 Health Care Quality Survey.</i> Anne C. Beal, Michelle M. Doty, Susan E. Hernandez, Katherine K. Shea and Karen Davis: The Commonwealth Fund, 2006. <a href="http://www.cmwf.org">www.cmwf.org</a></p>	<p>Increased first trimester identification of African American pregnant women and decreased low birthweight deliveries by creating an integrated clinical team, focus groups, mobile outreach and a doula program; medical home initiatives have also been found effective in improving receipt of preventive services as well as management of chronic conditions</p>
Pittsburgh/Allegheny County (PA) Healthy Start’s Male Initiative Program (MIP)	<p><a href="http://healthystartpittsburgh.org">http://healthystartpittsburgh.org</a></p>	<p>Informs fathers and “other male support persons” about their influence on pregnancy outcomes and children’s health and well-being. Program objectives include promoting parenting skills and responsible parenting strategies, and offers information on children’s social and health outcomes in the absence of a father figure</p>
<b>SOUTH CAROLINA</b>		

Program Name	Implementer/ Contact Info	Summary
South Carolina Black Infants Better Survival (SC BIBS)	A collaborative effort of the SC Dept. of Health & Environmental Control, Division of Health Services, Bureau of Maternal and Child Health, and three Healthy Start programs <a href="http://www.scdhec.net/health/mch/scbib">http://www.scdhec.net/health/mch/scbib</a>	SC BIBS is dedicated to reducing the infant mortality rate in the state's African American community by helping parents obtain information and resources to ensure better health and well-being for their children and families. Program components focused on: mother, baby, father, health care professionals
<b>VERMONT</b>		
Improving Prenatal Care in Vermont (IPCV)		This 18-month project pilot project engages prenatal care providers (obstetricians, family medicine physicians, certified nurse midwives, nurses and office staff) to decrease the rate of premature and low birth weight babies, providing coaching on a 3-tiered approach to improving prenatal care and outcomes: timely assessment, appropriate intervention and consistent follow-up. Participating clinical and office staff are trained in quality improvement methods and specific clinical content, with practice improvements addressing the following high impact topic areas: tobacco cessation, nutrition, gestational diabetes, psychosocial/behavioral, substance abuse, domestic violence, depression, infectious diseases and genetic and preterm screening. Using the framework of the <i>Breakthrough Series Collaborative</i> method, specific and measurable changes have been implemented to achieve improvement in the delivery of quality prenatal care. A Toolkit has been developed along with a State Guide for improving office systems. The toolkit provides prenatal care providers with practical advice on how to easily implement tools, track improvements and build needed partnerships with existing community resources. The tools and resources: identify evidence based "best practice" guidelines for prenatal care in the nine high impact topic areas; recommend screening tools for integration into provider practice workflow or for use as a reference while updating current tools; and incorporate innovative approaches to implementing change in how prenatal care is delivered in the areas of assessment, intervention and follow up, with suggested methods of tracking changes to ensure they result in improvements; the tools also incorporate techniques for streamlining referral processes and making connections to community resources. The program is a partnership with the March of Dimes and the Vermont Department of Health, with funding from the March of Dimes.
<b>WASHINGTON</b>		
Washington State Department of		The Washington State Department of Health used PRAMS (Pregnancy Risk Assessment and Monitoring System) to monitor prenatal care provider

Program Name	Implementer/ Contact Info	Summary
Health		discussions with women about maternal risk behaviors. Based on this data, they developed a statewide project to improve women's preconception and prenatal health education by their health care providers.
<b>OTHER</b>		
Birthing Project/ Sister Friends	<a href="http://www.birthingprojectusa.com">www.birthingprojectusa.com</a> Kathryn Hall-Trujillo, Director The Birthing Project Center for Community Health & Well-Being 1900 T Street Sacramento, CA 95814 (505) 758-8219	<p>Birthing Project USA is the only national African American maternal and child health program in the country. It is a volunteer effort to encourage better birth outcomes by providing practical support to women during pregnancy and for one year after the birth of their children. The first Birthing Project began in Sacramento, California in 1988 as a community service project comprised of volunteers Sister friends who provided one-on-one support to pregnant teens and women to lower Infant Mortality. In June 1992, The Birthing Project was featured in Essence Magazine. The response from women all over the country to become involved in their own communities was overwhelming.</p> <p>The Birthing Project concept has grown into a nationally recognized model which has been replicated in over 70 communities in the United States, Canada and Honduras. This sisterhood of Birthing Projects is provided with technical and practical support through our national resources center and is known throughout the country as Birthing Project USA: The Underground Railroad for New Life. At any given time, there are approximately thirty Birthing Projects in action - operating from homes, churches, services groups, places of employment, clinics, health departments and hospitals - any place where a group of ten women can commit to being conductors on The Underground Railroad for 18 months.</p> <p><b>The Birthing Project USA mission</b> is to assist local communities in improving their health status by addressing the systemic causes of their lack of well-being. The systemic causes usually include, lack of education, lack of social justice and economic disparities compounded by institutional political and personal barriers. Birthing Projects actively engage community residents in</p> <ol style="list-style-type: none"> <li>1) Identifying their needs.</li> <li>2) Planning, implementing and evaluating services.</li> <li>3) Working collaboratively with other agencies, organizations and individuals.</li> </ol> <p>During the last 18 years, Birthing Project models have been developed to improve birth outcomes by intervening at critical periods in a woman's life. For example, one of the most important determinates of a baby's health at birth is the physical, education and economic health of the baby's mother when she began pregnant. Our innovative programs allow us to identify our babies before they are born, keep a watchful eye on them during their childhood, invite them to participated with their</p>

Program Name	Implementer/ Contact Info	Summary
		mothers in our risk reduction program when they are in 6th and 7th grades and participate in our Academy of Dreams during their high school years. We also provide guides and support to their fathers.
The National Friendly Access Program	<p>Lawton Chiles Center for Healthy Mothers and Babies, University of South Florida College of Public Health  <a href="http://health.usf.edu/publichealth/chilescenter/">http://health.usf.edu/publichealth/chilescenter/</a></p> <p>In addition to the Centers for Disease Control and Prevention (CDC), the following organizations were actively involved in the planning and development of various components of Friendly Access.</p> <ul style="list-style-type: none"> <li>▪ Health Resources and Services Administration (HRSA)</li> <li>▪ The National Perinatal Association (NPA)</li> <li>▪ The Indiana Perinatal Network</li> <li>▪ Health and Hospital Corporation of Indianapolis</li> <li>▪ The Disney Institute</li> </ul>	<p>In 2002, The Chiles Center, through a cooperative agreement with the Centers for Disease Control and Prevention and other collaborating partners, led an initiative to change the culture of public maternal and child health care delivery systems and communities in ways that improve consumer access, satisfaction, use and outcomes. This initiative was called the <b>National Friendly Access Program</b>. Four sites: Indianapolis, IN; Jacksonville, FL; East Tennessee; and Flint/Genesee County, MI</p> <p>Mission is to decrease disparities in the health of mothers and infants by changing the culture of health care delivery systems in ways that increase consumer access, satisfaction, utilization and outcomes.</p>
Family Planning Waivers		26 states currently have Family Planning Waivers, which allows them to expand Medicaid eligibility to women who otherwise do not qualify for Medicaid; these waivers have proven effective in reducing unintended pregnancies among participants. Provided services include coverage of family planning services and supplies, including counseling services and patient education; examination and treatment, laboratory examinations and tests, medically approved contraceptive methods and infertility services.
Preconception Health	<i>Excerpts of State Initiatives in Preconception Health: UNC Center for Maternal and Infant Health 2007.</i> Accessed at <a href="http://www.mombaby.org">www.mombaby.org</a> .	California, Colorado, Delaware, Florida, Georgia, Illinois, Maryland, Missouri, Nebraska, New York and Oklahoma all have statewide initiatives in preconception health
Toolkit for Health & Resilience in Vulnerable	See <i>A Community Resilience Approach to Reducing Ethnic and Racial Disparities in Health</i> . R. Davis, D. Cook	A community asset evaluation tool that assists communities to advance resilience factors in support of the goal of eliminating health disparities. The toolkit offers

Program Name	Implementer/ Contact Info	Summary
Environments (THRIVE)	and L. Cohen: American Journal of Public Health, Vo. 95, No. 12, 2005. And <i>Advancing a Community Resilience Approach to Improve Health Outcomes: A Community Resilience Assessment Tool box.</i> Prevention Institute, September 2004. <a href="http://www.preventioninstitute.org">www.preventioninstitute.org</a> .	community leaders an alternative and constructive way of viewing the environmental factors that influence health and well being. It has been piloted in Hidalgo County NM, Del Paso Heights, Sacramento CA and in the East Harlem, South Bronx and Central Brooklyn neighborhoods in New York City.
Geocoding Project	<i>Painting a Truer Picture of US Socioeconomic and Racial/Ethnic Health Inequalities: The Public Health Disparities Geocoding Project.</i> Nancy Krieger, Jarvis T. Chen, Pamela D. Waterman, David H. Rehkopf and SV Subramanian: American Journal of Public Health, Vol. 95, No. 2, February 2005.	Monitoring of socioeconomic health disparities provides the opportunity to benchmark and track progress – the Geocoding Project uses the census tract poverty measure with public health surveillance data to identify and monitor areas of socioeconomic inequalities in health



## **Appendix 2**

### **A 12-Point Plan to Reduce Racial and Ethnic Disparities in Birth Outcomes**

Dr. Michael Lu, in an unpublished paper entitled “Closing the Black-White gap in birth outcomes: A life-course approach”,<sup>1</sup> outlines twelve specific recommendations within four broad areas of intervention that constitute a proposed, comprehensive strategy to eliminate racial and ethnic disparities in birth outcomes. This summary of the relevant research and best practices is organized around Dr. Lu's twelve point plan. Two reference charts were also developed that reflect best practices that address these recommendations, both nationally and within the state of Wisconsin.

#### **I. Improve women's health: Foster the conditions to improve health care for African American women, and their families, over their entire life span.**

These recommendations address the needs and strengths of African American women for quality healthcare not only during pregnancy, but from preconception to interconception and across the lifespan. Healthcare can play a vital role in closing the gap, but only if it goes beyond the nine months of pregnancy and begins to address the healthcare needs of African American women before, after and in between pregnancies, and over their entire lifespan.

##### ***Recommendation 1: Provide interconception care for African American women with prior adverse birth outcomes, and their families.***

###### ***What the Research says***

The goal of interconception care is to optimize women's health prior to pregnancy.<sup>2</sup> Care is aimed at improving health, modifying risk factors and promoting subsequent healthy births, through the provision of healthcare services and psychosocial care to a woman of childbearing age from one pregnancy to the next. Socioeconomic status directly and indirectly influences three major determinants of health: health care access, environmental exposure and health behavior. Racial inequalities in access to effective treatment also influence these determinants of pregnancy outcomes for women and infants.<sup>3</sup>

While interconception care should be provided to all women, given resource limitations it should at minimum be available for women who have experienced an adverse pregnancy outcome, because they are at substantial risk (anywhere from 15% - 67% more likely) for having a poor birth outcome in subsequent pregnancies.<sup>4</sup> This increased risk is due to the fact that many bio-behavioral risk factors for preterm birth, such as smoking and susceptibility to infections, are carried from one pregnancy to the next. More specifically, interconception care should be available for African American women with prior adverse birth outcomes, particularly low-income African American women whose pregnancy-related Medicaid coverage generally terminates at sixty days postpartum.

Policies aimed at improving interconception care need to address key barriers that prevent high risk women from accessing health services, starting with the post partum visit. Barriers associated with lack of follow up include unstable housing, lack of transportation and difficulties communicating with providers.<sup>5</sup>

Demonstration projects on interconception care consistently include four key components: risk assessment, medical and psychosocial interventions, outreach and case management.<sup>6</sup> The initial risk assessment must be comprehensive, including: medical and obstetrical history, as

well as psychological, nutrition, reproductive plans, periodontal disease, and comprehensive social needs assessments. The risk assessment should be ongoing throughout the interconception period and should guide the development of an individualized care plan for health promotion and medical and psychosocial interventions.

The individualized care plan should address known bio-behavioral pathways to adverse birth outcomes and strategies to address these. Health promotion services should include information about factors that have an on impact pregnancy and parenting; information on preventive health measures; promotion of healthy behaviors; breastfeeding promotion; advice and information on family planning and pregnancy spacing; counseling about the importance of planned pregnancies; advice and information about the need for ongoing care for chronic health conditions and support for healthy parenting behaviors and practices. Medical and psychosocial interventions should include primary preventive health care and treatment for both mother and infant; nutritional screening, treatment and referral; screening, treatment and referral for mental health conditions including stress, depression and pregnancy anxiety; screening and treatment for chronic infections including genitourinary tract infections, reproductive tract infections, sexually transmitted infections and periodontal infections; and screening for intimate partner violence.<sup>7</sup>

Since 2001, interconception care has been one of the nine core components of the federal Healthy Start Program, whose goal is to reduce infant mortality in the United States through grants to sites with high IM rates. The Maternal and Child Health Bureau of the Health Resources and Services Administration (HRSA) established practice guidelines for grantees in the areas of risk assessment/ screening, health promotion and intervention strategies (specifically linkages to and provision of primary healthcare services and treatment interventions). A review of interconception care services offered by 35 Healthy Start grantees found (1) most programs focused on women who had been participants during the prenatal period, with one-third not offering interconception services to women who were not enrolled prenatally; (2) limited resources, combined with high levels of need, made it difficult for grantees to achieve program goals – a shortage of specialty service providers, such as mental health, a lack of health coverage for women and limited funding for needed case management services; (3) the service intervention was more likely to focus on infant health and development rather than women's health – in part this was due to the fact that infants were covered by health insurance whereas many of the women were not, and there were more well-defined measures for child health as opposed to women's health; (4) all programs used care coordination and case management as their primary approach to provision of interconception care – an emerging promising practice was the use of community health workers (trained paraprofessionals) and professionals (such as nurses or social workers); most programs also used a tiered approach, tailoring the intensity of the intervention to individual family needs.<sup>8</sup>

Nineteen of the 35 sites were able to track receipt of linked direct services, specifically post partum visits, family planning services and women's health services. Successful delivery of linked direct care services was attributed to linkages with primary care clinics, including community health centers/FQHCs, hospital outpatient clinics and health departments offering primary care services. While many programs screened women for adverse health conditions, inconsistent data reporting made it difficult to interpret or compare efforts. Similarly, programs developed and used risk assessment tools, staff training methods, health education curricula and home visiting protocols, but these have not been validated or standardized. The exception is the consistent use of depression screening, for which grantees are using standardized screening tools and referral processes.

Recommendations include standardizing tools developed by the agencies, and promoting the consistent use of perinatal data tools, such as the Perinatal Periods of Risk and Fetal-Infant Mortality Review, for areas with concentrations of high risk women and infants. In addition, a better alignment of and consistency in definition for performance measures was cited – for example, the measure of “ongoing primary care” is “one visit during the 12 month postpartum period” rather than “having a routine source of care identified.” Few grantees focused their interconception care efforts on community wide or system barriers, such as loss of Medicaid coverage by women 60 days post partum and lack of mental health treatment services.

### ***What are best/promising practices?***

- **Denver’s** Interconception Health Promotion Initiative<sup>9</sup> is a five-year demonstration program funded by the Colorado Trust Foundation. The program evaluation suggests that women who participate in a comprehensive home visitation and case management program after a poor outcome birth have higher rates of compliance with post-partum care and family planning, and have longer interconception intervals and better outcomes as measured by NICU admission and cumulative low birth weight rates.
- Atlanta<sup>10</sup> – the **Interpregnancy Care (IPC) program** at Grady Memorial Hospital in Atlanta provided primary health care and dental services, enhanced case management and other outreach services to African-American women who delivered a very low birth weigh infant at the hospital and who qualified for indigent or charity care. A preliminary evaluation of the 22 women retained in the pilot program indicated that approximately one-third of them were affected by unrecognized or poorly managed chronic health problems. All developed a reproductive plan for themselves, and none wanted to become pregnant during the next 2 years. None became pregnant in the immediate nine months following delivery of their LBW infant.
- Jacksonville, FL (Pinellas County) – The **Magnolia Project**, a Healthy Start program, aims to reduce key risks in women of childbearing age, such as lack of family planning and repeat STDs, through outreach, case management, risk reduction, support, well-woman prenatal care, health education and community development activities. It had a success rate of greater than 70 percent in resolving two priority risks: STDs and family planning, and the black to white infant mortality ratio was better for the babies born to women participating in the project as compared to national rates.<sup>11</sup>
- **Other**<sup>12</sup>
  - Boston Internatal Care Program (Family Wellness)
  - Philadelphia Collaborative Preterm Prevention Project (Jennifer Culhane)
  - Contra Costa County, CA
  - Illinois Medicaid/DPH initiative (universal coverage of maternal depression screening)

### ***Recommendation 2: Improve preconception care for African American women and their families.***

#### ***What the Research says***

Planning for pregnancy and being at optimal health prior to pregnancy are keys to improving a woman’s chance of having a healthy pregnancy and baby. Optimal health includes maintaining a healthy weight, managing chronic disease and being tobacco and substance-free. Many pregnancy outcomes are determined before health care providers meet with their patients for their first prenatal care visit. In many cases, critical periods of fetal development occur before a woman is aware of her pregnancy.<sup>13</sup> Preconception care is not a single visit but a continuum of care designed to meet the needs of a woman throughout the various stages of her reproductive life, with the goal of making sure that the woman is healthy as she attempts to become pregnant, and to promote her health and the health of her children throughout her reproductive lifespan. The definition of preconception care is “a set of interventions that aim to identify and modify biomedical, behavioral and social risks to a woman’s health or pregnancy outcome through prevention and management, emphasizing those factors that must be acted on before conception or early in

pregnancy to have a maximal impact.”<sup>14</sup> The purpose of preconception care is to reduce perinatal risk factors and as such must be successfully implemented before the start of pregnancy. Interventions include risk screening, health promotion and effective interventions provided in the context of routine health care.<sup>15</sup> Ideally, preconception care is tailored to meet the needs of the individual woman.

The Institute of Medicine, several national committees and a substantial number of professional organizations, including the American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG), have established guidelines and recommendations regarding the importance and content of preconception health care. Clinical practice guidelines issued by AAP and ACOG are based on evidence that attention to certain preconception risk factors for adverse pregnancy outcomes are effective in reducing the risk of a poor outcome. These risk factors include alcohol misuse, use of anti-epileptic drugs, diabetes, folic acid deficiency, hepatitis B, HIV/AIDS, hypothyroidism, maternal PKU, obesity, STDs and smoking, among others.<sup>16</sup>

In 2006, the Centers for Disease Control and Prevention (CDC) released revised preconception care guidelines, with four goals in mind: (1) improving the knowledge and attitudes and behaviors of men and women related to preconception health; (2) assuring that all women of childbearing age in the US receive preconception care services that will enable them to enter pregnancy in optimal health; (3) reducing risks indicated by a previous adverse pregnancy outcome through intervention during the interconception period; and (4) reducing the disparities in adverse pregnancy outcomes.<sup>17</sup>

Recommendations of the task force focus on changes in consumer knowledge, clinical practice, public health programs, health-care financing, and data and research activities. The ten recommendations are: (1) individual responsibility across the lifespan; (2) consumer awareness; (3) preventive visits; (4) interventions for identified risks; (5) interconception care; (6) prepregnancy checkups; (7) health insurance coverage for low-income women; (8) public health programs and strategies; (9) research; and (10) monitoring improvements.

The best evidence for the effectiveness of specific components of preconception care has been documented when the focus of delivery was on a single risk behavior and accompanying intervention, rather than delivery of multiple interventions. Specific interventions found to be effective in reducing the risk for prematurity and low birthweight include dental interventions, smoking cessation interventions (the Five As – Ask, Advise, Assess, Assist and Arrange), interventions for specific chronic conditions (such as diabetes, hypothyroidism, and epilepsy) and brief counseling interventions aimed at reducing alcohol misuse.<sup>18</sup>

Recruiting women into preconception care programs absent a specific intervenable event, such as a poor birth outcome, may prove to be difficult. There is limited evidence available to determine effective methods for preconception care delivery. One randomized clinical trial found that even when preconception risk factors were identified, women did not seek interventions.<sup>19</sup> Provider attitudes toward preconception care are also at play, as are time constraints that limit physicians' ability to deliver health promotion interventions. In response, an integrated and coordinated care approach may be called for. An evaluation of the quality of care in the National Centers of Excellence in Women's Health indicated that women served in these centers, compared with community samples, received more clinical preventive services and had higher satisfaction levels.<sup>20</sup>

Every routine visit by any woman who may at some time become pregnant should be viewed as an opportunity to provide preconception care, especially in light of the fact that approximately half of

pregnancies in the US are unintended. A prospective study of the effect of preconception health promotion on intendedness of pregnancy revealed that women at a family planning clinic who had received the intervention during routine visits were more likely to report intended pregnancies than were those patients in the same clinic who were not exposed to the intervention.<sup>21</sup>

Advancing preconception care to the same extent as prenatal care is a key strategy for reducing future low birthweight and infant mortality.<sup>22</sup> In many states, the State Maternal and Child Health program collaborates with managed care organizations, community partners and local health departments to improve women's health; they also organize consumer education campaigns that inform women about how to achieve a healthy pregnancy while also educating partners and families about how to support a woman during pregnancy. Building on these relationships is critical to advancing women's health.

Financing of preconception care, especially for low-income women at higher risk for adverse birth outcomes, requires increasing access to health care, through strategies such as family planning waivers and expanded eligibility for Medicaid or employer-based healthcare coverage.<sup>23</sup>

Quality assurance mechanisms to monitor and improve the quality of preconception care are also needed. Starting with the HEDIS (Healthcare Effectiveness Data and Information Set) Measurement System, pay for performance and other strategies could be implemented and evaluated. Because most HEDIS measures focus on process measures, CDC recommendations call for the development of new and the modification of current HEDIS measures that reflect evidence- and/or consensus-based clinical practice in preconception care. Pay for Performance (P4P) strategies are aimed at reorienting payment incentives and instilling accountability by rewarding efforts to improve quality, usually undertaken as part of a broader quality improvement effort. Both financial and nonfinancial incentives may be used, and should encourage and reinforce use of practices that efficiently promote better outcomes. However, there is limited evidence of P4P efforts having a direct impact on quality.<sup>24</sup>

The Title V information system operated by the federal Maternal and Child Health Bureau in cooperation with state MCH programs also offers an opportunity to strengthen public health surveillance and performance monitoring around preconception care.<sup>25</sup>

### ***What are best/promising practices?***

- The **Washington State** Department of Health used PRAMS (Pregnancy Risk Assessment and Monitoring System) to monitor prenatal care provider discussions with women about maternal risk behaviors. Based on this data, they developed a statewide project to improve women's preconception and prenatal health education by their health care providers.
- **Family Planning Waivers** – 26 states (including Wisconsin) currently have Family Planning Waivers, which allows them to expand Medicaid eligibility to women who otherwise do not qualify for Medicaid; these waivers have proven effective in reducing unintended pregnancies among participants. Provided services include coverage of family planning services and supplies, including counseling services and patient education; examination and treatment, laboratory examinations and tests, medically approved contraceptive methods and infertility services.
- Other – California, Colorado, Delaware, Florida, Georgia, Illinois, Maryland, Missouri, Nebraska, New York and Oklahoma all have **statewide initiatives in preconception health**.<sup>26</sup>

*Recommendation 3: Improve the quality of prenatal care for African American women.*

### ***What the Research says***

Prenatal care is a vital part of the continuum of women's healthcare for the mother, as well as the starting point for the developmental trajectory of the child. Prenatal care plays an important role in closing the racial gap not only in birth outcomes, but possibly in health and developmental outcomes over the life course. However, racial disparities in perinatal mortality persist in contemporary obstetric practice despite early access to prenatal care<sup>27</sup>. As such, improving the quality of prenatal care is necessary, but not sufficient, to close the racial gap in birth outcomes.<sup>28</sup>

Prenatal care improvements are needed in two key areas: implementation of best practice/clinical guidelines in prenatal care services delivered to African American women, and improving the availability (increasing community capacity) of related services such as mental health treatment, periodontal services, and psychosocial supports such as childbirth education and support and breastfeeding support.

*Quality improvement for prenatal care for African American women.* While the racial gap in access to prenatal care has been closing, little has been done to close the racial gap in the quality of prenatal care.<sup>29</sup>

A number of clinical standards of care have been established for prenatal care, including screening and referral for smoking, substance abuse, poor nutrition, periodontal disease, intimate partner violence and behavioral health concerns, including maternal depression.<sup>30</sup> However, these standards are not routinely implemented. One national survey found that more than one-third of US women who had a live birth reported receiving no advice on tobacco or other substance use during prenatal care. Further, it found that Black women were significantly less likely than White women to receive health behavior advice from their prenatal care providers, and women who receive insufficient health behavior advice were at higher risk of delivering a LBW infant.<sup>31</sup> Other studies have documented similar racial gaps in the quality of prenatal care.<sup>32</sup>

A healthcare quality improvement strategy that has shown success is the Breakthrough Series (BTS), which uses a collaborative learning model to promote the spread of existing knowledge to practice.<sup>33</sup> The Institute for Healthcare Improvement (IHI) developed the Breakthrough Series Collaborative Model to help health care organizations make "breakthrough" improvements in quality while reducing or maintaining costs. The theory behind the Breakthrough Series is that there is much sound science about how to improve current health care practices, but much of this science is unused in daily work. The Breakthrough Series creates a structure in which organizations can easily learn how to make improvements from each other and from recognized experts in topic areas of interest.

This approach has been successfully applied in other areas, such as well child care and child welfare. The BTS has been adapted to prenatal care service delivery initiatives in Vermont, and could be used in Wisconsin with prenatal care providers to improve the quality of prenatal care for high risk African American women. Adopting such an approach would allow local providers to quickly identify effective quality improvement strategies that could then be implemented in high risk communities.

A study of birth outcomes and receipt of perinatal services across racial/ethnic groups receiving care in community health centers found that, despite serving a higher-risk population, racial disparities in certain perinatal services – specifically receipt of prenatal and postpartum services- and birth outcomes were lower than those in populations served in other settings. While causality was not demonstrated, the lower rates of disparities may be related to CHC efforts to promote access to primary care, to remove economic barriers to care and to offer enabling

services (such as translation, transportation and child care) that are traditionally inadequately reimbursed by insurance carriers but are particularly critical for vulnerable groups.<sup>34</sup>

**Service Availability.** Quality is also dependent on service availability. Many ancillary services such as childbirth education classes, mental health or periodontal services and breastfeeding support, are often unavailable or in short supply in underserved communities where many African American women reside. Attending to the psychosocial needs of women at risk for adverse reproductive outcomes has been supported in the literature, but these programs are the first to be cut in tight fiscal times.<sup>35</sup>

### ***What are best/promising practices?***

- **Vermont** – *Improving Prenatal Care in Vermont (IPCV)*. This 18-month project pilot project engages prenatal care providers to decrease the rate of premature and low birth weight babies, using a 3-tiered approach: timely assessment, appropriate intervention and consistent follow-up. A Toolkit provides prenatal care providers with practical advice on how to easily implement tools, track improvements and build needed partnerships with existing community resources.
- **El Paso, CO** - Healthy Generations: Volunteer Health Educators in the African American Community. The Healthy Generations project is a train-the-trainer model to empower African-American volunteer health educators to disseminate information related to healthy life style choices, risk factor reduction and community resources to other African American women within their social networks.
- **CA Black Infant Health Program** – the program retained high-risk women to delivery and assisted them with the maintenance of prenatal care; participants had better outcomes than a comparison group, despite being at higher risk.
- **Black Infant Health of San Diego CA** – The Social Support and Empowerment model links pregnant and parenting African American women and various health, social service, religious, family and other services, addressing social factors that impact birth outcomes and providing a framework to teach specific skills while increasing support networks and access to health care.
- **LAMB (Los Angeles Mommy and Baby)** – provides prenatal outreach and care coordination, nursing case management, social support and empowerment classes and strengthening family services for women prenatally and up to 24 months following delivery, as well as parenting support for young fathers.
- **Friendly Access** – a program of the Rhea and Lawton Chiles Center at the University of South Florida, this program is designed to help health care delivery institutions and staff collaborate with community residents and stakeholders from the public and private sectors to improve access to and use of quality maternal and child health services in order to reduce health disparities and improve population health. It consists of a consortium of programs that use staff training to emphasize customer care that is culturally, racially and gender sensitive. [www.chilescenter.org](http://www.chilescenter.org)
- **The Genesee Project** – a collaboration between University of Michigan, public health workers, health agencies and the private sector to use cultural competency training, inclusive of the adverse effects of racism on health, to improve prenatal services. Community residents are used as advocates to respond to the array of needs of expectant mothers.<sup>36</sup>

### ***Recommendation 4: Expand health care access over the life course for African American women, and their families.***

#### ***What the Research says***

Having health insurance is associated with better health status and improved access to care. Although many factors affect health status, the lack of health insurance and other barriers to obtaining health services reduce racial and ethnic minorities' utilization of preventive services and medical treatments that could reduce their burdens of disease and contribute to improved health status.

Closing the black-white gap in birth outcomes will require closing the Black-white gap in access to quality healthcare over the life course. At the national level, approximately one in five (19%) African American children are uninsured, as are one in four (23%) non-elderly African American women; these rates are nearly twice those for non-Hispanic whites.<sup>37</sup>

Uninsured African Americans are more than three times as likely to be without a usual source of care, and more than twice as likely not to have met minimum standards for physician visits or check-ups, compared to those with private or Medicaid coverage.<sup>38</sup> The relative lack of access to healthcare, particularly preventive and primary care, among uninsured African American women and children can lead to delayed diagnosis and treatment of chronic diseases such as hypertension or diabetes, or maintenance of risk behaviors such as cigarette smoking or poor nutrition, resulting in a greater cumulative physiologic toll over the life course, and increased bio-behavior vulnerability to adverse outcomes during pregnancy.<sup>39</sup>

The primary reason for the relative lack of health insurance coverage is low family income among African Americans.<sup>40</sup> The gap in access is greatest for those families between 100% and 200% of the federal poverty level (FPL). Medicaid provides an important safety net, but it is incomplete, covering only half of African Americans in poor households (at FPL or below) and 17% of those in near-poor households (between 100% and 200% of FPL). While nearly a quarter of African American women ages 18 to 64 are poor (23%) and 45% are near-poor, only 16% receive Medicaid.

Health insurance alone is not sufficient to guarantee access to necessary services, especially in light of trends toward high-deductible health plans, reductions in benefits, and greater patient cost sharing. Even with coverage, the quality of healthcare impacts outcomes. The move to managed care in many states did not have a measurable effect on birth outcomes, despite increased access to prenatal care.<sup>41</sup>

The Institute of Medicine report, *Unequal Treatment*, confirmed that racial and ethnic disparities in healthcare are not entirely explained by differences in access, clinical appropriateness, or patient preferences. There is also increasing evidence that provider behaviors and practice patterns contribute to disparities in care.<sup>42</sup> As such, increased access needs to be paired with increased attention to healthcare quality in order to eliminate these disparities.<sup>43</sup>

### ***What are best/promising practices?***

- Expand insurance coverage - Expanding Medicaid coverage for poor and near-poor families can be an important strategy for increasing healthcare access for African American women. States now have many options to expand Title XIX Medicaid coverage for their uninsured populations. The family coverage option of section 1931 of the SSA allows states considerable flexibility in setting income eligibility for Medicaid to cover parents as well as children above the federal poverty level. Additionally, section 1115 allows states to obtain federal waivers to restructure their Medicaid programs and enable uninsured adults without children, as well as families above the current income eligibility limits, to buy into the program on a sliding scale.<sup>44</sup>
- Provide culturally and linguistically appropriate services<sup>45</sup>
  - Friendly Access Program – a national program developed at the Lawton and Rhea Childs Center for Healthy Mothers and Babies, mentioned in the previous section.
  - Save 10, a program of the Minnesota Health Department, uses a combination of a provocative social marketing campaign, a broad collaborative approach and efforts to increase the representation of minorities in the health system including community health workers.
- Systematize strategies that foster continuity of care – UPMC for You (PA) increased first trimester identification of African American pregnant women and decreased low birthweight deliveries by



creating an integrated clinical team, focus groups, mobile outreach and a doula program; medical home initiatives have also been found effective in improving receipt of preventive services as well as management of chronic conditions;<sup>46</sup> and

- Increase provider adherence to evidence-based guidelines<sup>47</sup>: The Morehouse Community Physicians' Network is a consortium of primary care and multi-specialty community-based healthcare practitioners in partnership with Morehouse School of Medicine. Its goal is to eliminate health disparities through innovative educational programs, practice-based interventions and clinical research participation, and its mission is to promote evidence-based medical care through participation in quality improvement programs and to foster the highest standards of clinical research and good clinical practice.

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## **II. Improve Family and Community Health: Foster conditions for African American women, families, and communities to strengthen themselves.**

These recommendations go beyond healthcare, addressing family and community systems that may have a broader, more lasting impact on the health of pregnant women. Families and communities can be important sources of support and resiliency – or causes of stress and vulnerability, for pregnant women and their children. Being the head of a single-parent household with little or no father involvement, dealing with fragmented systems to get unfriendly family support services, living in neighborhoods where neighbors do not know or look after one another, and living in communities with concentrated poverty, high crime rates, poor housing, no public spaces, limited transportation options and inadequate child care add to the daily wear and tear of many African American mothers.

Strategies in this section include strengthening father involvement, enhancing service coordination and system integration, creating reproductive social capital and investing in community building and urban renewal.

### ***Recommendation 5: Strengthen father and male involvement in African American families.***

#### ***What the Research says***

Studies have shown that, controlling for parental education, income and other confounding factors, children growing up in father-absent families are at greater risk for various educational or behavioral problems and poorer developmental outcomes.<sup>48</sup> Fathers contribute in distinctive ways to children's development and achievement and are a positive influence on their overall well-being. Most categorizations of father involvement identify three components of paternal involvement: engagement (direct contact and shared interactions), accessibility (presence and/or availability to a child) and responsibility (understanding and meeting children's needs, including the provision of economic resources, planning and organizing – basically the extent to which the father takes responsibility for a child's welfare and care).<sup>49</sup> Broadly speaking, strengthening father involvement reduces the psychological toll of single parenthood for the

mother and, for the child, enhances cognitive ability, educational achievement and psychological well being.

While father absence is not unique to the African American community, its toll on African American women and children is especially high: nearly half of all poor African American children live in single-mother families with little or no father involvement, and approximately one third of poor African American infants are born into single mother families with little or no father involvement.<sup>50</sup> Theories proposed to explain father absence in the African American family range from being historically rooted in the legacy of slavery, to changing cultural norms and attitudes toward sex and marriage, to economic dislocation and marginality.<sup>51</sup>

Determinants of father involvement include: socio-economic characteristics, race/ethnicity and social class, mental health, expectations about fatherhood, timing of fatherhood, relationship with child's mother, other family support and factors in family of origin, residency, socio-cultural ideologies, child characteristics and public policies.<sup>52</sup>

The research on how to strengthen father involvement in African American families supports a life-course perspective and an ecological approach. Both call for addressing barriers to involvement at the individual, interpersonal, neighborhood and community, institutional and public policy levels. The life course perspective suggests that, as with mothers, fathers have their own life history, including how involved their own fathers were in their upbringing and the extent to which they were nurtured and supported; this determines, in part, their involvement in their children's lives.<sup>53</sup>

An ecological approach addresses barriers to father involvement at multiple levels: the individual – which addresses human capital (education, employment and legal/service) needs; the interpersonal – which addresses attitudes and relationship skills (marriage counseling or skills training in communication and conflict resolution) and needs; the community level – which addresses community rates of unemployment and incarceration; and the institutional – which addresses the role of institutions such as churches, universities and media in promoting changes in cultural norms, values and expectations that support and strengthen the father-child bond.

State supported responsible fatherhood initiatives generally do not focus their efforts beyond a father's economic responsibilities, though some states focus on both economic and emotional responsibilities.<sup>54</sup>

At the public policy level, various researchers and advocates have called for reforms needed to support the ability of fragile families to stay together. These include removing disincentives for father involvement in the TANF (Temporary Assistance for Needy Families), the Earned Income Tax Credit (EITC) and child support programs.<sup>55</sup> Finally, the measurement and design work of researchers involved in examining father involvement needs to be strengthened.<sup>56</sup>

### ***What are best/promising practices?***

- Pittsburgh/Allegheny County (PA) Healthy Start's Male Initiative Program (MIP) informs fathers and "other male support persons" about their influence on pregnancy outcomes and children's health and well-being. Program objectives include promoting parenting skills and responsible parenting strategies, and offers information on children's social and health outcomes in the absence of a father figure. <http://healthystartpittsburgh.org>

- Project MIND - initiative focuses on African-American males between the ages of 10 and 29, and includes a Males Only Clinic and Male Responsibility Curriculum.  
<http://www.youthfutures.com/component/healthystart/maleinvolvement.asp>

#### Web-based Sources:

The Fatherhood Project – [www.fatherhoodproject.org](http://www.fatherhoodproject.org)  
 National Center on Fathers and Families – <http://www.ncoff.gse.upenn.edu>  
 National Practitioners Network for Fathers and Families – [www.npnff.org](http://www.npnff.org)  
 Center on Fathers, Families and Public Policy – [www.cffpp.org](http://www.cffpp.org)  
 Child Trends – [http://www.childtrends.org/r\\_fh.cfm](http://www.childtrends.org/r_fh.cfm)  
 National Fatherhood Initiative – <http://www.fatherhood.org>

### ***Recommendation 6: Enhance systems collaboration and integration for family support services.***

#### ***What the Research says***

Fragmentation in the service delivery system for family support services deters access to services and care, particularly for low-income women and their families with many other competing needs.<sup>57</sup> Women needing multiple services often have to take time off from work on different days, arrange child care, find transportation to get to their appointments at different locations, fill out duplicative paperwork, and still not get the services they need. Different programs have different requirements, which in some instances cause conflicts and may result in services being withdrawn. Providers of Internatal care need to consider how to better coordinate and integrate services in order to improve access.

Addressing the service delivery systems from the families' point of view, coordinating program requirements and service delivery, and "braiding" funds from various categorical programs are critical to assuring that women and children get the services they need in a timely and family-friendly manner. And, while this systems issue can and should be addressed from a healthcare perspective, a broader approach is needed that encompasses the universe of the services and supports that strengthen low-income families. Home visiting programs that work with families to help them access needed resources while addressing maternal and child health issues have shown promise for better child and maternal outcomes.<sup>58</sup>

Specific service delivery approaches that have shown promise are described below, and include establishing a well-developed referral network, providing care coordination/case management services (whether by a nurse or social worker) and providing services such as the two week internatal visit and the two week well baby check up at one location, with onsite WIC, health education and social services that allow for "one stop shopping."<sup>59</sup> In the child welfare and social services arenas, much analytical and theoretical work has been done on how to better coordinate federal and state policies and programs designed to assist low income individuals and families, such as the Temporary Assistance to Needy Families (TANF), the Child Care and Development Fund (CCDF) and Medicaid/SCHIP programs. While recommendations have been made for better alignment of these programs at the federal level, local innovations hold promise for more immediate benefits for families.<sup>60</sup>

Finally, efforts to use funds from different categorical programs to develop seamless service delivery are showing promise.<sup>61</sup> This approach starts with what families need, and works backwards to identify barriers to seamless service delivery and strategies to eliminate them, braiding funds as needed.

### ***What are best/promising practices?***

- Service coordination - *Neighborhood Networks* is a community collaboration in New York City that provides an infrastructure for collaboration among organizations that work with children and families to integrate and coordinate services.<sup>62</sup>
- Programs like the *Nurse Family Partnership* or the *Black Infant Health* program in California have demonstrated some success in providing service coordination for low-income pregnant and parenting women using case management and home visitation strategies.<sup>63</sup>
- *One-stop centers* – The *Hope Street Family Center* in Los Angeles offers a model that includes prenatal care, well-baby care, primary care, onsite child care, Early Head Start, child development and family literacy programs, all under one roof. Where it is not possible for services to be delivered in the same location, different providers can work to coordinate services, conduct follow up on referrals, creating a “virtual” family resource center.
- *Coordination of eligibility requirements* – some states have taken advantage of federal policy levers to simplify the application process for benefits, such as the “face-to-face” interview required for child care subsidy and Food Stamp benefits. Others have looked to extend certain healthcare benefits on a “presumptive eligibility” basis for specific populations, including infants and pregnant women.
- *Braiding or blending funds* – at the community level, the *Monroe County Child and Family Health Initiative* in Monroe County, NY offers an example of a way to decategorize and integrate the financing of children’s health services, blending funds from six categorical funding streams (and three funding sources: federal, state and local) into one contract with one set of reporting mechanisms and an outcomes focus.<sup>64</sup>

### ***Recommendation 7: Create reproductive social capital in African American families and communities.***

#### ***What the Research says***

Human capital refers to the social, emotional and educational skills and abilities of individuals. It is reflected in characteristics such as health status, social-emotional development and education/employment status. Social capital refers to the features of social organization – such as civic participation, norms of reciprocity, and trust in others – that facilitate cooperation for mutual benefit. Social capital is a set of human relationships that facilitate certain actions on the part of individuals and/or groups.<sup>65</sup> It is reflected in the existence (or non-existence) of community networks, the level of civic engagement in a community, the existence of a sense of local identity and solidarity with other community members, and in opportunities for mutual help and support. It is dependent at the individual level on a person’s social networks, and can be hindered or destroyed by social and economic forces.

Social capital is an important protective factor against the detrimental effects of stress on individual health.<sup>66</sup> Important functions of social capital include establishing the level of trust needed to facilitate productive social exchange; a means of exchanging information that facilitates action, and effective community-level norms and values. Research indicates that disinvestment in social capital, a product of income inequality and other factors, is linked to health disparities, including disparities in infant mortality.<sup>67</sup> Those with low levels of income have poorer health than those with more income; an increase in income inequality has led to an increase in health inequality.

Reproductive social capital refers to those features of social organization that facilitate coordination and cooperation to promote reproductive health within a community.<sup>68</sup> Specific initiatives aimed at increasing social support for pregnant women in their every day lives are noted below, as well as efforts to expand this approach to women after pregnancy. Importantly, the kinds of social support that pregnant women wanted are not the kinds of support typically provided through

public health case management or home visitation. What they wanted from families and friends was consistent, daily emotional and instrumental support, while what they wanted from strangers was common courtesy. These simple acts of kindness from families, friends and even strangers may help buffer against the chronic stressors that many pregnant African American women experience daily.

### ***What are best/promising practices?***

- *One Hundred Intentional Acts of Kindness toward a Pregnant Woman* – LA Best Babies Collaborative: [www.labestbabies.org](http://www.labestbabies.org), is a media campaign developed by Healthy African American Families and implemented in South and Central Los Angeles.
- *Seven Principles Project*, San Francisco CA – A promising practice with three interventions: (1) community awareness campaigns that address the lack of knowledge among African Americans about their community's health and the disparities in infant death rates; (2) activities designed to improve community health by addressing social factors linked to high infant death rates, including violence, substance abuse, crime, poor nutrition, food insecurity and lack of community unity and leadership, and (3) skills training and workshops for health care providers to improve patient-provider interactions, promote mutual respect and examine the impact of race and racism on health disparities and health outcomes.
- *The Birthing Project* – A voluntary maternal and child health program that provides practical support to women during pregnancy and for one year after the birth of their children. Begun in Sacramento CA in 1988, it was originally comprised of volunteer "Sister Friends," who provide one on one support to pregnant women. Has broadened to include a national resource center and risk reduction programs for teens and father involvement programs. Replicated in more than 70 communities nationally.

### ***Recommendation 8: Invest in building stronger and healthier communities that promote not only healthy pregnancies but also health across the life span.***

#### ***What the Research says***

A growing body of evidence suggests that neighborhood or community characteristics may be important determinants of birth outcomes.<sup>69</sup> One study comparing birth weights across neighborhoods found that established individual risk factors for low birthweight (including maternal age, education, smoking during pregnancy, and receipt of prenatal care) accounted for only 5 percent of variance in individual birth weights, while three neighborhood variables (racial/ethnic composition, economic disadvantage and neighborhood support) accounted for more than 80 percent of the variance in birth weight.<sup>70</sup> Another found that African American women who perceived their neighborhoods unfavorably in terms of key characteristics such as police protection, personal safety, municipal services, and cleanliness were at increased risk of delivering a low birthweight baby.<sup>71</sup>

More broadly, the high degree of residential segregation that exists, and has existed for decades, for most African Americans places them at higher risk for poor health outcomes overall, as segregation limits access to education and employment opportunities, which results in differences in socioeconomic status.<sup>72</sup> Daily life is more stressful in concentrated poverty neighborhoods in which, as well as higher food costs, there is more limited access to places to purchase fresh fruits and vegetables or to exercise safely, and greater exposure to air, water and other environmental pollutants.<sup>73</sup>

Black and Hispanic children face particularly severe challenges, especially compared to white and Asian children.<sup>74</sup> Not only do black and Hispanic children live in families that experience many disadvantages, but disparities among individuals and families are exacerbated by vast inequalities in neighborhood and school environments. These inequalities go beyond what can be explained by income differences, as poor black and Hispanic children tend to encounter environments considerably worse than poor white and Asian children.<sup>75</sup> Given that minority children represent the fastest growing segment of the child population and the majority of all children in many metropolitan areas, the disparities they face have

implications not just for their well being but for an entire region's well being, in terms of economic development, social mobility and inequality and race/ethnic relations. Milwaukee is tied for second among the nation's 100 largest cities for the highest black to white disparity ratio, on average, of poor children's exposure to neighborhood poverty.<sup>76</sup>

Improving access to and the quality of healthcare services will not, in and of itself, eliminate racial disparities in birth outcomes. Building stronger and healthier communities that promote healthy development is needed. This must begin with economic development, because it is difficult to build and sustain a healthy community when there are high rates of unemployment and underemployment. Community building also requires directed focus on affordable and decent housing, good schools, and safe and accessible public places. Building community networks and mobilizing civic participation are two important dimensions of social capital needed to build the political will to improve communities.

Progress requires concerted efforts and monitoring over an extended period, both because some disparities result from past patterns of segregation and inequality, and because disparities in one domain, such as education, contribute to disparities in others, such as employment and earnings. Finally, programs to enhance mobility are important, including siting of affordable housing in areas of low poverty concentration; expanding neighborhood choice in the HUD Section 8 voucher program, ongoing enforcement of fair housing laws, and school assignment plans that do not predestine a child living in a concentrated poverty neighborhood to attend a concentrated poverty school.

At the same time, resiliency approaches at the community level show promise for achieving health and safety outcomes by counteracting the negative impact of risk factors. Approaches to improving the community environment must focus on both risk and resilience. Limiting risk factors reduces threats to health and safety, but does not necessarily achieve conditions that support good health. The effects of risk and resilience or protective factors on health are interactive and cumulative.<sup>77</sup>

Resilience is defined as the ability to thrive and overcome risk factors, or more plainly the ability to spring back from and successfully adapt to adversity. An increasing body of research from the fields of psychology, psychiatry, and sociology is showing that most people—including young people—can bounce back from risks, stress, crises, and trauma and experience life success. Resilience research validates prior research and theory in human development that has clearly established the biological imperative for growth and development that exists in the human organism and that unfolds naturally in the presence of certain environmental characteristics.<sup>78</sup> In essence, individuals are born with an innate capacity for resilience, by which they are able to develop social competence, problem-solving skills, a critical consciousness, autonomy, and a sense of purpose.

Characteristics of the family, school, and community environments that may alter or even reverse expected negative outcomes and enable individuals to circumvent life stressors and manifest resilience despite risk are referred to as "protective factors." They can be grouped into three major categories: caring and supportive relationships, positive and high expectations, and opportunities for meaningful participation.

Most health promotion efforts have focused on risk reduction; where resilience approaches are advanced, they focus on individual resilience rather than the overall community environment.<sup>79</sup> To the extent that community assets are addressed, they tend to be defined as assets that build individual resiliency rather than being focused on environmental conditions within a community.<sup>80</sup>

### ***What are best/promising practices?***

- *Toolkit for Health & Resilience in Vulnerable Environments (THRIVE)* – a community asset evaluation tool that assists communities to advance resilience factors in support of the goal of eliminating health disparities. The toolkit highlights resilience factors that support health and safety outcomes in communities, offering leaders an alternative and constructive way of viewing the environmental factors that influence health and well being. It has been piloted in Hidalgo County NM,

Del Paso Heights, Sacramento CA and in the East Harlem, South Bronx and Central Brooklyn neighborhoods in New York City.<sup>81</sup>

- Economic Development – the Smart Growth and New Urbanism movements provide innovative models of urban development that could also promote population health.
- Housing choice, mobility and neighborhood improvement programs, such as the Gautreaux program in Chicago, Moving to Opportunity policy demonstrations in Baltimore, Boston, Chicago, Los Angeles and New York, and regional housing mobility programs in Baltimore, Dallas and Westchester County, NY
- Building community networks and mobilizing civic participation – Healthy Births Learning Collaboratives in Los Angeles County. This is a network of providers, consumers, researchers, public health professionals, community leaders, advocates and other stakeholders whose primary aim is to improve birth outcomes in their local communities. The collaboration is guided by the principles of community-based participatory research, and the goal is to bring both MCH and non-MCH partners together regularly for networking and resource sharing.
- Early childhood development programs such as Perry Preschool, Abecedarian, Early Head Start, Head Start, Chicago Parent Child Center
- Monitoring of socioeconomic health disparities provides the opportunity to benchmark and track progress – the Geocoding Project uses the census tract poverty measure with public health surveillance data to identify and monitor areas of socioeconomic inequalities in health.<sup>82</sup>

### **III. Reduce Allostatic Load: Foster conditions to reduce chronic stress and traumatic experiences over the life course.**

These recommendations move beyond the medical model and begin to address the social and economic inequities that are a root cause of health disparities. Poverty alone does not explain health disparities in racial and ethnic minority groups. Regardless of income, race and ethnicity are strongly correlated with health and well being in the US.

Closing the Black-White gap in birth outcomes will take more than improving healthcare access or strengthening family and community support for African American women; it will take changing social institution and public policies to reduce early life disadvantages as well as the social and economic inequities that accumulate over their life course. These approaches are outside the typical scope of the maternal and child health world, yet it is imperative that their contributing role to overall maternal and child health be acknowledged and efforts made address them. Racial disparities remain deeply entrenched and interconnected across policy domains. Efforts to narrow these disparities should address multiple domains simultaneously, acknowledge the lasting effects of residential separation and neighborhood differences, and continue over many years in order to have substantial and lasting effects.

#### ***Recommendation 9: Close the education gap.***

##### ***What the Research says***

Black-white gaps in educational achievement are persistent, and many schools remain separate and unequal.<sup>83</sup> This gap starts before children enter school, with African American children entering kindergarten with substantial deficits in reading and math skills. Some studies show the achievement gap widening as children progress in school. Children in segregated minority schools face not only the disadvantages of concentrated poverty, but the effects of other resource challenges, including high teacher turnover, less experienced and qualified teachers, larger class sizes, inadequate facilities and lower per pupil spending. They also have fewer opportunities for learning enrichment outside of school, both after school and during summer months, and are more likely to experience health problems but less likely to receive adequate health services for these problems.

Because of housing and job instabilities in the family, African American children are more than twice as likely as White children to have attended at least three different schools by third grade.<sup>84</sup> Both health problems and mobility create stress and interfere with learning. Lower educational attainment results, with African American students significantly less likely to graduate from high school and to complete college. This in turn predicts lower earnings, along with lower health insurance coverage and access to health care, fewer resources, greater job insecurity and poorer housing. Lower educational attainment is predictive of poorer reproductive health as well as poorer pregnancy outcomes.

Interventions need to start in early childhood.<sup>85</sup> The first five years of life are a critical period for child development domains: physical well being and motor development, social and emotional development, approaches to learning, language development and cognition and general knowledge. Stable relationships with parents and caring adults and safe, nurturing and stimulating environments are all fundamental to a child's healthy growth and development. The economic and social environment within which families have children and raise them, including in utero experiences related to inadequate nutrition, family violence and environmental toxins, directly affects biomedical conditions in childhood and throughout the life course.

Further, interventions need to continue through post-high school career supports, to assure that youth begin career paths that lead to economic stability.

#### ***What are best/promising practices?***

- Early childhood interventions,<sup>86</sup> such as the Child-Parent Center (CPC) Program in Chicago, IL. The program provides educational enrichment, family support services and health services in the Chicago public school system from preschool through third grade. Findings from longitudinal studies of participants provide strong evidence that established high quality early education programs can positively influence the adult life course in several domains of functioning.
- Comprehensive prenatal through early childhood interventions<sup>87</sup>
- Voluntary school integration plans (Louisville KY and Lynn MA) that take race into account when making student to school assignments and economic-based integration plans
- Lighted school house programs have shown promise for learning enrichment opportunities during out of school time.
- Harlem Children's Zone (HCZ) – Founded in 1970, HCZ efforts are focused on a 24 block region of Central Harlem and include early childhood programs, healthcare and charter schools with a focus on parent and community involvement and wraparound approaches. Using a combination of Healthy Start, community health worker and other approaches with academic and hospital/healthcare partners, it reduced infant mortality rates in the community significantly.

#### ***Other Sources:***

*Neurons to Neighborhoods: The Science of Early Childhood Development.* Philip Shonkoff & Deborah Phillips: National Academies of Science Press, 2000

#### ***Recommendation 10: Reduce poverty/economic hardship among African American families.***

##### ***What the Research says***

A disproportionate number of African Americans live below the poverty level. Nationally, one in four Black women are poor, nearly three times the rate for non-Hispanic White women. Nearly one in three (30%) African American children live in a poor household, three times that for non-Hispanic White children (10%). Poverty rate is highest among single-parent households headed by African American women; one in three (35%) such households are poor, and more than half



(58%) report an annual income of less than \$25K (Current Population Reports, Series P20-541 US Census Bureau). Poverty predicts poorer health.<sup>88</sup>

Low income African Americans continue to participate at higher rates than whites in various public assistance and subsidy programs. Despite gains in education and earnings between low-income blacks and low-income whites in the past decade, disparities persist with respect to wealth accumulation and rates of economic hardship. Many structural barriers facing low-income African Americans result in part from longstanding patterns of special segregation, exclusion and isolation. Minority neighborhoods have suffered from redlining and disinvestment, and exclusionary zoning practices by suburban communities have contributed to the concentration of poverty and distress in central cities, creating fiscal inequities and wide disparities in school quality. As jobs have become increasingly decentralized, residents of minority neighborhoods in central cities face increasing difficulties gaining access to employment opportunities. Policy changes that increase work incentives and support cannot on their own address these persistent barriers to economic advancement.

### ***What are best/promising practices?***

- Raise the minimum wage<sup>89</sup>
- Expand the Earned Income Tax Credit (EITC) –the EITC is a federal tax credit for low-income families that is refundable in cash; research indicates it is more effective in moving families over the poverty line than any other government programs. Combining the EITC with child tax credits is another innovation.<sup>90</sup>
- Investment in a social safety net of universal programs, including food stamps, Section 8 housing vouchers and Medicaid
- Living wage, fair trade, job training and retraining initiatives

### ***Recommendation 11: Support working mothers and families.***

Most African American mothers work. Better parental leave and child care policies and programs can reduce the stress levels for working mothers.

### ***What the Research says***

Two key public policy levers that can better support working mothers are parental leave and child care. Leave policies give working parents the right to take time off from work without the risk of losing their jobs. The Family and Medical Leave Act (FMLA) passed in 1993 increased maternity and paternity leave coverage, but is not universal. Part-time employees, employees in small firms, employees with short working hours or short job tenure are often not covered or eligible. As a result only 45% of parents working in the private sector have guaranteed unpaid parental leave through the FMLA. Nearly 30% of working African American parents do not have guaranteed unpaid leave. FMLA also only provides for 12 weeks of parental leave, which is unpaid. Less than 5% of parents working in the private sector have access to paid parental leave. Lack of paid leave is a barrier to women's taking leave, as many face substantial loss of income. One survey found that nearly a third of women on maternity leave returned to work in less than 6 weeks, and over 70% returned to work in less than 12 weeks.

More than half (59%) of mothers with children ages 0 to 3 were in the workforce in 2005. Child care is a critical support for working families, and regular child care arrangements are associated with greater job stability and retention for mothers. Child care costs and quality are major concerns. Too often, child care is hard to find, difficult to afford, and of questionable quality. Research shows that quality child care can have the greatest impact on low income children, but finding affordable and quality child care is one of the most critical challenges for

families in economically disadvantaged communities. At the same time, poor quality care - unstimulating, uncaring, and even unsafe - deprives children of the strong start they need.

Quality matters: long term follow up studies of low income children in high quality settings revealed lower rates of crime, welfare dependency and teen pregnancy and higher educational attainment, employment and earnings.<sup>91</sup> The Child Care and Development Block Grant provides federal resources to improve access to and quality of child care programs in states, including a subsidy program for parents, allowing them to purchase quality care. Demand exceeds supply, and the shortfall will increase, as work requirements increase under TANF with no corresponding increase in child care subsidy funding for low income families. At the same time, the supply that is available is either not affordable - on average, families with income below the federal poverty level spend 25% of their income on child care – or not of good quality.

With so many families with young children lacking access to quality child care, which science shows can significantly improve the likelihood of future success, initiatives to increase both supply and quality should be supported, particularly in low income communities where many children are at risk and where the demand for quality care is the highest.

### ***What are best/promising practices?***

- Family Leave: California provides paid leave for up to six weeks for parents with a newborn or for employees with an ill family member. Small businesses with less than 50 employees are exempted, and the program is funded entirely from employee payroll tax.
- Increase the affordability of quality child care:
  - Tiered reimbursement strategies that increase public subsidy reimbursement rates for higher quality settings in effect in several states (such as the Keystone Stars Quality Rating system in Pennsylvania)
- Strengthen the quality of available child care
  - Offer tax credits or other programs to allow child care providers to invest in equipment and materials to promote early learning
  - Offer tax credits and/or grants to assist child care providers to become licensed and accredited
  - Provide grants for community training systems to train providers in to provide age-appropriate child development services
  - Provide grants to communities to train informal care providers to promote early learning (such as the Smart Start initiative in North Carolina)

### ***Recommendation 12: Foster conditions to promote cultural and linguistic competence and to reduce racism.***

#### ***What the Research says***

Race is a social construct, and can be conceived of as occurring on three levels: internalized, personally-mediated and institutionalized.<sup>92</sup> *Internalized* racism is defined as acceptance by members of the stigmatized races of negative messages about their own abilities and intrinsic worth. *Personally-mediated* racism is defined as prejudice or discrimination, that is, differential assumptions about or actions toward others according to their race. *Institutionalized* racism is defined as differential access to the goods, services and opportunities of society by race. It can manifest as differential access to quality education, sound housing, gainful employment, appropriate medical facilities, and a clean environment. Residential segregation exemplifies institutionalized racism, as cities that are more racially segregated have greater black-white infant mortality disparities.<sup>93</sup> Disparities are rooted in early experiences, and unequal treatment over time.<sup>94</sup> Upward socioeconomic mobility has been found to contribute to improved birth outcomes among infants born to white women, but the same does not hold true for their African American counterparts.<sup>95</sup>

Racial disparities in access to and quality of health care have been documented. Key principles for implementing cultural competency include community representation and feedback at each stage of implementation, integrating cultural competency into all systems of a health care organization, and particularly in quality improvement efforts, and ongoing staff training.<sup>96, 97</sup>

### ***What are best/promising practices?***

- The **Disparities Project of the Boston Public Health Commission** – The Mayor's Task Force framed racism as a leading public health problem, and issued twelve recommendations to eliminate racial and ethnic health disparities; of the twelve, eight had a healthcare focus and four had an environmental or societal focus. In October 2007, the CDC awarded the Public Health Commission a five year, \$4 million grant to implement its recommendations, matched by \$1 million in private funds raised by the Task Force.
- **Northern New Jersey Maternal/Child Health Consortium** – Established in 1992, and focused on underserved communities in Bergen, Essex, Morris and Passaic counties, the Consortium is a not for profit health planning agency that provides family planning, prenatal, postpartum, gynecological and pediatric health care services. It has been a leader in promoting cultural competency and the elimination of racial/ethnic disparities in its health and education programming.
- **Genesee County REACH 2010 Team** – A community action plan to mobilize community resources to improve healthcare services for infants and reduce racism at the individual, institutional and systems levels. Team consists of 12 community groups responsible for implementing the plan.
- Conduct **institutional assessments** in key and high profile agencies and institutions to determine where racial discrimination is occurring and how inequities are being perpetuated by and within the institution. These key organizational self-assessment questions can open the door to making equity achievable. The selected institutions should then serve as a model for all other institutions to do similar self-assessment work.<sup>98</sup>

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<sup>1</sup> Referenced with the author's permission.

<sup>2</sup> *Recommendations to Improve Preconception Health and Health Care – United States: A Report of the CDC/TASCR Preconception Care Work Group and the Select Panel on Preconception Care.* Morbidity and Mortality Weekly Report: April 21, 2006/Vol. 55/No. RR-6.

<sup>3</sup> Ibid.

<sup>4</sup> *Closing the Black-White Gap in Birth Outcomes: A Life-Course Approach.* Michael C. Lu, Milton Kotelchuck, Vijaya Hogan, Loretta Jones, Camara Phyllis Jones, Neal Halfon. 2007: In press.

<sup>5</sup> Predictors of Compliance with The Postpartum Visit Among Women Living In Healthy Start Project Areas. Allison S. Bryant, Jennifer S. Haas, Thomas F. McElrath, Marie C. McCormick. Maternal and Child Health Journal 2006. 10(6), pp. 511-516.

<sup>6</sup> Lu and Kotelchuck, 2007.

<sup>7</sup> *Preconception Care between Pregnancies: The Content of Internatal Care.* Michael C. Lu, Milton Kotelchuck, Jennifer F. Culhane, Calvin J. Hobel, Lorraine V. Klerman and John M. Thorp, Jr. Maternal and Child Health Journal (2006) 10:S107-S122

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- <sup>16</sup> *Ibid.*
- <sup>17</sup> *Ibid.*
- <sup>18</sup> *Ibid.*
- <sup>19</sup> *Addressing Preconception Risks Identified at the Time of a Negative Pregnancy Test: A Randomized Trial*. B. Jack, L. Culpepper, J. Babcock, M. Kogan and D. Weismiller: Journal of Family Practice, 1998, Vol. 47.
- <sup>20</sup> Johnson, et al, 2006.
- <sup>21</sup> Biermann, et al, 2006
- <sup>22</sup> *Preconceptional and Prenatal Care Can Improve Birth Outcomes*. Alan Guttmacher Institute: Issues in Brief, March 1993.
- <sup>23</sup> *Preconception Health and Health Care*: Association of Maternal and Child Health Programs (AMCHP) Fact Sheet, February 2007.
- <sup>24</sup> *Preconception Health Policy and Finance*, August 2007: Presentation by Anne Rossier Markus at the 2007 CityMatCH Urban MCH Leadership Conference, Denver, Colorado. See also *Interconception Care: Presentation to the National Summit on Preconception Care*: June 21, 2005. L. Klerman, Institute for Child, Youth and Family Policy, Heller School of Social Policy and Management, Brandeis University
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**Appendix 3**  
**Wisconsin Investments in Improving Birth Outcomes: 2007**

<b>Program/ Initiative</b>	<b>Description</b>	<b>Funding</b>	<b>Contact Information</b>
<b>STATEWIDE</b>			
University of Wisconsin Department of Population Health Sciences	Focuses on the health of populations. Its mission is to create, integrate, disseminate and apply knowledge promoting the most efficient and effective possible use of resources to maintain and improve the public's health. We strive for nationally recognized research excellence in integrative biology, epidemiology, disease prevention, health policy and management.		Patrick Remington, MD, MPH <a href="http://www.pophealth.wisc.edu/">http://www.pophealth.wisc.edu/</a>
Statewide Advisory Committee on Eliminating Racial and Ethnic Disparities in Birth Outcomes	A statewide advisory committee formed in 2007 by the Department of Health and Family Services' Division of Public Health to advise on strategies to eliminate racial and ethnic disparities in birth outcomes.	None	Sheri Johnson, State Health Officer and Administrator, DHFS Division of Public Health <a href="mailto:Johnsons11@dhfs.state.wi.us">Johnsons11@dhfs.state.wi.us</a>  Patrice Onheiber, Disparities In Birth Outcomes Director <a href="mailto:onheipm@dhfs.state.wi.us">onheipm@dhfs.state.wi.us</a>



Program/ Initiative	Description	Funding	Contact Information
Infant Death Center of WI (IDCW)	A statewide program administered through Children's Hospital of Wisconsin, the IDCW provides information, counseling and support groups for children, parents, grandparents and others affected by the sudden and unexpected death of an infant up to one year of age. The IDCW strives to improve the health of infants and reduce infant deaths, working with other professionals in outreach, education and infant mortality review programs. In partnership with public health systems and national infant mortality programs, the IDCW maintains information that assists in the study and understanding of the causes of infant death; the information is used for statistical reporting. Additionally, the center aims to increase awareness of sudden infant death syndrome and to educate professionals and the general population about SIDS, the process of grieving and current research efforts.	HRSA Title V Maternal and Child Health (MCH) and Children's Hospital of Wisconsin	Anne Harvieux, Program Administrator Children's Hospital of Wisconsin (414) 266-2746 <a href="http://www.idcw.org">www.idcw.org</a>
Wisconsin Association for Perinatal Care/ Perinatal Care Foundation	Improve maternal health practices and health care services for women of reproductive age including the WI Maternal Mortality Review program and education on evidence-based health care practices that improve maternal health; promotes preconception services, and supports healthcare providers to increase risk assessment and follow-up services for women during the preconception, prenatal and inter-conceptional periods. Funding pilot initiatives in Beloit and Racine aimed	MCH Block Grant	Ann Conway, Executive Director Wisconsin Association for Perinatal Care 608-267-6060 <a href="http://www.perinatalweb.org">www.perinatalweb.org</a>

Program/ Initiative	Description	Funding	Contact Information
	at improving screening and follow-up care for perinatal risk factors. Funding a web-based IT system (see below). The Foundation, established in 1985, raises funds and awards grants to improve perinatal care throughout the state.		
PeriData.Net Platform	A comprehensive web-based system that is being developed to collect, manage, store and retain data on antepartum, intrapartum and postpartum care statewide.	WI Association of Perinatal Care, WI Partnership Fund and WI birth hospitals	Ron Cisler, Center for Urban Population Health 414-219-5100 <a href="http://www.cuph.org">www.cuph.org</a>
First Breath	Smoking cessation program for pregnant women	WI Partnership Fund and State GPR (general purpose revenue)	Wisconsin Women's Health Foundation Michael Fiore (Academic Partner)
BadgerCare Plus Pay for Performance Initiative	Incentive plan to improve healthy birth outcomes with a one-time lump sum and/or a per member per month (PMPM) bonus to managed healthcare plans that offer services related to healthy birth outcomes such as prenatal care and substance abuse treatment.	Department of Health Services, Division of Health Care Access & Accountability	Jason Helgeson, Division Administrator <a href="mailto:helgeja@dhfs.state.wi.us">helgeja@dhfs.state.wi.us</a>
Black Health Coalition of Wisconsin, Inc.	Mission is to improve the health status of African Americans and other underserved populations in the state of Wisconsin and to insure equitable and comprehensive health for all people. Conducts research and provides training, technical assistance, and advocacy services. Operates five coalitions in the City of Milwaukee: Administers several programs,	Multiple public and private sources	Dr. Patricia McManus, Executive Director <a href="mailto:pmcmanus@bhcw.org">pmcmanus@bhcw.org</a> 414-933-0064

Program/ Initiative	Description	Funding	Contact Information
	Milwaukee Healthy Beginnings Consortium, African American Mental Health Task Force, African American HIV/AIDS Task Force, Health Access Task Force, and the Milwaukee Tobacco Free Task Force.		
<b>MILWAUKEE</b>			
Medical College of Wisconsin Center for the Advancement of Underserved Children	The Center for the Advancement of Underserved Children was established by the College's Department of Pediatrics and Children's Hospital of Wisconsin to build effective partnerships with community organizations and key leaders and to collectively address the wellbeing of children.		Earnestine Willis, MD, MPH  <a href="http://www.mcw.edu/display/router.asp?docid=2322">http://www.mcw.edu/display/router.asp?docid=2322</a>
Center for Health Equity - Milwaukee	Evaluate disparities in health care access and service delivery, focused on improving the social and economic conditions contributing to health equity through education, civic capacity building and public policy.		City of Milwaukee Health Department Contact: Bevan Baker, Commissioner <a href="http://www.milwaukee.gov/health">www.milwaukee.gov/health</a>

Program/ Initiative	Description	Funding	Contact Information
Center for Urban Population Health - Milwaukee	Established in April 2001, the Center's mission is to conduct and facilitate original population health research and educational initiatives that improve the health of urban communities through collaboration with academic and community organizations. The Center will develop increased capacity for conducting population health research and education activities through programs such as seed funding for researcher development through the Center Scientist Development Program, and a tenure-track cluster faculty hire at UWM for its initiatives in interdisciplinary public health disease prevention and health promotion for urban populations.	WI Partnership Fund Medical College of Wisconsin Aurora Health Care UW-Milwaukee	Ron Cisler, Ph.D., Executive Director <a href="http://www.cuph.org">www.cuph.org</a> 414-219-5100
Infant Mortality Action Group - Milwaukee	Goal is to reduce local infant mortality rates by focusing on innovative, state of the art research and to develop more effective strategies focusing on determinants of health or health disparities." Objectives: to develop a research team that will incorporate qualitative and quantitative methodologies to address IM; to generate new knowledge, interventions and/or programming that may be specific to SE WI and/or leading edge work in the nation; to evaluate effectiveness of programs in the SE WI area, to provide a forum and infrastructure for researchers and others to work together to develop and conduct research on IM, and to	None	Ron Cisler, Ph. D. <a href="http://www.cuph.org">www.cuph.org</a> 414-219-5100

Program/ Initiative	Description	Funding	Contact Information
	provide opportunities for mentoring and research support for new investigators .		
Milwaukee Healthcare Task Force on Pre- and Inter-Conception Care	Goal is to optimize women's health and increase access to primary and preventive health services. Membership includes hospitals, healthcare systems, clinical providers, payors, state and local community agencies. Current areas of focus: safe sleep environment, common database for PNCC and partnership with EDs (Emergency Departments).	WI Partnership Fund	Claudette Hamm, Aurora Health Services ( <a href="mailto:Claudette.hamm@aurora.org">Claudette.hamm@aurora.org</a> ) 414-329-5697  Tina Mason, Academic Partner ( <a href="mailto:tina.mason@aurora.org">tina.mason@aurora.org</a> )
Fetal Infant Mortality Review	City of Milwaukee Health Department and Milwaukee Healthy Beginnings: Reviews fetal and infant deaths and makes recommendations for system, policy, and program improvements.	City Health Department (subcontract from Black Health Coalition)	Karen Michalski, Project Coordinator 414-286-5012 <a href="mailto:kmicha@milwaukee.gov">kmicha@milwaukee.gov</a>
Fetal Infant Mortality Healthcare Collaborative	Milwaukee hospital systems consortium that works to identify and respond to problems related to mothers and infants. Recent area of focus was safe sleep environments, including education on dangers of co-sleeping and secondhand smoking. As a result of the collaborative/s efforts, all hospitals providing related educational programming and have developed internal policies that address these areas. New subcommittee working with Emergency Departments to address issues related to preterm labor. Jointly staffed by Covenant Healthcare, System, Infant Death Center of WI and City of Milwaukee Health Department. All Milwaukee County hospitals participate:	None	Claudette Hamm, Aurora Health Services 414-329-5697 <a href="mailto:Claudette.hamm@aurora.org">Claudette.hamm@aurora.org</a>

Program/ Initiative	Description	Funding	Contact Information
	Aurora, Wheaton Franciscan, Froedtert, Children's Hospital of WI and Columbia/St. Mary's.		
Community Health Advocate Model Program (CHAMP)	The CHAMP program was developed to address critical health and quality-of-life concerns in public housing communities. The program provides leadership training to selected residents to strengthen the skills necessary to effect change in their community. The advocates have developed culturally appropriate programs to address the many health concerns of housing residents. Implemented in partnership between Center for Healthy Communities, SET Ministry and Milwaukee Housing Authority	US Dept of Housing and Urban Development  Medical College of Wisconsin	Marie Wolff, Principal Investigator, Center for Healthy Communities, Department of Family and Community Medicine, MCW  Syed M. Ahmed, MD, MPH, DrPH Director 414- 456-8291  <a href="mailto:chc@mcw.edu">chc@mcw.edu</a>
Milwaukee Birthing Project	The Milwaukee Chapter of the National Sister Friend program. Mission is to grow healthier babies by providing care and support to their mothers during & after pregnancy, helping them to better understand and cope with childbirth & parenthood through mentoring and peer support strategies.	WI Partnership Fund	Darlene Robinson, Director, Milwaukee Birthing Project (Founder: Kathryn Hall-Trujillo)  <a href="mailto:milwbirthing@sbcglobal.net">milwbirthing@sbcglobal.net</a> 414-475-6720  Gloria Johnson-Powell, Academic Partner Center for the Study of Cultural Diversity in HealthCare , UW School of Medicine and Public Health
Safe Mom/ Safe Baby	Services and interventions to improve health and safety outcomes for pregnant women and new mothers at risk for intimate partner violence. Center for Urban Population Health provides data management and analysis	WI Partnership Fund	Aurora Sinai Medical Center Alice Kramer, (414-219-5146) <a href="mailto:Alice_kramer@aurora.org">Alice_kramer@aurora.org</a>  Adanna Amanze (Academic partner)
Milwaukee Healthy Beginnings	A federally funded Healthy Start program. Milwaukee Healthy Beginnings Project (MBHP) promotes access to necessary	HRSA	Rachel Morgan, Program Coordinator <a href="mailto:rmorgan@bhcw.org">rmorgan@bhcw.org</a> Black Health Coalition

Program/ Initiative	Description	Funding	Contact Information
	<p>prenatal infant services to all women, their infants and families in the project area. With special emphasis on African-American and Latino women, the goal of the project is to reach women of childbearing age, pregnant women and their infants, support networks that influence these families, and health providers in and outside the project area. Goal is to give children a healthy start by helping women and their families in the following ways:</p> <p>easy access to services that are community driven; increasing early prenatal care for pregnant women; providing culturally sensitive and family centered care; promoting public awareness of infant mortality and its contributing factors; making transportation and child care services; and including the populations served in decision making processes</p>		414-933-0064
Empowering Families of Milwaukee	A comprehensive home visitation program aimed at improving birth outcomes and healthy child development for high risk, low income women in 5 targeted Milwaukee zip codes with high rates of poor birth outcomes. Incorporates best practices from the Healthy Families America and Parents as Teachers model programs. Expects to serve 700 families over 5 years.	DHFS Division of Public Health	City of Milwaukee Health Department Contact: Julie Driscoll <a href="http://www.milwaukee.gov/health">www.milwaukee.gov/health</a>
Nurse Family Partnership	An evidence-based nurse home visitation program that improves the health, well-	Columbia St. Mary's and	City of Milwaukee Health Department 414-286-6637

Program/ Initiative	Description	Funding	Contact Information
	being and self-sufficiency of low income, first time parents and their children by establishing long term relationships between public health nurses and families. Targeted to pregnant low income women who are no more than 28 weeks pregnant and who reside in zip codes 53204, 53210, 53212 or 53218	Wisconsin Partnership Program	Jill Paradowski – <a href="mailto:jparad@milwaukee.gov">jparad@milwaukee.gov</a>
Prenatal Care services -	Grants to community-based organizations providing prenatal services in support of healthy birth outcomes	United Way of Greater Milwaukee	United Way of Greater Milwaukee <a href="http://www.unitedwaymilwaukee.org">www.unitedwaymilwaukee.org</a>
Prenatal Care Coordination Medicaid benefit	A Medicaid benefit available to low income, high risk pregnant women – case management services to help them obtain needed economic, non-medical and psycho-social supports, as well as nutritional counseling and behavioral risk reduction; from prenatal through 60 days post-partum. In 2006, served 2,870 women in Milwaukee. Managed Health Services, Inc., Covenant Prenatal and Family Services, Aurora Family Services, Sixteenth St. Community Health Center, V E Carter Development Group, The Nurturing Women Center Rosalie Manor, Children’s Hospital of Milwaukee West Allis Health Department & St. Mary’s Hospital	State Medicaid Program	Milwaukee Health Department <a href="http://www.milwaukee.gov/health">www.milwaukee.gov/health</a>



Program/ Initiative	Description	Funding	Contact Information
Child Care Coordination Medicaid benefit	A Medicaid benefit available to low income, high risk women with infants 6 months through 7 years of age – case management services to help them gain access to and coordinate a full array of services, including necessary medical, social, educational, vocational, and other services. Service providers include: Compassionate Mothers, Inc., Aurora Family Service, V E Carter Development Group, Managed Health Services, Inc., Rosalie Manor, The Parenting Network & Aurora Sinai Medical Center	State Medicaid Program	Milwaukee Health Department <a href="http://www.milwaukee.gov/health">www.milwaukee.gov/health</a>
Teen Pregnancy Prevention One Milwaukee	Call to Action report: If Truth Be Told: Teen Pregnancy, Public Health and the Cycle of Poverty – offers recommendations for action; Advisory Committee formed to implement via One Milwaukee – includes awareness campaign and youth development activities.	Milwaukee Health Department and United Way of Greater Milwaukee	City of Milwaukee Health Department <a href="http://www.onemilwaukee.org">www.onemilwaukee.org</a>  Nicole Angresano, United Way of Greater Milwaukee <a href="http://www.unitedwaymilwaukee.org">www.unitedwaymilwaukee.org</a>
<i>Plain Talk</i> initiative	A teen pregnancy prevention program developed by the Anne E. Casey Foundation that targets a specific neighborhood and trains parents and other adults to become more effective sex educators.	Greater Milwaukee Foundation Annie E. Casey Foundation	City of Milwaukee Health Department <a href="http://www.onemilwaukee.org">www.onemilwaukee.org</a>
Schools for Pregnant and Parenting students - Milwaukee	For pregnant and parenting middle-school and high-school students within the MPS system. Capacity to serve 160 students. A comprehensive program includes both education and supportive services components. Students have access to social workers, school psychologist and	Milwaukee Public Schools (MPS)	Kathleen Murphy, Health Services Coordinator, MPS 414-475-8766 <a href="mailto:murphyk@milwaukee.k12.wi.us">murphyk@milwaukee.k12.wi.us</a>

Program/ Initiative	Description	Funding	Contact Information
	community services as needed. All students are required to complete prenatal and parenting courses. In addition, standard courses are offered in English, social studies, math, science, business, physical education and fine arts.		
MCH Services	Pregnancy and STD prevention, screening and referral services; healthy eating, physical activity and peer education; and individualized case management for MPS adolescents. Also provide perinatal care coordination to high risk women to prevent poor birth outcomes.	Maternal and Child Health (MCH) Block Grant	City of Milwaukee Health Department <a href="http://www.onemilwaukee.org">www.onemilwaukee.org</a>
Health Center Clusters - Milwaukee	FQHC centers delivering primary care services to uninsured and under-insured	HRSA Not specific to birth outcomes	Westside Healthcare Association Sixteenth St. Community Health Center Milwaukee Health Services, Inc.
Model for Intimate Partner Violence	To improve women's health in Wisconsin by strengthening primary and secondary prevention of intimate partner violence. Partners include All Saints Healthcare, Sojourner Truth House, and the Women's Center	MCW	Bruce Ambuel, MCW Dept. of Family & Community Medicine
Riverwest Health Initiative	To transform health improvement efforts through the Community Health Improvement Process for residents of the 53212 zip code.	MCW	Jim Sanders (AP) - COA Youth and Family Centers
Milwaukee CARES	To improve health status of residents by providing access to medical, hospital and medication via a voluntary network	MCW	Theodore MacKinney (AP) - City of Milwaukee Health Dept., Milwaukee Co. General Assistance Program, Medical County Medical Society, 20 others
<b>RACINE</b>			

Program/ Initiative	Description	Funding	Contact Information
FIMR of Racine	Working with CUPH to develop a formal FIMR process to explore prenatal, intrapartal and neonatal factors that may contribute to the high fetal and infant mortality rate in the city of Racine. Part of Racine Infant Mortality Coalition.	CUPH Scientist Development Program	Dr. Teresa Johnson, UW-M
Racine Infant Mortality Coalition	Planning efforts began in August 2006. Chaired by a community volunteer, Betty Stinson. In the process of hiring a Healthy Birth Coordinator and developing a home visiting/PNCC initiative	State GPR – specific item in 2007-09	Thelma Jones, City of Racine Health Dept. <a href="mailto:Thelma.jones@cityofracine.org">Thelma.jones@cityofracine.org</a>
<b>BELOIT</b>			
Beloit Infant Death Center/ Beloit African American Infant Mortality Coalition	Provides coalition-building activities to support the implementation of strategies by the Healthy Babies in Wisconsin initiative and the Milwaukee Infant Mortality Health Care Action Team; educational strategies to improve infant health and reduce disparities; supports community health initiatives in Beloit and Racine; provides bereavement support services for families or other individuals who have been affected by sudden or unexpected infant death; planning implementation of a mentoring program for pregnant women and a Cribs for Kids program. Site of WAPC pilot initiative to improve screening for and follow up care needed to address perinatal risk factors.	Rock County Health Department (MCH funds)	Rock County Health Department
<b>DANE COUNTY</b>			
Early Childhood Initiative –	Comprehensive home visiting and integrated services one-stop shop program that focuses on 2 high risk	State GPR and Partnership Funds	Ron Chance, Program Director <a href="mailto:chance@co.dane.wisconsin.gov">chance@co.dane.wisconsin.gov</a> 608-242-6325

<b>Program/ Initiative</b>	<b>Description</b>	<b>Funding</b>	<b>Contact Information</b>
Dane County	neighborhoods in Dane County. Services are provided by a multi- disciplinary team and focused on physical health and nutrition, safety and well-being, maternal mental health especially depression, parent-child attachment, and economic stability.	County Human Services and Public Health funds	
<b>KENOSHA</b>			
Black Health Coalition	Has recently formed a Black Health Coalition		Gwen Perry-Brye 262 605 6764

## Appendix 4

### Academic Resources for Birth Outcome Disparities

Effort	Contact	Description
Racial & Ethnic Disparities: Schools of Public Health Respond as Engaged Institutions	<p>W. K. Kellogg Foundation Seminar Series, February 2005: <a href="http://www.wkkf.org">www.wkkf.org</a> and <a href="http://depts.washington.edu/ccph/engaged-inst.html">http://depts.washington.edu/ccph/engaged-inst.html</a></p> <p>“Engaged institutions invest in lasting relationships with communities. These relationships influence, shape and promote the success of both the institution and the community.”</p>	<p>Kellogg funded 12 public health schools or graduate programs of public health to use the “engaged institutions” approach to address the problem of R &amp; E Disparities.</p> <p>The twelve schools or programs of public health include: U of Arizona, U of Arkansas, San Jose State, U of South Florida, U of Hawaii, Morgan State U, UNC, Oregon Consortium, USC, and Virginia Commonwealth.</p> <p>Racial and ethnic health disparities persist even when socio-economic status and insurance coverage are taken into account, due to a complex combination of factors. Eliminating these disparities will require collaborative solutions that bring communities and institutions together as partners and build upon the assets, strengths, and capacities of each. Schools and graduate programs of public health - with their roles in educating public health professionals, conducting public health research and applying knowledge to solve public health problems - have a unique and important role to play.</p>
NIH Roadmap Disparities Center: Interdisciplinary Center for Birth Outcome Disparities at U of Michigan	<p>Lise Anderson, MPH Project Coordinator NIH Roadmap Disparities Center University of Michigan Department of Obstetrics and Gynecology PO Box 531 Domino's Farms 24 Frank Lloyd Wright Dr. Ann Arbor, MI 48106 Phone: (734) 930-5610 Fax: (734) 930-5609 <a href="http://www.med.umich.edu/roadmap/">www.med.umich.edu/roadmap/</a></p>	<p>The current three-year planning grant, "Health Disparities: Leaders, Providers, and Patients" (<a href="#">NIH Grant No: 1P20RR020682-01</a>), funded in Fall 2004, has three overarching goals: 1) to develop an optimal interdisciplinary research infrastructure; 2) to develop testable hypotheses for new and more effective approaches to augmented prenatal care; and 3) to provide an effective mechanism for communicating research-based information to policy leaders, providers, and women.</p>

## National Efforts

Effort	Contact	Description
<p>NIH Strategic Research Plan and Budget to Reduce and Ultimately Eliminate Health Disparities - Fiscal Years 2002 — 2006</p>	<p>National Center on Minority Health and Health Disparities (NCMHD) – Established in 2000; \$150 million allocated by Congress – Minority Health and Health Disparities Research and Education Act of 2000, Public Law 106-525</p> <p>(See review in Research chart)</p>	<p>The mission of the National Center on Minority Health and Health Disparities (NCMHD) is to promote minority health and to lead, coordinate, support, and assess the NIH effort to reduce and ultimately eliminate health disparities. In this effort NCMHD will conduct and support basic, clinical, social, and behavioral research, promote research infrastructure and training, foster emerging programs, disseminate information, and reach out to minority and other health disparity communities.</p> <p>In addition to awarding grants and contracts independently, the Center continues the legacy of the former NIH Office of Research on Minority Health in partnering with the NIH Institutes and Centers to support programs of health disparities research with a focus on basic and clinical research, training, and the dissemination of health information. In particular, the NCMHD will serve as the focal point for coordinating and focusing the minority health disparities research and other health disparities research programs at the NIH into a national health research agenda. The specific goals and purposes of the Center include the following:</p> <ul style="list-style-type: none"> <li>*To assist in the development of an integrated national health research agenda, across disciplines, that reflects the current and emerging health needs of racial and ethnic minorities and other health disparity groups.</li> <li>*To promote and facilitate the creation of a robust minority health research environment with sustained funding for a wide breadth of studies—basic, clinical, and population research; studies on the influences of health processes; and research on the societal, cultural, and environmental dimensions of health—all aimed at identifying potential risk factors for disparate health outcomes.</li> <li>*To promote, assist, and support research capacity building activities in the minority and medically underserved communities, focusing on research infrastructure development, faculty career development, and increasing the number of underrepresented minority students and students from health disparity groups with an interest in careers in biomedical and bio-behavioral research.</li> </ul>

Effort	Contact	Description
Building State Partnerships to Improve Birth Outcomes	Association of Maternal and Child Health Programs (AMCHP) Perinatal Disparities Action Learning Lab Report, January 2005	In 2004, AMCHP planned and convened a two-part Action Learning Lab (ALL) to help state MCH professionals and their local partners increase their knowledge of perinatal disparities and their contributing factors and to assist them in creating and implementing year-long action plans for reducing these gaps in their states and territories. The project was initiated in response to research linking the higher rates of poor birth outcomes among black American women to social and environmental factors such as chronic stress and racial discrimination. This report provides a brief overview of the ALL participants' planning process, essential elements of their collaborative activities, preliminary outcomes and lessons learned. Not a comprehensive or best practice guide.
Statewide Health Disparities Committees Executive Summary and Recommendations (December 2005) and Best Practices in Capacity Building and Disease Management and Prevention to Address Minority Health Disparities (September 2007):	Office of Minority Health & Health Disparities, MD Dept of Health & Mental Hygiene, September 2007 <a href="http://www.mdhealthdisparities.org">www.mdhealthdisparities.org</a>  Chart book of Disparities Data in development.	The Office of Minority Health & Health Disparities was created in 2004 by legislative action and charged with developing a state plan to systematically address minority health disparities within the state. Four statewide committees were created to develop recommendations for inclusion in the plan: quality health services, health professional education, identifying funding strategies, and measuring health disparities.  Concluded that "any effort to eliminate health disparities must be multifaceted and focus on complete and accurate measurement of disparities, the development of a diverse healthcare workforce, and increased access to care. Additionally, sufficient resources are necessary to insure that effective programs and initiatives can be eliminated."  Best practices in Capacity Building: North Carolina's State Health Department's Call to Action; Healthy Indiana – Minority Health Plan; Washington - The Healthiest State in the Nation; Closing the Gap - Reducing Disparities in Florida; State Policy Agenda to Eliminate Disparities – Commonwealth Fund; and National Network of State Offices of Minority Health.
Racial and Ethnic Approaches to Community Health (REACH)	US Department of Health & Human Services, Centers for Disease Control and Prevention <a href="http://www.cdc.gov/reach">www.cdc.gov/reach</a>  Initiated in 1999, REACH is a community-	Of the forty community programs funded by REACH, two focused on Infant Mortality: the Seven Principles project of the San Francisco Dept of Health, and the Genesee County (Flint, MI) Health Dept. Both are profiled here.

Effort	Contact	Description
	<p>based public health program funded by CDC to eliminate racial and ethnic health disparities. The fundamental objective of REACH was to address the Healthy People 2010 goal of eliminating health disparities. Forty communities were funded to close the health disparity. Communities focused on reducing disparities in the following six health priority areas: breast and cervical cancer screening and management, cardiovascular disease, diabetes mellitus, immunizations, HIV/AIDS, and <u>infant mortality</u>. In late 2005, CDC developed REACH Across the US (REACH US), whose goal is to share effective dissemination strategies, lessons learned and best practices,</p>	<p>The REACH US initiative is initially focused on promising interventions in the areas of breast and cervical cancer prevention, cardiovascular health, and diabetes.</p>



## Media

National Newspaper Coverage of Minority Health Disparities	Anouk Amzel and Chandak Ghosh: Journal of the National Medical Association, Vol. 99, No. 10, October 2007, pp. 1120-1125	Article assesses American newspaper coverage of racial and ethnic minority disparities. Concludes that despite the release of major organization reports and the publication of many studies confirming the prevalence of disparities, few newspaper articles have been published explaining these to the public. Because of the general public's low rate of health literacy, the health world should collaborate with the media to present a consistent, simple message concerning gaps in care experienced by all racial/ethnic minority groups. In a time of consumer-directed healthcare, if Americans understand that disparities exist, they may galvanize to advocate for disparity elimination and quality improvement.
Culturally competent care	Newsday.com Sept. 30 2007 Newsday.com/news/local/wire/newyork/ny-bc-ny—cultural-care0930sep30,0,1340857.story <b>Also see</b> <a href="http://orthoinfo.org/diversity">http://orthoinfo.org/diversity</a>	Article "States consider educating doctors on culturally specific care." Cultural sensitivity is gaining greater attention in efforts to improve health care by improving communication. Bills that would require cultural competence training for medical licensing or renewal have stalled in NY, but passed in NJ, CA and NM, while Illinois has pending legislation.
PBS documentary - <i>Unnatural Causes</i>	<a href="http://www.unnaturalcauses.org">www.unnaturalcauses.org</a>	<i>Unnatural Causes</i> sounds the alarm about America's glaring socio-economic and racial inequities in health - and searches for root causes. The four-hour series (for PBS broadcast and DVD release) sifts through the evidence to discover there is more to our health than bad habits, health care, or unlucky genes. The social conditions in which we are born, live and work affect our health and longevity.  Conceived as part of an ambitious public education campaign conducted in partnership with leading public health, policy, and community-based organizations, <i>Unnatural Causes</i> will help foster a new and hopeful approach to the public's health. As Harvard epidemiologist David Williams points out, investing in our schools, improving housing, integrating neighborhoods, better jobs and wages, and giving people more control over their work are as much health strategies as are smoking, diet and exercise.  The centerpiece of the series is an hour-long opening episode that sets up the overarching themes of the series: health and longevity are correlated with socioeconomic status, people of color face an additional burden and solutions lie not in more pills or better genes, but in better social policies. The main hour is supported by

		<p>six additional half-hour stories set in different racial and ethnic communities. Each deepens our understanding of the root causes of disease, illuminates pathways by which social conditions affect physiology, and brings viewers face to face with innovative initiatives for health equity.</p> <p>The programs will be packaged as a series for the PBS broadcast, and available as separate modules on video and DVD.</p>
Milwaukee Journal Sentinel	Three part series December 4 – 6, 2004 by John Schmid	<p>Why do African-Americans tend to fare worse here than just about anyplace else on the statistical indicators of well-being: rates of unemployment, poverty, out-of-wedlock births, imprisonment, business formation, etc? Is Milwaukee more racist than elsewhere or are generous welfare benefits to blame?</p> <p>This series looks at a third, more credible explanation: worldwide shifts led to the collapse of the economic floor underneath Milwaukee's black community in the 1980s, and more so than elsewhere. That calamity snuffed out the unparalleled beacon of hope Milwaukee once was to African-Americans and stirred up a witch's brew of ills like nowhere else. Solving a big chunk of the mystery of how we got here from the prosperous 1960s should help in extricating ourselves. We must rebuild an economic floor underneath the black community. These stories are part of the Journal Sentinel's yearlong "Still Separate and Unequal" series, which looks at the state of the black movement for equality 50 years after the Brown vs. Board of Ed ruling. Fifty years later, Milwaukee's inner city remains in the throes of a two decade long depression. Sociologist William Julius Wilson has pioneered the theory that economic forces – rather than racism or welfare – explain the present plight of black America. You can't escape race altogether as an explanation in Milwaukee. But the metro area must act to put jobs in the inner city and not out of pity but for the sake of its own survival. As Harvard University economist Michael E. Porter puts it "I can tell you quite categorically: Unless Milwaukee is able to create a vital inner-city economy it will not have a vital regional economy."</p>

## Appendix 5

### Research on Racial/Ethnic Disparities in Birth Outcomes

Title	Author/Publication	Abstract
<b>RESEARCH</b>		
<p>Infant Mortality in the Global Village: Inequality Matters</p>	<p>Ronald David: Joint Center for Political and Economic Studies, Health Policy Institute, Washington, DC, 2007.  <a href="http://www.jointcenter.org">www.jointcenter.org</a></p>	<p>Argues that improved pregnancy outcomes are tied to economic prosperity and meaningful civic participation for all women and for African American women in particular. Looks at causes and effects of infant mortality within global context, and assesses how social inequalities are related to population health. "Income inequality is a manifestation of structural violence to the extent that it is not inevitable, but the adverse consequence of deliberate public and economic policy choices." Demands a social justice response: promote civic discourse &amp; critical reflection on alternative political economies; promulgate enforceable legislation for equal employment &amp; pay for women, including a taxation &amp; benefits structure that treats reproduction as an economic activity; protect labor collective bargaining &amp; support initiatives to increase minimum wage; engage women as active participants in decisions about their health &amp; well-being; change policy measures of development from the Gross Domestic Product to the Human Development Index; adopt policy on employment.</p>
<p>Race, Stress &amp; Social Support: Addressing the Crisis in Black Infant Mortality</p>	<p>Fleda Mask Jackson: Joint Center for Political and Economic Studies, Health Policy Institute, Washington, DC, 2007.  <a href="http://www.jointcenter.org">www.jointcenter.org</a></p>	<p>Examines the impact of stress and stress mediators on pregnancy outcomes for African American women. The report also examines social support and other relational experiences and makes recommendations for related changes in public policy and maternal and child health practices. "Efforts to improve birth outcomes must confront the structural issues surrounding employment, housing, education, and safety, as these are paramount concerns embedded in the racial and gendered realities of African American women's lives. But equally important as systemic and structural changes are support and promotion of relational responses to the particular stressors of pregnancy that are present before conception and continue after birth and throughout the lifespan." Research Recommendations:</p> <ol style="list-style-type: none"> <li>1. Expand current research focus on reproductive disparities to include preconceptional and interconceptual experiences that affect birth outcomes;</li> <li>2. Align research methodologies to the realities of the lives of AA women in ways that maximize data gathering to inform culturally sensitive and sustainable interventions;</li> <li>3. Examine the assets within AA communities that account for positive birth outcomes in spite of adverse environmental conditions;</li> <li>4. Document and evaluate existing medical services that include psychosocial care.</li> </ol>

Title	Author/Publication	Abstract
		<p>5. Examine the existing interactions among key institutions within AA communities (i.e., churches, civic organizations, schools and health care agencies) to explore potential avenues of collaboration for addressing psychosocial risk for poor pregnancy outcomes.</p> <p>Advance lifespan research that connects childbearing experiences with the development of psychosocial risk for chronic diseases.</p> <p>Policy Recommendations:</p> <ol style="list-style-type: none"> <li>1. Provide support to create comprehensive prenatal care that addresses the psychosocial needs as well as the medical concerns of expectant mothers across socioeconomic categories;</li> <li>2. Provide funding for comprehensive culturally sensitive, race- and gender-specific research and interventions that are community-based and include a focus on expectant fathers.</li> <li>3. Provide support to empower community-based initiatives and existing programs designed to monitor and support positive pregnancy outcomes.</li> <li>4. Examine the conditions that have produced the rise in infant deaths and address these conditions as a civil rights issue.</li> </ol>
Sudden Infant Death Syndrome and parental smoking	Peter Fleming and Peter S. Blair: Early Human Development, Vol. 83, No. 11, pp. 721-725, November 2007	<p>Analyzed evidence of 21 international studies on smoking and cot death. Prenatal exposure to tobacco smoke is a major risk factor associated with SIDS and the risk has increased despite continued advice against this practice. Evidence from the UK suggests the prevalence of maternal smoking during pregnancy has risen among SIDS mothers while the rate among expectant mothers in the general population has fallen. Additional risk associated with increasing the number of smokers in the household or the daily hours an infant is subjected to a smoke-filled environment. Exposure may lead to a complex range of effects on normal physiological and anatomical development in fetal and postnatal life that places infants at greatly increased risk of SIDS.</p>
Biological and Social Determinants of Perinatal Health Disparities: A Life-Course Perspective	Michael C. Lu: The Illinois Maternal and Infant Mortality Summit, October 24, 2007	<p>Presentation on the life course perspective: two components: early programming and cumulative pathways. Vulnerability to preterm delivery may be traced to not only exposure to stress &amp; infection during pregnancy, but to the host's response to stress and infection, patterned over the life course. Introduces 12 point plan to close the black-white gap in birth outcomes.</p> <p>Early programming model posits that experiences early in life influence health and function for life (Barker hypothesis – showed links between LBW and coronary heart disease, hypertension and diabetes later in life); epigenetics and the role of mothers' stress in producing infants with hyper-reactivity to stress; infections/inflammation (a leading cause of preterm delivery) also linked to susceptibility of infant in later life to inflammatory diseases; prenatal factors linked to childhood obesity, such as maternal diabetes, smoking and poor nutrition.</p> <p>Cumulative pathways model – effect of exposure to chronic and repeated stress.</p>

Title	Author/Publication	Abstract
		Of the 12 points, four move beyond the current focus on prenatal care and begin to address the healthcare needs of Black women before and between pregnancies and across their life course. The next four points move beyond the current focus on individual risk behaviors and begin to address family and community systems. The last four points move beyond current focus on the biomedical model and begin to address the social and economic inequities that are the root cause of much of our health disparities.
Poverty and Health Disparities: More Than Just a Difference	A. M. Villarruel Western Journal of Nursing Research, October 1, 2007; 29(6).	Volume 29 No. 6, October 2007 is a special themed issue of this journal on health disparities. Editorial notes that poverty alone does not explain health disparities in racial and ethnic minority groups. Regardless of income, race and ethnicity are strongly correlated with health and well being in the US.
Racial and Ethnic Disparities in Access to and Quality of Health Care	Joes. J. Escarce: Research Synthesis Report No. 12, September 2007. The Synthesis Project: Robert Wood Johnson Foundation <a href="http://www.policysynthesis.org">www.policysynthesis.org</a>	This policy brief examines the prevalence and causes of racial and ethnic disparities in health care access and quality. Notes that disparities are pervasive but not universal, and that while insurance coverage, income and other factors contribute to some health disparities, racial and ethnic gaps in access and quality remain after accounting for these factors. <u>Policy implications:</u> evidence points to the following strategies to reduce disparities: (a) expand insurance coverage; (b) provide culturally and linguistically appropriate services; (c) systematize strategies that foster continuity of care; and (d) increase provider adherence to evidence-based guidelines.
Implicit Bias Among Physicians and its Prediction of Thrombolysis Decisions for Black and White Patients	Alexander R. Green, Dana R. Carney, Daniel J. Pallin, Long H. Ngo, Kristal L. Raymond, Lisa I. Lezzoin and Mahzarin R. Banaji: Journal of General Internal Medicine, Vol. 22, No. 9, Sept. 2007	This study represents the first evidence of unconscious (implicit) race bias among physicians, its dissociation from conscious (explicit) bias, and its predictive validity. Results suggest that physicians' unconscious biases may contribute to racial/ethnic disparities in use of medical procedures such as thrombolysis for myocardial infarction.
A Science-Based Framework. for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior and Health for Vulnerable Children	National Forum on Early Childhood Program Evaluation and the National Scientific Council on the Developing Child, August 2007 <a href="http://www.developingchild.harvard.edu">www.developingchild.harvard.edu</a>	Based on a rigorous peer-review process, provides a concise overview of the scientific principles of early childhood and early brain development, along with an inventory of specific effectiveness factors associated with a variety of programs that enhance outcomes for vulnerable children.  Because brain architecture is shaped by both genetics and early experience, policies that support the ability of parents and providers of early care and education to interact positively with children in stable and stimulating environments help create a sturdy foundation for effective learning, socially adaptive behavior, and lifelong physical and mental health. Four decades of program evaluation research provide a wealth of knowledge about both successful and ineffective interventions, and illustrate that even the best programs can be improved by the continuous

Title	Author/Publication	Abstract
		development and evaluation of new strategies, particularly for the most vulnerable target groups. The report also concludes that ensuring positive experiences for children in the earliest years is likely to produce better outcomes than providing remediation programs at a later age. A review of cost-benefit studies documents strong return on investment from high-quality programs for vulnerable children beginning as early as prenatally and as late as age 4.
Preventive Care: A National Profile on Use, Disparities and Health Benefits	National Commission on Prevention Priorities: Partnership for Prevention, August 2007 <a href="http://www.prevent.org">www.prevent.org</a>	Low utilization rates for cost-effective preventive services reflect the emphasis of the health care system on providing acute care. Of the 12 preventive services examined, 7 are being used by half or fewer of the people who should be using them. Racial and ethnic minority populations are getting even less preventive care than the general population. Expanding the delivery of proven preventive services would save lives and lead to more effective use of resources.
Disparities in Infant Mortality: What's Genetics Got to Do with it?	Richard Davis and James Collins: Maternal and Infant Health in Diverse Settings. July 2007, Vol. 97, No. 7, 1191-1197	Overall patterns of racial disparities in mortality and secular changes in rates of prematurity as well as birth weight patterns in infants of African immigrant populations contradict the genetic theory of race and point toward social mechanisms. Authors postulate that a causal link to class disparities in health exists.
The Contribution of Preterm Birth to the Black-White Infant Mortality Gap, 1990 and 2000	Ashley H. Schempff, Amy M. Branum, Susan L. Lukeacs, and Kenneth C. Shoendorf: American Journal of Public Health, Vol. 97, No. 7, July 2007; pp. 1255 – 1260	Examined whether and how the contribution of preterm birth to the black-white disparity in infant mortality may have changed between 1990 and 2000. Previous analyses of 1983, 1988 and 1991 infant mortality data suggest that almost two-thirds of the racial disparity in infant mortality can be attributed to preterm birth, using very low birthweight as a proxy. Over past decade, racial disparity in preterm birth has declined because of an increase in the preterm birth rate among white infants and a decrease in the preterm birth rate among black infants. However infant mortality rate ratio has remained unchanged. Found that the narrowing racial disparity in the preterm birth rate was counterbalanced by greater mortality reductions in white than in black preterm infants. Extremely preterm birth (<28 weeks) was four times higher in black infants and accounted for more than half of the infant mortality gap. Concluded that substantial reductions in the black-white infant mortality gap will require improved prevention of extremely preterm birth among black infants.
Reducing Disparities Beginning in Early Childhood	Kay Johnson and Suzanne Theberge: Project Thrive: National Center for Children in Poverty, July 2007 <a href="http://www.nccp.org">www.nccp.org</a>	Review of research shows that many disparities in health and well-being are rooted in early childhood. These disparities reflect gaps in access to services, unequal treatment, adverse congenital health conditions, and exposures in the early years linked to elevated community and family risks. Poverty brings risks for children of all races; however, racial/ethnic status is an independent risk factor. Young children are more likely than older children to live in families without economic security. Of the 10.2 million U.S. children ages birth through 5 years, 42 percent lived in low-

Title	Author/Publication	Abstract
		<p>income families (with income below the federal poverty level-FPL) and 20 percent lived in poor families (income below 100 percent of FPL) in 2005. Minority young children also are overrepresented among the 2.2 million U.S. children ages birth through 5 who live in extremely poor families (income below 50 percent of FPL). The younger the child, the more harmful poverty is to developmental outcomes.</p> <p>Concludes that addressing disparate risks and conditions in early childhood health, care and education is an important way to reduce disparities affecting low-income and minority adults, lower poverty rates and improve overall health and education indicators. Recommends that state Early Childhood Comprehensive Systems have strong potential to advance strategies for reducing disparities in early childhood and to have an impact across the life span; offers specific strategies for doing so, including education and awareness, use of data, and inclusion of early childhood systems in efforts to eliminate disparities.</p>
Perinatal Periods of Risk in Wisconsin: 2002-2004	Matthew J. Landis, UW Population Health Fellow; Bureau of Health Information and Policy, DHFS, June 2007	<p>Used Perinatal Periods of Risk (PPOR) model to measure infant deaths. This model differs from the infant mortality rate because it includes selected infant and fetal deaths and, based on weight and age at death, calculates a fetal-infant mortality rate. Combining these parameters allows for the linkage of deaths to four primary prevention areas of maternal health: prematurity, maternal care, newborn care and infant health. Found total fetal-infant mortality rate for the WI reference population to be 4.7 deaths per 1000 births. Compared to the WI reference population, total excess fetal-infant mortality rate is 12.9 in the African American populations, approximately six times that for the white population and four times that for the Hispanic/Latino population. Among African Americans, the highest rate of excess deaths can be attributed to maternal health/prematurity, suggesting primary prevention activities such as pre- and inter-conception health, access to high quality perinatal care and promoting healthy behaviors would have the greatest impact in reducing disparities. The second highest factor was infant health, where the prevention approaches include promoting safe sleep, breastfeeding and injury prevention. Within the City of Milwaukee, African Americans represent the only measurable racial/ethnic sub-population, and the PPOR model results are similar to the statewide results.</p> <p>Concludes that PPOR model is an approach that can identify promising interventions based on where excess risk is most apparent, providing a means for determining how best to direct limited resources.</p>
Disparities in Health Care are Driven by Where Minority Patients Seek Care	Romana Hasnain-Wynia, PhD; David W. Baker, MD, MPH; David Nerenz, PhD; Joe Feinglass, PhD; Anne C. Beal, MD, MPH; Mary Beth Landrum, PhD; Raj Behal, MD, MPH; Joel S. Weissman, PhD - Archives of	<p>Disparities in clinical process of care measures are largely the result of differences in where minority and non-minority patients seek care. However, disparities in services requiring counseling exist within hospitals after controlling for site of care. Policies to reduce disparities should consider the underlying reasons for these disparities.</p>

Title	Author/Publication	Abstract
	Internal Medicine (June 25, 2007): 2007; 167:1233-1239	
Disparities in Neighborhood Poverty of Poor Black and White Children	Diversity Data Brief, Issue 1: May 2007 <a href="http://diversitydata.sph.harvard.edu">http://diversitydata.sph.harvard.edu</a>	<p>Differences in poverty between black and white children are large. Centuries of racial discrimination, often institutionalized in governmental policy, have left a legacy of segregation that isolates poor black children in concentrated poverty neighborhoods, to a much greater degree than that experienced by poor white children.</p> <p>“The very best metro area for poor black children was worse than a quarter of all metro areas for poor white children in terms of neighborhood poverty rate.”</p> <p>Milwaukee is tied for second highest disparity ratio in average poor child’s exposure to neighborhood poverty (3.2 black to white disparity ratio, tied with Newark NJ, Bergen-Passaic, NJ and Richmond, VA; Chicago has highest disparity ratio, 4.0)</p> <p>In many metro areas, even affluent black households are more likely to live in low-income neighborhoods than are low-income whites. Home sales and rental audit tests continue to document discrimination in housing markets between blacks and whites, even when black testers have better financial profiles than whites.</p> <p>Concentrated efforts to improve the neighborhoods of poor black children, including construction of affordable, well-designed housing, improved public safety, recreational space, availability of healthy food and accessibility to high quality primary and preventive health care are vital but are only part of the solution.</p> <p>Programs to enhance mobility are also important, including: situating affordable housing in areas of low poverty concentration; expanding neighborhood choice in the HUD Section 8 voucher program; ongoing enforcement of fair housing laws; and school assignment plans that do not predestine a child living in a concentrated poverty neighborhood to attend a concentrated poverty school.</p>
Race, Race-Based Discrimination, and Health Outcomes Among African Americans	Vickie M. Mays, Susan D. Cochran, and Namdi W. Barnes: Annual Review of Psychology, Vol. 58: 201-225 (January 2007)	Authors review emerging work that locates the cause of race-based health disparities in the external effects of the contextual social space on the internal world of brain functioning and physiologic response. These approaches reflect the growing interdisciplinary nature of psychology in general, and the field of race relations in particular.
Self-reported Racial Discrimination and Substance Use in the Coronary Artery Risk Development in Adults Study	Luisa N. Borrell, David R. Jacobs, Jr, David R. Williams, Mark J. Pletcher, Thomas K. Houston and Catarina I. Kiefe: American Journal of Epidemiology 2007 166(9):1068-1079	The authors investigated whether substance use and self-reported racial discrimination were associated in the Coronary Artery Risk Development in Young Adults (CARDIA) Study. Smoking status, alcohol consumption, and lifetime use of marijuana, amphetamines, and opiates were ascertained in 2000–2001, 15 years after baseline (1985–1986). Most of the 1,507 African Americans reported having experienced racial discrimination, 79.5% at year 7 and 74.6% at year 15, compared with 29.7% and 23.7% among the 1,813 Whites.



Title	Author/Publication	Abstract
		<p>Compared with African Americans experiencing no discrimination, African Americans reporting any discrimination had more education and income, while the opposite was true for Whites (all <math>p &lt; 0.001</math>). African Americans experiencing racial discrimination in at least three of seven domains in both years had 1.87 (95% confidence interval (CI): 1.18, 2.96) and 2.12 (95% CI: 1.42, 3.17) higher odds of reporting current tobacco use and having any alcohol in the past year than did their counterparts experiencing no discrimination. With control for income and education, African Americans reporting discrimination in three or more domains in both years had 3.31 (95% CI: 1.90, 5.74) higher odds of using marijuana 100 or more times in their lifetime, relative to African Americans reporting no discrimination. These associations were similarly positive in Whites but not significant. Substance use may be an unhealthy coping response to perceived unfair treatment for some individuals, regardless of their race/ethnicity.</p>
<p>Examining the Health Disparities Research Plan of the National Institutes of Health: Unfinished Business</p>	<p>Gerald E. Thomson, Faith Mitchell, Monique Williams, Editors, Committee on the Review and Assessment of the NIH's Strategic Research Plan and Budget to Reduce and Ultimately Eliminate Health Disparities, 2006 National Academy of Sciences: National Academies Press</p>	<p>The report is an assessment of the NIH Strategic Research Plan and Budget to Reduce and Ultimately Eliminate Health Disparities, and the adequacy of coordination of the development and implementation of the Strategic Plan across NIH Institutes and Centers. The study committee viewed the Strategic Plan in the context of the need for NIH health disparities research to be conducted as an integrated and inclusive field of study rather than an aggregate of independent research plans and activities occurring in separate research domains. Such an approach would help to further needed study of social, behavioral, environmental and other root factors interactive across diseases, conditions and affected population, as well as proving assurance that needed areas of research are not neglected. Found that development and implementation of the plan presently lacks the central management and coordination necessary to meet the challenge, that development and revision has been delayed and is incomplete; includes extensive programs without evidence that these efforts are centrally coordinated, appropriately assessed regarding priorities and outcomes, or otherwise viewed as part of an overall strategy. Needed additions to the plan include attention to the integration of research on the multifactorial nature of health disparities; population research; targeted and timed objectives; collaborative, integrated research on disparate health care; identification of additional affected populations; access to a registry of conditions for which differences between populations exist; assessments and evaluations of programs intended to increase capacity to conduct health disparities research; and attention to public and professional communication regarding health disparities as a specific, trans-NIH program.</p>
<p>Maternal Upward Socioeconomic Mobility and Black–White Disparities in</p>	<p>Cynthia G. Colen, PhD, Arline T. Geronimus, ScD, John Bound, PhD and</p>	<p><i>Objectives.</i> We estimate the extent to which upward socioeconomic mobility limits the probability that Black and White women who spent their</p>

Title	Author/Publication	Abstract
Infant Birthweight	Sherman A. James, PhD: American Journal of Public Health, Vol 96, No. 11, pp. 2032-2039; November 2006	<p>childhoods in or near poverty will give birth to a low-birthweight baby.</p> <p><i>Methods.</i> Data from the National Longitudinal Survey of Youth 1979 and the 1970 US Census were used to complete a series of logistic regression models. We restricted multivariate analyses to female survey respondents who, at 14 years of age, were living in households in which the income-to-needs ratio did not exceed 200% of poverty.</p> <p><i>Results.</i> For White women, the probability of giving birth to a low-birthweight baby decreases by 48% for every 1 unit increase in the natural logarithm of adult family income, once the effects of all other covariates are taken into account. For Black women, the relation between adult family income and the probability of low birthweight is also negative; however, this association fails to reach statistical significance.</p> <p><i>Conclusions.</i> Upward socioeconomic mobility contributes to improved birth outcomes among infants born to White women who were poor as children, but the same does not hold true for their Black counterparts.</p>
Expanding the Frame of Understanding Health Disparities: From a Focus on Health Systems to Social and Economic Systems	Brian d. Smedley: Health Education and Behavior, Vol. 33(4): 538-541 (August 2006)	<p>Policy makers are increasingly attending to the problem of racial and ethnic health disparities, but much of this focus has been on evidence of inequality in health care systems. This attention is important and laudable, but eliminating inequality in the health care system would be insufficient to eliminate racial and ethnic disparities and improve the health of all Americans. Social and economic factors, such as disadvantaged socioeconomic status, racism discrimination and geographic inequality shape virtually all risks for poor health. Interventions that focus solely on improving access to health care, or on reducing individual behavioral and psychosocial risks, therefore have limited potential to reduce racial and ethnic health disparities. The elimination of health disparities requires comprehensive, intensive strategies that address inequality in many sectors, including housing, education, employment and health systems. These interventions must be targeted at many levels, including individuals, families, workplaces, schools and communities.</p>
Bridging Domains in Efforts to Reduce Disparities in Health and Health Care	Shiriki K. Kumanyika and Cristiaan B. Morssink: Health Education and Behavior Special Issue - Eliminating Racial and Ethnic Health Disparities Framing a Health Education Research Agenda. Vol. 33(4): 538-541 (August 2006):440-458	<p>The concept of health disparities is a familiar one, but we must continually challenge our thinking on how disparities issues are framed. The 1985 Report of the Secretary's Task Force on Black and Minority Health established a disease-oriented focus on "excess deaths" as the primary targets of disparities initiatives. However, progress in reducing disparities has been limited. The disease focus, which emphasizes the individual-level and health care services, may be too narrow. A "population health" perspective can foster amore comprehensive and integrated approach. Both disease-oriented and population health perspectives have advantages and disadvantages, for both policy and practical purposes. The challenge is to effectively leverage both approaches to improve the health of ethnic minority and other disadvantaged populations. We need bridge builders who can articulate</p>

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		and unite people with diverse perspectives, work with systems and maintain a long-term vision for affecting the social dynamics of society.
Preterm Birth: Causes, Consequences and Prevention	Institute of Medicine Report Brief July 2006	A host of socioeconomic, biological and environmental factors contribute to a woman's risk for a preterm delivery. Medical conditions such as chronic hypertension, diabetes, infections and stress are associated with preterm birth, and a woman's medical history may also increase the risk. Many of the factors associated with preterm birth occur together, particularly in minority women or those who have low socioeconomic s While it is known that racial and ethnic factors pay significant roles, these factors remain poorly understood or explained. Concludes that preterm birth is not one disease with a single solution or cure, but rather the product of overlapping factors. Any significant gains to be made will be in the area of prevention. Suggests better defining the problem, conducting studies to improve clinical treatment, examining the multiple causes including reasons for disparities and conducting studies to increase understanding of impact of preterm birth on various public programs and policies and how policies can be used to reduce the rates of preterm birth.
Gender, Race, Class and Health: Intersectional Approaches	Leith Mullings & Amy Schultz, editors Jossey Bass 2005	Examines relationships between economic structures, race, culture and gender, and their combined influence on health. Systematically apply social and behavioral science to inspect how these dimensions intersect to influence health and health care in the US. Brings into sharp focus the potential for influencing policy to improve health through a more complete understanding of the structural nature of race gender and class disparities in health.
Minority Populations and Health: An Introduction to Health Disparities in the US	Thomas A. LaViest Wiley 2005 <a href="http://www.minorityhealth.com">www.minorityhealth.com</a>	A textbook that offers a foundation in the core issues and theoretical frameworks for the development of policy and interventions to address race disparities in health-related outcomes. Covers US health and social policy, the role of race and ethnicity in health research, social factors contributing to mortality, longevity and life expectancy, quantitative and demographic analysis and access and utilization of health services.
Self-Reported Experiences of Racial Discrimination and Black-White Differences in Preterm and Low-Birthweight Deliveries: The CARDIA Study	Sarah Mustillo, Nancy Krieger, Erica P. Gunderson, Stephen Sydney, Heather McCreath and Catarina Kiefe American Journal of Public Health: December 2004, vol. 94, No. 12	Report that self-reported experiences of racial discrimination were associated with preterm and low-birthweight deliveries and such experiences may contribute to Black-White disparities in perinatal outcomes.
Very Low Birthweight in African American Infants: The Role of Maternal Exposure to Interpersonal Racial Discrimination	Collins, JW, David RJ, Handler A et al: American Journal of Public Health, Vol 94, No. 12 , 2004, pp. 2132-2138	<i>Objectives.</i> We determined whether African American women's lifetime exposure to interpersonal racial discrimination is associated with pregnancy outcomes. <i>Methods.</i> We performed a case-control study among 104 African American women who delivered very low birthweight (<1500 g) preterm (<37 weeks) infants and 208 African American women who delivered non-low-birthweight (>2500g) term infants in Chicago, Ill.

Title	Author/Publication	Abstract
		<p><i>Results.</i> The unadjusted and adjusted odds ratio of very low birthweight infants for maternal lifetime exposure to interpersonal racism in 3 or more domains equaled 3.2 (95% confidence intervals=1.5, 6.6) and 2.6 (1.2, 5.3), respectively. This association tended to persist across maternal socio-demographic, biomedical, and behavioral characteristics.</p> <p><i>Conclusions.</i> The lifelong accumulated experiences of racial discrimination by African American women constitute an independent risk factor for preterm delivery.</p>
America's Health Centers: Reducing Racial and Ethnic Disparities in Perinatal Care and Birth Outcomes	Leiyu Shi, Gregory D. Stevens, John T. Wulu, Jr., Robert M. Politzer, and Jiahong Xu: Health Services Research, Vol. 39, Issue 6, Part 1, pp. 1881-1901, December 2004	<p><u>Objective:</u> To examine whether community health centers (CHCs) reduce racial/ethnic disparities in perinatal care and birth outcomes, and to identify CHC characteristics associated with better outcomes.</p> <p><u>Background:</u> Despite great national wealth, the U.S. continues to rank poorly relative to other industrialized nations on infant mortality and other birth outcomes, and with wide inequities by race/ethnicity. Disparities in primary care (including perinatal care) may contribute to disparities in birth outcomes, which may be addressed by CHCs that provide safety-net medical services to vulnerable populations.</p> <p><u>Methods:</u> Data are from annual Uniform Data System reports submitted to the Bureau of Primary Health Care over six years (1996–2001) by about 700 CHCs each year.</p> <p><u>Results:</u> Across all years, about 60% of CHC mothers received first-trimester prenatal care and more than 70% received postpartum and newborn care. In 2001, Asian mothers were the most likely to receive both postpartum and newborn care (81.7% and 80.3%), followed by Hispanics (75.0% and 76.3%), blacks (70.8% and 69.9%), and whites (70.7% and 66.7%). In 2001, blacks had higher rates of low birth weight (LBW) babies (10.4%), but the disparity in rates for blacks and whites was smaller in CHCs (3.3 percentage points) compared to national disparities for low-socioeconomic status mothers (5.8 percentage points) and the total population (6.2 percentage points). In CHCs, greater perinatal care capacity was associated with higher rates of first-trimester prenatal care, which was associated with a lower LBW rate.</p> <p><u>Conclusion:</u> Racial/ethnic disparities in certain prenatal services and birth outcomes may be lower in CHCs compared to the general population, despite serving higher-risk groups. Within CHCs, increasing first-trimester prenatal care use through perinatal care capacity may lead to further improvement in birth outcomes for the underserved.</p>
Racial and Ethnic Disparities in Preterm birth: The Role of Stressful Life Events	Michael Lu and Belinda Chen: American Journal of Obstetrics and Gynecology, Vol. 191, Issue 3, pp. 691-699, September 2004	<p>The purpose of this study was to examine racial-ethnic disparities in stressful life events before and during pregnancy and to assess the relationship between stressful life events and racial-ethnic disparities in preterm birth.</p> <p>Study design: Using data from the Pregnancy Risk Assessment Monitoring System, we conducted a retrospective cohort analysis of a sample of 33,542 women from 19 states who were delivered of a live-</p>

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		<p>born infant in 2000. Principal component analysis was used to group 13 stressful life events into 4 stress constructs: emotional, financial, partner-related, and traumatic. Racial-ethnic disparities in stressful life events were assessed with the use of bivariate and multivariate regression analyses. The contribution of stressful life events to racial-ethnic disparities in preterm birth was evaluated with the use of stepwise regression model and interaction terms.</p> <p>Results: Black women and American Indian/Alaska Native women reported the highest number of stressful life events in the 12 months before delivery. Compared with non-Hispanic white women, black women were 24% more likely to report emotional stressors, 35% more likely to report financial stressors, 163% more likely to report partner-related stressors, and 83% more likely to report traumatic stressors. The addition of stress constructs to the stepwise regression model minimally affected the association between race-ethnicity and preterm birth, and none of the stress constructs were significantly associated with preterm birth. There were no significant interaction effects between race-ethnicity and stress on preterm birth, except for a modest effect between black race and traumatic stressors.</p> <p>Conclusion: There are significant racial-ethnic disparities in the experience of stressful life events before and during pregnancy. Stressful life events do not appear to contribute significantly to racial-ethnic disparities in preterm birth.</p>
Trends in Maternal and Child Health Outcomes: Where Does Wisconsin Rank in the National context?	Katherine M. Kvale, Maria A. Mascola, Randall Glysch, Russell S. Kirby, Murray L. Katcher: Wisconsin Medical Journal 2004, Vol. 103, No. 5	<p>Found that Wisconsin' overall IMR was consistently at or slightly better than the national IMR. From 1979-1981 to 1999-2001, the US black IMR decreased by 37% while the Wisconsin black IMR declined 12%; thus, Wisconsin's rank among the states fell from third best to 32 among 34 states with a sufficient number of black births for comparison purposes. LBW rates for Wisconsin's black population were consistently at least twice that of the white population. In 1979-1981, early entry into PNC for all Wisconsin women (83%) was significantly higher than that of the US Population (74%). Wisconsin's early PNC entry rates improved slightly; as other states also improve, Wisconsin's ranking dropped. Wisconsin's relative ranks for IMR, LBW and PNC declined for all three indicators from 1979-1981 to 1999-2001.</p>
Addressing Perinatal Health Disparities; Another Place for a Paradigm Shift	Vijaya K. Hogan North Carolina Medical Journal May/June 2004, Volume 65, No. 3	<p>Prematurity, with its associated low birth weight, is the leading contributor to neonatal mortality in the US and the leading cause of overall infant mortality in many states. Preterm birth has been the leading cause of death for black infants in North Carolina for more than a decade and is the greatest contributor to the excess mortality experienced by black compared to white infants. Preterm birth rate has continued to increase among both multiple and singleton deliveries, with little progress in rate reduction and little sustained progress in reducing the disparity. Why hasn't progress been made? First, there has been little progress in</p>

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		<p>understanding the etiology of preterm birth. Second, there has been a failure to define effective mechanisms to address known risk factors for preterm birth. Third, there has been a failure to correctly conceptualize the causes of health disparities and approach their elimination in a logical and scientific way. This paper focuses attention on the third problem. Before defining strategies to eliminate health disparities, need to understand underlying contributors and the relative impact each has on disparate outcomes. Article offers a framework for determining intervention priorities, using a logic model approach.</p>
<p>Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care</p>	<p>Brian D. Smedley, Adrienne Y. Stith, and Alan R. Nelson, editors: Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, Board on Health Sciences Policy, Institute of Medicine: 2003</p>	<p>Findings and Key Recommendations: Racial and ethnic minorities tend to receive a lower quality of healthcare than non-minorities, even when access-related factors, such as patients' insurance status and income, are controlled. The sources of these disparities are complex, are rooted in historic and contemporary inequities, and involve many participants at several levels, including health systems, their administrative and bureaucratic processes, utilization managers, healthcare professionals, and patients.</p> <p>In the clinical encounter itself, the study committee found evidence that stereotyping, biases, and uncertainty on the part of healthcare providers can all contribute to unequal treatment. The conditions in which many clinical encounters take place – characterized by high time pressure, cognitive complexity, and pressures for cost-containment – may enhance the likelihood that these processes will result in care poorly matched to minority patients' needs. Minorities may experience a range of other barriers to accessing care, even when insured at the same level as whites, including barriers of language, geography, and cultural familiarity. Further, financial and institutional arrangements of health systems, as well as the legal, regulatory and policy environment in which they operate, may have disparate and negative effects on minorities' ability to attain quality care.</p> <p>Recommends a comprehensive, multi-level strategy to eliminate these disparities. Broad sectors – including healthcare providers, their patients, payors, health plan purchasers and society at large – should be made aware of the healthcare gap between racial and ethnic groups in the United States. Health systems should base decisions about resource allocation on published clinical guidelines, insure that physician financial incentives do not disproportionately burden or restrict minority patients' access to care, and take other steps to improve access – including the provision of interpretation services, where community need exists. Economic incentives should be considered for practices that improve provider-patient communication and trust, and reward appropriate screening, preventive and evidence-based clinical care. In addition, payment systems should avoid fragmentation of health plans along</p>

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		<p>socioeconomic lines.</p> <p>The healthcare workforce and its ability to deliver quality care for racial and ethnic minorities can be improved substantially by increasing the proportion of underrepresented U. S. racial and ethnic minorities among health professionals. Patients and providers can benefit from education. Patients can benefit from culturally appropriate education programs to improve their knowledge of how to access care and their ability to participate in clinical decision-making. The greater burden of education lies with providers. Cross-cultural curricula should be integrated early into the training of future healthcare providers, and practical, case-based, rigorously evaluated training should persist through practitioner continuing education programs. Finally, collection, reporting and monitoring of patient care data by health plans and federal and state payors should be encouraged as a means to assess progress in eliminating disparities, to evaluate intervention efforts, and to assess potential civil rights violations.</p>
Social Capital and Health: Why Social Resources Matter	Ichiro Kawachi: 4 <sup>th</sup> Maternal and Child Health Community Leadership Institute, San Francisco CA: November 2003	Presentation on the relationship between social capital (financial, human and social) and risk of disease/ death. Argues that those with more social capital are more likely to be healthy and safe.
Who will Keep the Public Healthy?	Institute of Medicine Report: National Academy Press, 2003	Schools of public health must change the way they do research and train professionals by instituting ecological approaches, which recognize the importance of multiple determinants of health.
Racial and Ethnic Disparities in Birth Outcomes: A Life-Course Perspective	<p>Michael C. Lu and Neal Halfon: Maternal and Child Health Journal, Vol. 7 No. 1, March 2003</p> <p>E-mail: <a href="mailto:mclu@ucla.edu">mclu@ucla.edu</a></p>	<p><i>Background:</i> In the United States, Black infants have significantly worse birth outcomes than do White infants. The cause of these persisting racial disparities remains unexplained. Most extant studies focus on differential exposures to protective and risk factors <i>during pregnancy</i>, such as current socioeconomic status, maternal risky behaviors, prenatal care, psychosocial stress, or perinatal infections. These risk factors during pregnancy, however, do not adequately account for the disparities. <i>Methods:</i> We conducted a literature review for longitudinal models of health disparities, and presented a synthesis of two leading models, using a life-course perspective. Traditional risk factors during pregnancy are then reexamined within their life-course context. We conclude with a discussion of the limitations and implications of the life-course perspective for future research, practice, and policy development. <i>Results:</i> Two leading longitudinal models of health disparities were identified and discussed. The early programming model posits that exposures in early life could influence future reproductive potential. The cumulative pathways model conceptualizes decline in reproductive health resulting from cumulative wear and tear to the body's allostatic systems. We propose a synthesis of these two models, using the life-course perspective. Disparities in birth outcomes are the consequences of differential developmental trajectories set forth by early life experiences and cumulative allostatic load over the life course.</p>

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		<p><i>Conclusions:</i> Future research on racial disparities in birth outcomes needs to examine differential exposures to risk and protective factors not only during pregnancy, but over the life course of women. Eliminating disparities requires interventions and policy development that are more longitudinally and contextually integrated than those that currently prevail.</p>
<p>Racial/Ethnic Discrimination and Health: Findings From Community Studies</p>	<p>David R. Williams, PhD, MPH, Harold W. Neighbors, PhD and James S. Jackson, PhD: February 2003, Vol 93, No. 2   American Journal of Public Health 200-208 © 2003 <a href="#">American Public Health Association</a></p>	<p>The authors review the available empirical evidence from population-based studies of the association between perceptions of racial/ethnic discrimination and health. This research indicates that discrimination is associated with multiple indicators of poorer physical and, especially, mental health status. However, the extant research does not adequately address whether and how exposure to discrimination leads to increased risk of disease. Gaps in the literature include limitations linked to measurement of discrimination, research designs, and inattention to the way in which the association between discrimination and health unfolds over the life course. Research on stress points to important directions for the future assessment of discrimination and the testing of the underlying processes and mechanisms by which discrimination can lead to changes in health.</p>
<p>Neighborhood Support and the Birth Weight of Urban Infants</p>	<p>Buka, Brennan, et al: American Journal of Epidemiology, Vol. 157, No. 1, pp. 1-8, January 3, 2003</p>	<p>Differences in maternal characteristics only partially explain the lower birth weights of infants of African-American women. It is hypothesized that economic and social features of urban neighborhoods may further account for these differences. The authors conducted a household survey of 8,782 adults residing in 343 Chicago, Illinois, neighborhoods to assess mean levels of perceived social support and used US Census data to estimate neighborhood economic disadvantage. Data on birth weight and maternal risk factors were gathered from 95,711 birth certificates (1994–1996). Before statistical adjustment of the data, infants born to African-American mothers were found to be, on average, 297 g lighter than those born to White mothers. After adjustment for individual-level risk factors, this difference was reduced to 154 g. For African-American mothers only, mean birth weight decreased significantly as the neighborhood level of economic disadvantage increased. For White mothers only, a significant positive association was found between perceived levels of neighborhood social support and infant birth weight. Adding these neighborhood-level predictors to the model reduced the adjusted White versus African-American difference in birth weight to 124 g. Results support the hypothesis that neighborhood-level factors are significantly associated with infant birth weight.</p>
<p>Low Birthweight, Social Factors and Developmental Outcomes Among Children in the US</p>	<p>Jason D. Boardman, Daniel A. Powers, Yolanda C. Padilla, Robert A. Hummer <i>Demography</i>, Vol. 39, No. 2 (May, 2002), pp. 353-368</p>	<p>We used six waves of the National Longitudinal Survey of Youth-Child Data (1986-1996) to assess the relative impact of adverse birth outcomes vis-a-vis social risk factors on children's developmental</p>



Title	Author/Publication	Abstract
		<p>outcomes. Using the Peabody Individual Achievement Tests of Mathematics and Reading Recognition as our outcome variables, we also evaluated the dynamic nature of biological and social risk factors from ages 6 to 14. We found the following: (1) birth weight is significantly related to developmental outcomes, net of important social and economic controls; (2) the effect associated with adverse birth outcomes is significantly more pronounced at very low birth weights (&lt; 1,500 grams) than at moderately low birth weights (1,500-2,499 grams); (3) whereas the relative effect of very low-birth-weight status is large, the effect of moderately low weight status, when compared with race/ethnicity and mother's education, is small; and (4) the observed differentials between moderately low-birth-weight and normal-birth-weight children are substantially smaller among older children in comparison with younger children.</p>
<p>Socioeconomic and Racial/Ethnic Disparities in Unintended Pregnancy Among Postpartum Women in CA</p>	<p>Cubbin C, Braveman PA, Marchi KS, Chavez GF, Santelli JS, Gilbert BJ: Maternal and Child Health Journal, Vol. 6, No. 4, pp. 237-246, December 2002</p>	<p>OBJECTIVE: We examined social disparities in unintended pregnancy among postpartum women to better understand 1) the role of socioeconomic factors in racial/ethnic disparities and 2) factors that might explain both socioeconomic and racial/ethnic disparities in the risk for unintended pregnancy among women who give birth.</p> <p>METHODS: We used 1999 and 2000 data from a statewide-representative mail and telephone survey of postpartum women in California (N = 7044). We examined associations between unintended pregnancy and race/ethnicity (African American, Asian or Pacific Islander, U.S.-born Latina, foreign-born Latina, European or Middle Eastern), three socioeconomic factors (poverty status, maternal education, paternal education), and several potential explanatory factors.</p> <p>RESULTS: Overall, racial/ethnic disparities in unintended pregnancy were reduced by the three socioeconomic factors individually and collectively (e.g., reducing higher unadjusted odds for African Americans from 3.4 to 1.9); additional adjustment for marital status age, parity, insurance, language, abuse, sense of control, and interaction between marital status and race/ethnicity (each independently associated with unintended pregnancy) reduced the socioeconomic disparities (e.g., reducing odds for the poorest women from 4.1 to 2.3). Although reduced, significant racial/ethnic and socioeconomic disparities remained after adjustment, but generally only among married women. Results for Latinas appeared to vary by nativity, with foreign-born Latinas being at lower odds and U.S.-born Latinas being at higher odds of unintended pregnancy.</p> <p>CONCLUSIONS: Racial/ethnic disparities in unintended pregnancy are partly explained by the socioeconomic factors we measured. Several additional factors were identified that suggest possible directions for policies and programs to help reduce social disparities in unintended pregnancy among childbearing women.</p>

Title	Author/Publication	Abstract
The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work	Suniya S. Luthar, Dante Cicchetti & Bronwyn Becker: Child Development, Vol. 71, No. 3, pp. 543-562, 2000	This paper presents a critical appraisal of resilience, a construct connoting the maintenance of positive adaptation by individuals despite experiences of significant adversity. As empirical research on resilience has burgeoned in recent years, criticisms have been levied at work in this area. These critiques have generally focused on ambiguities in definitions and central terminology; heterogeneity in risks experienced and competence achieved by individuals viewed as resilient; instability of the phenomenon of resilience; and concerns regarding the usefulness of resilience as a theoretical construct. We address each identified criticism in turn, proposing solutions for those we view as legitimate and clarifying misunderstandings surrounding those we believe to be less valid. We conclude that work on resilience possesses substantial potential for augmenting the understanding of processes affecting at-risk individuals. Realization of the potential embodied by this construct, however, will remain constrained without continued scientific attention to some of the serious conceptual and methodological pitfalls that have been noted by skeptics and proponents alike.
Levels of racism: a theoretic framework and a gardener's tale	CP Jones: American Journal of Public Health, Vol 90, Issue 8, pp. 1212-1215 2000	The author presents a theoretic framework for understanding racism on 3 levels: institutionalized, personally mediated, and internalized. This framework is useful for raising new hypotheses about the basis of race-associated differences in health outcomes, as well as for designing effective interventions to eliminate those differences. She then presents an allegory about a gardener with 2 flower boxes, rich and poor soil, and red and pink flowers. This allegory illustrates the relationship between the 3 levels of racism and may guide our thinking about how to intervene to mitigate the impacts of racism on health. It may also serve as a tool for starting a national conversation on racism.
Neurons to Neighborhoods: The Science of Early Childhood Development	Philip Shonkoff & Deborah Phillips: National Academies of Science Press, 2000	A systematic analysis of current research, the authors conclude that the economic and social environment or the context within which families have children and raise them directly effects biomedical conditions in childhood and throughout the life course. Biomedical vulnerability can be traced to children's early life experiences, including exposure to experiences in utero related to inadequate nutrition, family violence, and environmental toxins. Beyond physiological impairment starting at birth, psychosocial challenges are created that reduce children's capacity for self-efficacy and achievement in life's goals.
Inequality in Quality: Addressing Socioeconomic, Racial and Ethnic Disparities in Health Care	Fiscella, Franks, Gold, Clancy: JAMA, 2000; Vol. 283, No. 19, pp. 2579-2584	Socioeconomic and racial/ethnic disparities in health care quality have been extensively documented. Recently, the elimination of disparities in health care has become the focus of a national initiative. Yet, there is little effort to monitor and address disparities in health care through organizational quality improvement. After reviewing literature on disparities in health care, discusses the limitations in existing quality assessment for identifying and addressing these disparities.

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		Proposes 5 principles to address these disparities through modifications in quality performance measures: disparities represent a significant quality problem; current data collection efforts are inadequate to identify and address disparities; clinical performance measures should be stratified by race/ethnicity and socioeconomic position for public reporting; population-wide monitoring should incorporate adjustment for race/ethnicity and socioeconomic position; and strategies to adjust payment for race/ethnicity and socioeconomic position should be considered to reflect the known effects of both on morbidity.
Income distribution, socioeconomic status, and self rated health in the United States: multilevel analysis	Bruce P. Kennedy, Ichiro Kawachi, Roberta Glass and Deborah Prothrow-Stith: BMJ (British Medical Journal) 1998: 317, pp. 917-921 <a href="http://www.bmj.com">www.bmj.com</a>	Objective of the study was to determine the effect of inequalities in income within a state on self rated health status while controlling for individual characteristics such as socioeconomic status. This cross sectional multilevel study of income distribution in each of the 50 states in the US resulted in a finding that, when personal characteristics and household income were controlled for, individuals living in states with the greatest inequalities in income were more likely to report their health as fair or poor than individuals living in states with the smallest inequalities in income. Inequality in the distribution of income was associated with an adverse impact on health independent of the effect of household income.
Social capital, income inequality, and mortality	I Kawachi, B P Kennedy, K Lochner and D Prothrow-Stith: American Journal of Public Health, Vol. 87, Issue 9, 1997; 1491-1498	OBJECTIVES: Recent studies have demonstrated that income inequality is related to mortality rates. It was hypothesized, in this study, that income inequality is related to reduction in social cohesion and that disinvestment in social capital is in turn associated with increased mortality. METHODS: In this cross-sectional ecologic study based on data from 39 states, social capital was measured by weighted responses to two items from the General Social Survey: per capita density of membership in voluntary groups in each state and level of social trust, as gauged by the proportion of residents in each state who believed that people could be trusted. Age-standardized total and cause-specific mortality rates in 1990 were obtained for each state. RESULTS: Income inequality was strongly correlated with both per capita group membership ( $r = -.46$ ) and lack of social trust ( $r = .76$ ). In turn, both social trust and group membership were associated with total mortality, as well as rates of death from coronary heart disease, malignant neoplasms, and infant mortality. CONCLUSIONS: These data support the notion that income inequality leads to increased mortality via disinvestment in social capital.
The First Injustice: Socioeconomic Disparities, Health Services Technology and Infant Mortality	Gortmaker and Wise: Annual Review of Sociology, Vol. 23, pp. 147-170, August 1997	Infant mortality has long been viewed as a synoptic indicator of the health and social condition of a population. In this article the authors examine critically the structure of this reflective capacity with a particular emphasis on how new health care technologies may have altered traditional pathways of social influence. The infant mortality rate is a composite of a series of component rates, each with its own relationship to social factors. Advances in health care have reduced dramatically the risk of mortality for the critically ill newborn, thereby elevating the

Title	Author/Publication	Abstract
		<p>importance of access to this care in shaping absolute and disparate infant mortality rates. These advances in health services technology have also had the effect of concentrating infant mortality among extremely premature and low birth-weight infants, a group tied directly to social factors operating through maternal influences and the general well-being of women. In this manner, current patterns of infant mortality in the United States provide a useful illustration of the dynamic interaction of underlying social forces and technological innovation in determining trends in health outcomes. The authors review the implications of this perspective for sociological research into disparate infant mortality, including the social and economic structure of societies, access to health services, the potential for prenatal intervention, women's health status and racial and ethnic disparities</p>
Ethnic Differences in Birthweight: The Role of Lifestyle and Other Factors	<p>Patricia H. Shiono, Virginia A. Rauh, Mikyung Park, Sally A. Lederman, Deborah Zuskar: American Journal of Public Health, May 1997, Vol. 87, No. 5 pp 787 - 793</p>	<p>Purpose of study was to expand the search for risk factors for low birthweight and to find new explanations for the ethnic-group disparities in birth outcomes. Analyzed sample of pregnant women who registered for prenatal care at one of six clinics, two in Chicago and 4 in NYC. After controlling for poverty and other birthweight correlates, found that living in public housing and believing that chance plays a major role in determining one's health status were negatively associated with birthweight. Having a stable residence was positively related to birthweight. Material hardship, social adversity, perceived racial discrimination, physical abuse, anxiety and depression were not associated with birthweight. Concluded that the negative role of an impoverished living environment and feelings of helplessness, as well as the positive role of having a stable form of social support, suggests new directions for research on causes of low birthweight and ethnic disparities in US birth outcomes.</p>
Fostering Resilience in Children	<p>Bonnie Benard, MSW : ERIC Clearinghouse on Elementary and Early Childhood Education, August 1995</p>	<p>Along with other educational research, research on resilience gives educators a blueprint for creating schools where all students can thrive socially and academically. Research suggests that when schools are places where the basic human needs for support, respect, and belonging are met, motivation for learning is fostered. Reciprocal caring, respectful, and participatory relationships are the critical determining factors in whether a student learns; whether parents become and stay involved in the school; whether a program or strategy is effective; whether an educational change is sustained; and, ultimately, whether a youth feels he or she has a place in this society. When a school redefines its culture by building a vision and commitment on the part of the whole school community that is based on these three critical factors of resilience, it has the power to serve as a "protective shield" for all students and a beacon of light for youth from troubled homes and impoverished communities.</p>
Overcoming the Odds: High Risk	<p>Emmy E. Werner and Ruth S. Smith: 1992</p>	<p>The lives of 505 individuals born in 1955 on the island of Kauai (Hawaii)</p>

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Children from Birth to Adulthood	Cornell University Press	<p>were followed from the prenatal period to adulthood to elucidate their resilience in the face of childhood adversity or their recovery in later years. The Kauai Longitudinal Study monitored the impact of a variety of biological and psychosocial risk factors, stressful life events, and protective factors on the development of these individuals from a mixture of ethnic groups (primarily Japanese, Hawaiian, and Pilipino). One of every three members of this cohort was born with the odds against successful development. Nevertheless, one of every three of these high risk children had developed into a confident, capable, and caring young adult by age 18. This book, the fourth about this cohort, examines members at 30 years of age, with emphasis on work life, marriage, and parenthood. Attention is paid to outcomes for teenage mothers, juvenile delinquents, and children with mental health problems as they mature. A common core of individual differences and sources of support is beginning to emerge that ameliorates or buffers a person's responses to constitutional risk factors or stressful life events. Several case histories and vignettes illustrate the struggles of cohort members. Twenty-eight tables in two appendices and nine figures supplement the discussion.</p>
<b>PRACTICE</b>		
Effects of Nurse Home Visiting on Maternal and Child Functioning: Age-9 Follow-up of a Randomized Trial	<p>David L. Olds, PhD, Harriet Kitzman, PhD, RN, Carole Hanks, DrPH, RN, Robert Cole, PhD, Elizabeth Anson, MS, Kimberly Sidora-Arcoleo, PhD, MPH, Dennis W. Luckey, PhD, Charles R. Henderson, Jr, John Holmberg, PsyD, Robin A. Tutt, BA, Amanda J. Stevenson, BS and Jessica Bondy, MHA<sup>1</sup>: PEDIATRICS Vol. 120 No. 4 October 2007, pp. e832-e845</p>	<p><b>OBJECTIVE.</b> test the effect of prenatal and infancy home visits by nurses on mothers' fertility and children's functioning 7 years after the program ended at child age 2.</p> <p><b>METHODS.</b> We conducted a randomized, controlled trial in a public system of obstetric and pediatric care. A total of 743 primarily black women &lt;29 weeks' gestation, with previous live births and at least 2 socio-demographic risk characteristics (unmarried, &lt;12 years of education, unemployed), were randomly assigned to receive nurse home visits or comparison services. Primary outcomes consisted of intervals between births of first and second children and number of children born per year; mothers' stability of relationships with partners and relationships with the biological father of the child; mothers' use of welfare, food stamps, and Medicaid; mothers' use of substances; mothers' arrests and incarcerations; and children's academic achievement, school conduct, and mental disorders. Secondary outcomes were the sequelae of subsequent pregnancies, women's employment, experience of domestic violence, and children's mortality.</p> <p><b>RESULTS.</b> Nurse-visited women had longer intervals between births of first and second children, fewer cumulative subsequent births per year, and longer relationships with current partners. From birth through child age 9, nurse-visited women used welfare and food stamps for fewer months. Nurse-visited children born to mothers with low psychological resources, compared with control-group counterparts, had better grade-point averages and achievement test scores in math and reading in</p>

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		<p>grades 1 through 3. Nurse-visited children, as a trend, were less likely to die from birth through age 9, an effect accounted for by deaths that were attributable to potentially preventable causes.</p> <p>CONCLUSIONS. By child age 9, the program reduced women's rates of subsequent births, increased the intervals between the births of first and second children, increased the stability of their relationships with partners, facilitated children's academic adjustment to elementary school, and seems to have reduced childhood mortality from preventable causes.</p>
Barriers to Smoking Cessation in Inner-City African American Young Adults	Frances A. Stillman, Lee Bone, Erika Avila-Tank, Katherine Smith, Norman Yancey, Calvin Street and Kerry Owings: American Journal of Public Health, Vol. 97 No. 8, August 2007, pp. 1405-1408	Looked at community-level factors contributing to problem of young adults smoking. Sale and acquisition of individual cigarettes are ubiquitous and normative and may contribute to the high usage and low cessation rates.
From Policy to Action: Addressing Racial and Ethnic Disparities at the Ground-Level - Resources	January Angeles and Stephen A. Somers: Center for Health Care Strategies Issue Brief, August 2007 <a href="http://www.chcs.org">www.chcs.org</a>	<p>This issue brief reports on practical strategies that health care purchasers and plans nationally are implementing to address documented gaps in care. It highlights the need for standardized collection of race, ethnicity and language data, culturally competent approaches, as well as the involvement and commitment of multiple stakeholders. Provides practical strategies to address documented gaps in care.</p> <p><i>Toolkit</i> – Reducing Racial and Ethnic Disparities: Quality Improvement in Medicaid Managed Care – this toolkit details the experiences of a collaborative workgroup of Medicaid managed care organizations to reduce disparities.</p> <p><i>Brief</i> – Using Data on Race and Ethnicity to Improve Health Care Quality for Medicaid Beneficiaries – provides practical examples to demonstrate how states are using data on race and ethnicity to improve the quality of care for Medicaid beneficiaries. Based on states' experience with the CHCS Purchasing Institute, Leveraging Data to Reduce Racial and Ethnic Health Disparities, the brief covers strategies on how states can enhance data mining skills, build agency capacity, and create strategic plans for interventions aimed at reducing disparities.</p> <p><i>National Health Plan Collaborative to Reduce Disparities and Improve Quality</i> – co-sponsored by the Agency for Healthcare Research and Quality and the RWJ Foundation, brings together 10 of the nation's largest health insurance plans serving commercial, Medicare and Medicaid patients nationwide, which are committed to reducing racial and ethnic disparities and improving quality of care. The 10 plans are working together to test provider, member and community targeted approaches to reduce gaps in care and improve the quality of care.</p>
The Influence of Social Context on Changes in Fruit and Vegetable Consumption: Results of the Healthy Directions Studies	Glorian Sorensen, Anne M. Stoddard, Tamara Dubowitz, Elizabeth M. Barbeau, JudyAnn Bigby, Karen M. Emmons, Lisa F. Berkman and Karen E. Peterson:	As part of the Harvard Cancer Prevention Program Project, used a social contextual model of health behavior change to test an intervention targeting multiple risk-related behaviors in working-class, multiethnic populations. Examined the relationships between the social contextual

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	American Journal of Public Health, July 2007, Vol. 97, No. 7, pp. 1216-1227	factors in the conceptual model and changes in fruit and vegetable consumption from baseline to completion of intervention in health centers and small business studies. Found that stronger social networks, social norms that were more supportive, food sufficiency and less household crowding were associated with greater change in fruit and vegetable intake. Observed differences between intervention sites. Social context can play an important role in promoting changes in fruit and vegetable consumption.
Intensive home visiting is associated with decreased risk of infant death	EFDonovan, RT Ammerman, J Besl, H Atherton, JC Khoury, M Altaye, FW Putnam, JB Van Ginkel: pediatrics Vo. 119, No. 6: pp. 1145-51, June 2007	Retrospective, case-control design used to compare the risk of infant death among participants in Cincinnati's Every Child Succeeds program. Found that infants whose families did not receive home visiting were 2.5 times more likely to die in infancy compared with infants whose families received home visiting. Black infants were at least as likely to benefit from home visiting as were non-black infants. No effect of program participation on the risk of preterm birth was observed. Concluded that the study is consistent with the hypothesis that intensive home visiting reduces the risk of infant death.
Community Health Worker National Workforce Study: An Annotated Bibliography	HRSA - March 2007	Of the 45 articles included in this bibliography, 10 are review articles, overviews, surveys or white papers on multiple programs and 35 are individual program descriptions, research or evaluation studies. The overviews and surveys of multiple programs describe definitions, roles, demographics, education, and training of CHWs, as well as program evaluation. Other topics include cost, funding and policy implications. Many reports summarize lessons learned from existing programs and made recommendations for the future. Overview reports are either statewide or nationwide. These literature reviews vary in methodology but generally explore study design and program outcomes of CHW programs in the United States. Past published reports cite CHW contributions to HIV prevention, immunizations, and cancer screening. These studies are described as having appropriate design and significant positive outcomes. General recommendations are made for stronger study design, larger sample sizes, longer study periods and triangulated approaches to research and evaluation of CHW programs and projects. The articles on specific CHW programs and research cover the goals of the programs, the design of the studies, the populations served and locations of the studies, health topics addressed, and the outcomes of the project or program. Some reports address costs of the CHW approach in comparison to traditional approaches to health care delivery. As to outcomes, projects and programs are complex and unique. The randomized controlled trials of health interventions are affected by the nature of social science research, characterized by many variables that are difficult to isolate but each possibly making a contribution to the outcomes.
Reducing Racial and Ethnic Disparities:	Constance Martin:	Innovative strategies to reduce disparities in three targeted areas: birth

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A Quality Improvement Initiative in Medicaid Managed Care	Center for Health Care Strategies Tool Kit, January 2007 <a href="http://www.chcs.org">www.chcs.org</a>	outcomes and immunizations, asthma care and diabetes care. Three key lessons in addressing disparities: data collection and analysis a critical first step in assessing quality and effectiveness; designing patient-centered and culturally-sensitive care a next step, and encouraging collaborative efforts to reduce disparities the third step. Case studies in identifying and reducing disparities in the three areas. For birth outcomes, cites three programs: *Monroe Plan in Rochester NY decreased NICU admission rates with targeted, culturally competent outreach, education and family planning services for high risk teens; in 2004, cost-effectiveness research showed \$2.86 in savings for every \$1.00 spent. *Helix Family Choice, Baltimore MD, increased percentage of African American women who completed more than 80% of prenatal visits. MedStar Health instituted system-wide data collection on race and ethnicity to focus activities on reducing disparities. *UPMC for You, PA , increased first trimester identification of African American pregnant women and decreased low birth weight deliveries by creating an integrated clinical team, focus groups, mobile outreach and doula program
Maternal Nutrition and Infant Mortality in the Context of Relationality	Michael C. Lu and Jessica S. Lu: Joint Center for Political and Economic Studies, Health Policy Institute, Washington, DC, 2007. <a href="http://www.jointcenter.org">www.jointcenter.org</a>	Analyzes the relationship between maternal nutrition and leading causes of IM, as well as maternal, infant and child health; provides an overview of the nutritional status and behaviors of pregnant women in the US; assesses the effectiveness of prenatal nutritional interventions; and reframes the relationship between maternal nutrition and IM within context of relationality over the life course. Offers specific recommendations for research, policy and practice.
African American Women and Breastfeeding	Barbara L. Philipp and Sheina Jean-Marie: Joint Center for Political and Economic Studies, Health Policy Institute, Washington, DC, 2007. <a href="http://www.jointcenter.org">www.jointcenter.org</a>	This background paper examines the critical relationship between breastfeeding and infant mortality among African Americans, the racial/ethnic group with the lowest rate of breastfeeding. The authors explore the benefits of breastfeeding and the issues associated with racial/ethnic disparities in breastfeeding, concluding with an action plan for closing the gap through promotion of breastfeeding based on education, training, awareness, support, and research.



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Preventive Care: A National Profile on Use, Disparities and Health Benefits	Partnership for Prevention of the National Commission on Prevention Priorities, 2007. <a href="http://www.prevent.org">www.prevent.org</a>	This report demonstrates that there is significant under use of cost-effective preventive care in the US, resulting in lost lives, unnecessary poor health and inefficient use of health care dollars. Highlights racial and ethnic disparities in use of preventive care. Focuses on 25 evidence-based clinical preventive services recommended by the US Preventive Services Task Force and the Advisory Committee on Immunization Practices; services were ranked based on each service's health benefits (clinically preventable burden) and economic value (cost effectiveness). Among the findings is this: disparities in utilization rates for childhood vaccines between racial and ethnic groups have been largely eliminated among children under three. [The approach used here would be a valuable one for ranking such indicators specific to birth outcomes and analyzing their use.]
Enabling Services at Health Centers: Eliminating Disparities and Improving Quality	The New York Academy of Medicine: October 2006  <a href="http://www.aapcho.org">www.aapcho.org</a>	Subtitled "Challenges and Opportunities for Health Centers in Collecting Data on Enabling Services." This report discusses the enabling services provided by federally qualified health centers (FQHCs), also known as community health centers, which are a key component of the nation's safety net, providing comprehensive primary and preventive care to low-income, racially and ethnically diverse, and uninsured populations. Enabling services include health education, interpretation and case management. This report explores the need for research studies that examine and quantify the impact of such services on reducing disparities.
Recommendations to Improve Preconception Health and Health Care – United States: A Report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care	Kay Johnson, MPH, Samuel F. Posner, PhD, Janis Biermann, MS, José F. Cordero, MD, Hani K. Atrash, MD, Christopher S. Parker, PhD, Sheree Boulet, DrPH, Michele G. Curtis, MD: National Center for Chronic Disease Prevention and Health Promotion, April 2006	<p>The 10 recommendations in this report are aimed at achieving four goals to 1) improve the knowledge and attitudes and behaviors of men and women related to preconception health; 2) assure that all women of childbearing age in the United States receive preconception care services (i.e., evidence-based risk screening, health promotion, and interventions) that will enable them to enter pregnancy in optimal health; 3) reduce risks indicated by a previous adverse pregnancy outcome through interventions during the interconception period, which can prevent or minimize health problems for a mother and her future children; and 4) reduce the disparities in adverse pregnancy outcomes.</p> <p>The recommendations focus on changes in consumer knowledge, clinical practice, public health programs, health-care financing, and data and research activities. Each recommendation is accompanied by a series of specific action steps and, when implemented, can yield results within 2--5 years. Based on implementation of the recommendations, improvements in access to care, continuity of care, risk screening, appropriate delivery of interventions, and changes in health behaviors of men and women of childbearing age are expected to occur. The recommendations and action steps are a strategic plan that can be used by persons, communities, public health and clinical providers, and</p>

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		governments to improve the health of women, their children, and their families. Improving preconception health among women of childbearing age requires multi-strategic, action-oriented initiatives.
Taking Cultural Competency from Theory to Action	Ellen Wu and Martin Martinez: California Pan-Ethnic Health Network, October 2006 The Commonwealth Fund <a href="http://www.cmwf.org">www.cmwf.org</a> publication no. 964	Provides principles and recommendations for implementing cultural competency in the field. Six principles: (1) community representation and feedback at all stages of implementation; (2) cultural competency integrated into all systems of the health care organization, particularly quality improvement efforts; (3) ensuring that changes made are manageable, measurable and sustainable; (4) making the business case for implementation of cultural competency policies; (5) commitment from leadership; and (6) staff training on an ongoing basis. Based on interviews with leaders in the field of cultural competency, the authors discuss best practices and important lessons in the implementation of cultural competency initiatives.
Closing the Divide: How Medical Homes Promote Equity in Health Care.	Results from the Commonwealth Fund 2006 Health Care Quality Survey: Anne C. Beal, Michelle M. Doty, Susan E. Hernandez, Katherine K. Shea, and Karen Davis <a href="http://www.cmwf.org">www.cmwf.org</a>	When adults have health insurance coverage and a medical home – defined as a health care setting that provides patients with timely, well-organized care, and enhanced access to providers – racial and ethnic disparities in access and quality are reduced or even eliminated. When adults have a medical home, their access to needed care, receipt of routine preventive screenings, and management of chronic conditions improve substantially. The survey found that rates of cholesterol, breast cancer, and prostate screening are higher among adults who receive patient reminders, and that when minority patients have medical homes, they are just as likely as whites to receive these reminders. The results suggest that all providers should take steps to create medical homes for patients. Community health centers and other public clinics, in particular, should be supported in their efforts to build medical homes for all patients.
Cigarette Smoking Among Low-Income African Americans a Serious Public Health Problem	Jorge Delva, Marisol Tellez, Tracy L. Finlayson, Kimberlee A Gretebeck, Kristine Siefert, David R. Williams, Amid I. Ismail: American Journal of Preventive Medicine, Vol. 29, No. 3, October 2005, pp. 218-220	High prevalence of cigarette use provides evidence that the excess burden of tobacco-related disease among low-income African-American families may be on the rise. Indicates urgent need for preventive intervention.
Community Collaboration in New York City: Charting the Course for a Neighborhood-Based Safety Net: An Assessment of the NYC Administration for Children's Services' Neighborhood networks project	Andrew White, Nancy Rosenbaum, Sharon Lerner and Sasha Nyary: Center for New York City Affairs, Milano Graduate School of Management and Urban Policy, New School University. March 2005	Neighborhood Networks attempts to build an infrastructure for collaboration among organizations that work with children and families. Its goals include improving the quality and accessibility of social services for families while reducing the number of children entering foster care. The report examines lessons learned by participants, including the following key components of successful networks: clear and shared objectives, motivated participants, involvement of both front-line and top-level staff. Integrating and coordinating services can speed up referrals, improve access and help families receive the supports they need to remain stable and keep their children healthy and thriving. A stronger

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		neighborhood-based safety net that effectively meshes public and nonprofit agencies can reduce extreme poverty and help keep children safe.
Cultural Competence and Health Care Disparities: Key Perspectives And Trends	Joseph R. Betancourt, Alexander R. Green, J. Emilio Carrillo and Elyse R. Park <a href="#">Health Affairs</a> , 24, no. 2 (2005): 499-505	Cultural competence has gained attention as a potential strategy to improve quality and eliminate racial/ethnic disparities in health care. In 2002, the authors conducted interviews with experts in cultural competence from managed care, government, and academe to identify their perspectives on the field. Findings are presented and recent trends in cultural competence are identified, focusing on health care policy, practice, and education. The analysis reveals that many healthcare stakeholders are developing initiatives in cultural competence. Yet the motivations for advancing cultural competence and approaches taken vary depending on mission, goals, and sphere of influence.
Lower rates of low birthweight and preterm births in the CA Black Infant Health Program	WO Willis, CH Eder, SP Lindsay, G Chavez and ST Shelton: Journal of the National Medical Association 2004: Vol.96, No. 3, pp. 315-324.	The BIH Program retained high-risk women in the program to delivery and assisted them with maintenance of prenatal care. Even though the program participants were higher risk, their LBW and PTB outcomes were comparable to the geographic area overall. More importantly, there was a trend among women in the BIH Program toward better outcomes than the comparison group in both VLBW and VPTB.
Effects of Home Visits by Paraprofessionals and by Nurses: Age 4 Follow-up Results of a Randomized Trial	David L. Olds, JoAnn Robinson, Lisa Pettitt, Dennis W. Luckey, John Holmberg, Rosanna Ng, Kathy Isacks, Karen Sheff and Charles R. Henderson: Pediatrics, Vol. 114, No. 6, December 2004, pp. 1560-1568	<p><b>Objective.</b> To examine the effects of prenatal and infancy home visiting by paraprofessionals and by nurses from child age 2 through age 4 years.</p> <p><b>Methods.</b> In public and private care settings in Denver, Colorado, a randomized, controlled trial with 3 arms, i.e., control, paraprofessional visits, and nurse visits, was conducted. Home visits were provided from pregnancy through child age 2 years. 1178 low-income, pregnant women with no previous live births were invited to participate, and were randomized 735 into the trial; 85% were unmarried, 47% Mexican American, 35% white non-Mexican American, 15% black, and 3% American Indian/Asian. Outcomes consisted of maternal reports of subsequent pregnancies, participation in education and work, use of welfare, marriage, cohabitation, experience of domestic violence, mental health, substance use, and sense of mastery; observations of mother-child interaction and the home environment; tests of children's language and executive functioning; and mothers' reports of children's externalizing behavior problems.</p> <p><b>Results.</b> Two years after the program ended, women who were visited by paraprofessionals, compared with control subjects, were less likely to be married (32.2% vs. 44.0%) and to live with the biological father of the child (32.7% vs. 43.1%) but worked more (15.13 months vs. 13.38 months) and reported a greater sense of mastery and better mental health (standardized scores [mean = 100, SD = 10] of 101.25 vs. 99.31 and 101.21 vs. 99.16, respectively).</p>

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		<p>Paraprofessional-visited women had fewer subsequent miscarriages (6.6% vs. 12.3%) and low birth weight newborns (2.8% vs. 7.7%). Mothers and children who were visited by paraprofessionals, compared with control subjects, displayed greater sensitivity and responsiveness toward one another (standardized score [mean = 100, SD = 10] of 100.92 vs. 98.66) and, in cases in which the mothers had low levels of psychologic resources at registration, had home environments that were more supportive of children's early learning (score of 24.63 vs. 23.35). Nurse-visited women reported greater intervals between the births of their first and second children (24.51 months vs. 20.39 months) and less domestic violence (6.9% vs. 13.6%) and enrolled their children less frequently in preschool, Head Start, or licensed day care than did control subjects. Nurse-visited children whose mothers had low levels of psychologic resources at registration, compared with control group counterparts, demonstrated home environments that were more supportive of children's early learning (score of 24.61 vs. 23.35), more advanced language (score of 91.39 vs. 86.73), superior executive functioning (score of 100.16 vs. 95.48), and better behavioral adaptation during testing (score of 100.41 vs. 96.66). There were no statistically significant effects of either nurse or paraprofessional visits on the number of subsequent pregnancies, women's educational achievement, use of substances, use of welfare, or children's externalizing behavior problems.</p> <p>Conclusions. Paraprofessional-visited mothers began to experience benefits from the program 2 years after the program ended at child age 2 years, but their first-born children were not statistically distinguishable from their control group counterparts. Nurse-visited mothers and children continued to benefit from the program 2 years after it ended. The impact of the nurse-delivered program on children was concentrated on children born to mothers with low levels of psychologic resources.</p>
Strides Among State Health Agencies to Improve Birth Outcomes	ASTHO, 2004	The single most frequently reported program constraint across the board is securing and sustaining stable funding.
THRIVE (Toolkit for Health & Resilience In Vulnerable Environments): A Community Approach to Address Health Disparities	<p><b>Advancing a Community Resilience Approach to Improve Health Outcomes:</b> A Community Resilience Assessment Toolbox. Prevention Institute, September 2004</p> <p><a href="http://www.preventioninstitute.org">www.preventioninstitute.org</a></p> <p><a href="http://www.omhrc.gov/assets">www.omhrc.gov/assets</a></p>	<p>Poor health and safety outcomes, including chronic disease, traffic-related injuries, mental illness, substance abuse, teen pregnancy, and violence, are disproportionately high among low-income people and people of color in the United States. In addition, the impact of racism and oppression increases numerous risk factors for illness and injury, including reduced access to fresh nutritious foods, fewer opportunities for physical activity, greater exposure to environmental toxins, and substandard housing and neighborhood conditions.</p> <p>With the increased recognition of existing health disparities in the United States, there has been an emphasis on treatment and intervention. However, there is also a need to prevent health disparities before the</p>

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		<p>onset of injury, illness, or death. Focusing on underlying factors, both risk and resilience, can save lives and money and reduce suffering. Resilience, defined here as the ability to thrive and overcome risk factors, merits attention in order to achieve health and safety outcomes. Studies show that resilience factors can counteract the negative impact of risk factors and that effective approaches need to include attention to both. Given the preponderance of attention to risk factors, this project will highlight resilience factors that support health and safety outcomes.</p> <p>Resilience approaches have tended to focus on individual measures; attention to community-level factors is also important. For example, the building blocks of healthy communities include marketing and availability of healthy foods as opposed to fast food and tobacco, safe parks, effective education, health and social services, community gathering places, and locally owned businesses. Research confirms the relationship between such factors and health and safety outcomes. For instance, social cohesion corresponds with significant increases in physical and mental health, academic achievement, and local economic development, as well as lower rates of homicide, suicide, and alcohol and drug abuse. Other examples of community resilience factors include environments that promote walking, bicycling, and other forms of incidental or recreational activity, jobs, a willingness to take action for the common good, positive inter-group relations, and positive behavioral norms. By strengthening such factors, communities have significant capacity to enhance health and safety.</p> <p>The purpose of this project was to develop a community asset evaluation tool to assist communities in advancing resiliency factors in support of Healthy People 2010 and its goal of eliminating health disparities. The objectives were to: (1) delineate a set of community assets/resiliency factors related to Healthy People 2010 goals; (2) develop and pilot test a community asset evaluation tool that incorporated identified factors; and (3) delineate preliminary guidelines on how to strengthen community assets to eliminate health disparities. Using a five-part methodology (i.e., an environmental scan, a national expert panel to advise the project, development of a draft assessment tool/toolkit, pilot-testing in three communities, and development of a set of preliminary guidelines), a Toolkit for Health &amp; Resilience In Vulnerable Environments (THRIVE) was developed.</p> <p>This toolkit, with its emphasis on resilience and community strengths, offers community leaders an alternative and constructive way of viewing the environmental factors that influence health and well-being as they undergo their strategic planning and needs assessment efforts to improve health outcomes and close health gaps for members of their communities.</p>

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		<p>Prevention Institute successfully piloted THRIVE in October-December 2003 in Hidalgo County, New Mexico; Del Paso Heights, Sacramento, California; and in New York City (East Harlem, South Bronx, Central Brooklyn). THRIVE was ratified by the Expert Panel in March 2004, and is awaiting federal approval. If you would like to receive a copy of the tool upon approval, please contact Rachel Davis at 510.444.7738 or <a href="mailto:rachel@preventioninstitute.org">rachel@preventioninstitute.org</a>.</p>
Strategies for Improving Minority Healthcare Quality	<p>Beach MC, Cooper LA, Robinson KA, Price EG, Gary TL, Jenckes MW, Gozu A, Smarth C, Palacio A, Feuerstein CJ, Bass EB, Powe NR. Strategies for Improving Minority Healthcare Quality. Evidence Report/Technology Assessment No. 90. (Prepared by the Johns Hopkins University Evidence-based Practice Center, Baltimore, MD.) AHRQ Publication No. 04-E008-02. Rockville, MD: Agency for Healthcare Research and Quality. January 2004 <a href="http://www.ahrq.gov">www.ahrq.gov</a></p>	<p>In recent years, it has become clear that the healthcare system in the United States is not providing the same quality of care for ethnic minority populations that it does for the majority white population. Racial and ethnic disparities in access to and quality of healthcare have been extensively documented. The Institute of Medicine report, <i>Unequal Treatment</i>, confirmed that racial and ethnic disparities in healthcare are not entirely explained by differences in access, clinical appropriateness, or patient preferences. There is also increasing evidence that provider behaviors and practice patterns contribute to disparities in care. Despite extensive documentation of inequities in healthcare quality, little is known about strategies with the potential to improve the quality of healthcare for ethnic minority populations. For those interested in quality improvement, there is a need for an evaluation and synthesis of the strategies that have been shown to be effective in bettering the quality of healthcare for ethnic minorities.</p> <p>The purpose of this report is to systematically review the evidence to determine the effectiveness of interventions designed to improve the quality of healthcare and/or to reduce disparities for ethnic minorities. It focuses on evaluations of interventions aimed at healthcare providers or organizations, as recent work suggests these factors contribute substantially to the inequities. We examined broadly any type of strategy aimed at improving the quality of care in an ethnic minority population of patients, and then looked more specifically at strategies designed to improve the cultural competence of healthcare providers or organizations.</p> <p>Focused on interventions that targeted providers and organizations.</p>
A randomized controlled trial of a home-visiting intervention on cognition and behavior in term low birth weight infants	<p>JM Gardner, SP Walker, CA Powell and S Grantham-McGregor: Journal of Pediatrics Vol. 143, No. 5, pp. 634-639, November 2003</p>	<p>Early, low cost intervention can improve cognition and behavior of LBW infants in developing countries.</p>



Title	Author/Publication	Abstract
Outcome Effectiveness of Community Health Workers: An Integrative Literature Review	Susan M. Swider: Public Health Nursing, 19 (1) (2002): 11-20	Community health workers (CHW) are promoted as a mechanism to increase community involvement in health promotion efforts, despite little consensus about the role and its effectiveness. This article reviews the data based literature on CHW effectiveness, which indicates preliminary support for CHWs in increasing access to care, particularly in underserved populations. There are a smaller number of studies documenting outcomes in the areas of increase health knowledge, improved health status outcomes and behavioral changes, with inconclusive results. Although CHWs show some promise as an intervention, the role can be doomed by overly high expectations, lack of a clear focus, and lack of documentation. Further research is required with an emphasis on stronger study design, documentation of CHW activities and carefully defined target populations.
Using Evidence-Based Practice to Improve Intrapartum Care	Suzan Kardong-Edgren RNC, MS: Journal of Obstetric, Gynecologic, & Neonatal Nursing 30 (4), 371–375, 2001	The Cochrane Data Base ( <a href="http://www.cochrane1library.com/clibhome/clib.htm">http://www.cochrane1library.com/clibhome/clib.htm</a> , retrieved February 23, 2001), a comprehensive international review of current medical and obstetric practices, demonstrates that birth outcomes improve with one-to-one labor support but not necessarily with continuous fetal monitoring. Because of a cultural bias toward technology, however, few extrinsic rewards exist for nurses who provide individualized labor support. Clinical scholarship in the obstetric setting is one way to begin changing ritualized practices, incorporating evidence-based practice, and improving nursing care.
Effects of home visits to vulnerable young families	MH Kearney, R York and JA Deatrick: Journal of Nursing Scholarship: Vol. 32, No. 4, pp. 369-76, 2000	Nurse home visits to new parents have been replaced in many high-need communities with nonprofessional visits without clear evidence of effectiveness. Previous reviews of home visiting research have combined nurse and non-nurse interventions and have pooled studies from the US, where home visiting is mainly limited to low-income families, with those from nations where home visiting is a universal services. This integrative review was focused on nurse-delivered interventions in the US and Canada to identify the nursing-specific models with the greatest effect n this cultural context. Found that maternal outcomes, maternal-infant interaction and parenting were more often influenced than was child development, except in preterm infants. Well-child health care did not improve. Effective programs generally began in pregnancy, included frequent visits for more than a year, had well-educated nurses and were focused on building a trusting relationship and coaching maternal-infant interaction.
<b>DATA</b>		
Reducing Racial and Ethnic Disparities: A Quality Improvement Initiative in Medicaid Managed Care	Center for Health Care Strategies, Inc., 2007	Collecting data by race and ethnicity is a critical first step in reducing racial and ethnic disparities in health care.
2006 National Healthcare Disparities	Agency for HealthCare Research and	Tracks disparities related to quality of health care and access to health

Title	Author/Publication	Abstract
Report	Quality <a href="http://www.ahrq.gov">www.ahrq.gov</a> Pub. No. 07-0012	care. Four key themes: disparities remain prevalent across all dimensions of both; some disparities are diminishing while others are increasing; opportunities for reducing disparities remain; and information about disparities is improving, but gaps still exist. Further, improvements needed in collection and analysis of data on race ethnicity, and matching these to existing quality measures and developing quality improvement interventions.
Children Left Behind: How Metropolitan Areas Are Failing America's Children	Delores Acevedo-Garcia, Nancy McArdle, Theresa L. Osypuk, Bonnie Lefkowitz, Barbara K. Krimgold: Harvard School of Public Health and the Center for the Advancement of Health, January 2007 <a href="http://diversitydata.sph.harvard.edu">http://diversitydata.sph.harvard.edu</a>	<p>The diversity data website is an interactive, online resource that brings together a wide range of indicators on many dimensions of well-being, including housing, neighborhood conditions, residential integration, education and health. Profiles U.S. metropolitan areas, home to 80% of the nation's children. This report focuses on the 100 metropolitan areas with the largest child populations, including Milwaukee. Concludes that black and Hispanic children face particularly severe challenges, especially compared to white and Asian children. Not only do black and Hispanic children live in families that experience many disadvantages, but disparities among individuals and families are exacerbated by vast inequalities in neighborhood and school environments. These inequalities go beyond what can be explained by income differences, as poor black and Hispanic children tend to encounter environments considerably worse than poor white and Asian children. Given that minority children represent the fastest-growing segment of the child population everywhere and the majority of all children in many metropolitan areas, the disparities they face have implications not just for their well-being but for an entire region's well-being, in terms of economic development, social mobility and inequality, and race/ethnic relations.</p> <p>The conditions that contribute to these inequalities suggest some possible policy solutions. Need regional strategies and solutions, as local government fragmentation contributes to inequities in housing, employment and schools, among others. Public/private partnerships are needed.</p> <p>Models that work:  <u>Early childhood development</u> programs such as Perry Preschool and Abecedarian and Early Head Start and Head Start;  <u>Housing choice, mobility and neighborhood improvement</u> programs such as: Gautreaux program in Chicago, Moving to Opportunity policy demonstrations in Baltimore, Boston, Chicago, Los Angeles and New York, and regional housing mobility programs in Baltimore, Dallas and Westchester County, NY;  <u>Education</u> - segregated minority schools face not only the disadvantages of concentrated poverty, but also a number of other resource challenges, including high teacher turnover, less experienced and qualified teachers, larger class sizes, inadequate facilities, and lower per-pupil spending.</p>



Title	Author/Publication	Abstract
		Some school districts (Louisville KY and Lynn MA) have adopted voluntary school integration plans that allow schools to take race into account when making student to school assignments; others experimenting with economic-based integration plans. Schools are needed in poor and minority neighborhoods – the Knowledge is Power Program has been shown to boost performance on standardized tests (Educational Policy Institute, 2005) .
Pregnancy Risk Assessment Monitoring System (PRAMS): Possible New Roles for a National MCH Data System	Milton Kotelchuck: Public Health Reports, January-February 2006, Vol. 121, pp. 6 – 10	Suggests that PRAMS be used to enhance the quality of maternal, infant and family health practices by (1) improving the continuity of maternal and infant health from pregnancy through the early post-partum period; (2) address maternal health by focusing on specific women’s health issues such as partner violence, post-pregnancy weight recovery, smoking reduction, etc.; (3) contribute to disparities research; (4) monitor health program participation and impact; (5) provide a conduit for community “voice” and involvement in research and program development; (6) add focus on mothers’ birth experiences; and (7) serve as a site for MCH methodological research.
Painting a Truer Picture of US Socioeconomic and Racial/Ethnic Health Inequalities: The Public Health Disparities Geocoding Project	Nancy Krieger, Jarvis T. Chen, Pamela D. Waterman, David H. Rehkopf and S.V. Subramanian American Journal of Public Health, February 2005, Vo. 95, No. 2, 312-323.	Describes a method to facilitate routine monitoring of socioeconomic health disparities in the US. Analyzed geocoded public health surveillance data, including events from birth to death (births, childhood lead poisoning, sexually transmitted infections, nonfatal weapons-related injuries, cancer incidence and all-cause and cause-specific mortality), linked to 1990 census tract poverty data for Massachusetts and Rhode Island. For virtually all outcomes, risk increased with census tract poverty, and when adjusted for census tract poverty, racial/ethnic disparities were substantially reduced. For half the outcomes, more than 50% of cases would not have occurred if population rates equaled those of persons in the least impoverished census tracts. Concluded that geocoding and use of the census tract poverty measure permit routine monitoring of US socioeconomic inequalities in health, using a common and accessible metric.

Title	Author/Publication	Abstract
Measuring Racial Discrimination: Panel on Methods for Assessing Discrimination	<p>Rebecca M. Blank, Marilyn Dabady, and Constance F. Citro, Editors: Committee on National Statistics, Division of Behavioral and Social Sciences and Education, National Research Council Of The National Academies: 2004</p> <p>The National Academies Press Washington, D.C. <a href="http://www.nap.edu">www.nap.edu</a></p>	<p>Intent of this report is to provide guidance to social science researchers interested in measuring discrimination. For the purpose of understanding and measuring racial discrimination, race should be viewed as a social construct that evolves over time. Despite measurement problems, data on race and ethnicity are necessary for monitoring and understanding evolving differences and trends in outcomes among groups in the U.S. population.</p> <p>This report adopts a social science definition of racial discrimination that has two components:</p> <ol style="list-style-type: none"> <li>1. <i>differential treatment on the basis of race</i> that disadvantages a racial group and</li> <li>2. <i>treatment on the basis of inadequately justified factors other than race</i> that disadvantages a racial group (differential effect).</li> </ol> <p>In this report, we focus on discrimination against disadvantaged racial minorities. The two components of our definition—differential treatment and differential effect discrimination—are related to but broader than the standards embodied in case law in the U.S. legal system, which are <i>disparate treatment</i> and <i>disparate impact discrimination</i>. An example of potentially unlawful disparate treatment discrimination would be when an individual is not hired for a job because of his or her race. An example of potentially unlawful disparate impact discrimination would be when an employer uses a test in selecting job applicants that is not a good predictor of performance on the job and results in proportionately fewer job offers being extended to members of disadvantaged racial groups compared with whites.</p>
Who, When, and How: The Current State of Race, Ethnicity, and Primary Language Data Collection in Hospitals	<p>Romana Hasnain-Wynia, Debra Pierce, and Mary A. Pittman, The Commonwealth Fund, May 2004 <a href="http://www.commonwealthfund.org">www.commonwealthfund.org</a></p>	<p>According to the Institute of Medicine, standardized data collection is critical to understanding and eliminating racial and ethnic disparities in health care. A critical barrier to eliminating disparities and improving the quality of patient care is the frequent lack of even the most basic data on race, ethnicity, and primary language of patients within health care organizations. The methods for collecting these data are disparate and, for the most part, incompatible across organizations and institutions in the health care sector.</p> <p>The Health Research and Educational Trust (HRET) is working with a consortium of six leading hospitals and health systems to address racial and ethnic disparities in treatment and outcomes. To identify current practices around race, ethnicity, and primary language data collection in hospitals, site visits to each of the consortium members (Henry Ford Health System, Kaiser Permanente, Massachusetts General Hospital, Northwestern Memorial Hospital, Parkland Memorial Hospital, and the</p>

Title	Author/Publication	Abstract
		<p>University of Pittsburgh Medical Center Health System) were conducted to address questions about their data collection practices. In addition, 1,000 hospitals nationwide were surveyed to provide a wide-angle snapshot of what is taking place regarding race, ethnicity, and primary language data collection. The most recent (2003) American Hospital Association Annual survey, which is sent to 6,000 hospitals nationwide, also included two questions asking hospitals whether they gather information on patient race, ethnicity, and primary language; the survey has an 80 percent response rate.</p> <p>RECOMMENDATIONS. From the results of the surveys and site visits, it is clear that the collection of data on patients' race, ethnicity, and primary language is not standardized within or among the hospitals surveyed and visited and that such collection must be standardized in order to be effective. We offer the following recommendations to achieve this goal:</p> <ul style="list-style-type: none"> <li>*Hospitals should standardize who provides information. Patients or their caretakers are more likely to provide accurate information about patients' race, ethnicity, and language than an admitting clerk or health care provider based on observation.</li> <li>*Hospitals should standardize when data are collected. Collection of data on patients' race, ethnicity, and language upon admission or patient registration will ensure that appropriate fields are completed at the time a patient begins treatment at the hospital.</li> <li>*Hospitals should standardize which racial and ethnic categories are used. If hospitals are going to use categories, then the Office of Management and Budget (OMB) categories should be used, which would allow for use of standard racial and ethnic categories by all hospitals (see Appendix 3). At the same time, hospitals can use fine-grained categories of Hispanic or Asian groups, for example, that could then expand to broader U.S. Census categories as needed.</li> <li>*Hospitals should standardize how data are stored. Race, ethnicity, and language data should be stored in a standard format that is compatible across hospitals and health systems. Many of the newer data systems used by hospitals have separate fields for race, ethnicity, and primary language. The data systems may allow for export and import and merging with clinical data files.</li> <li>*Hospitals should standardize their responses to patients' concerns. Patients' concerns about the ways in which data on race, ethnicity, and language will be used should be addressed prior to collecting the information. There should be a uniform rationale offered to all patients before asking them to identify their racial/ethnic background.</li> </ul> <p>Collection and reporting of data on patients' race and ethnicity are critical if hospitals and other private health organizations want to engage as active partners in improving overall quality of care and reducing racial and ethnic disparities. The availability of accurate and timely data on</p>

Title	Author/Publication	Abstract
		<p>health care access and utilization by patients' race, ethnicity, and primary language will contribute to increased awareness of racial and ethnic disparities in health, identification of appropriate target populations for interventions to improve quality of care, and development of programs and strategies to eliminate disparities. It also will facilitate monitoring and evaluation of the effects of interventions, and ultimately provide the answer to the following questions: "For whom are we developing initiatives and are these initiatives appropriate for these populations?" To accomplish the overarching goals of improving quality and reducing disparities, it is imperative that the leadership of hospitals and health systems be supportive and involved; invest in staff training at all levels; ask patients to self-identify their race, ethnicity, and primary language, and ensure that data collected are valid and reliable through constant monitoring and evaluation.</p> <p><b>NEXT STEPS.</b> The development of a framework to collect information on patient race, ethnicity, and primary language is a first step and lays the foundation in a long-term effort to improve quality of care and reduce disparities. Consortium members, along with a National Advisory Panel appointed by HRET, have been working to develop such a framework. Once a framework is agreed upon, a set of clinical conditions and a core set of indicators to track over time will be selected. By linking clinical information with information about patients' race, ethnicity, and primary language, consortium members will track the care process and where it breaks down, or has the potential to break down. In addition, they will develop interventions and initiatives to improve the care process for various population groups.</p>
Tracking Services for Infants, Toddlers & Their Families: A Look at Federal Early Childhood Programs and the Roles of State and Local Governments	Zero to Three Policy Center: August 2007	Chart of key federal programs specifically geared toward young children and the roles of federal, state and local governments in those programs, divided into issue categories of: child care and early childhood education, child welfare, health and mental health, poverty, and professional development/higher education.

## **APPENDIX 6**

### **EVIDENCE-BASED MEDICAL PRACTICE INFLUENCING BIRTH OUTCOMES**

Some of the non-modifiable risk factors for poor birth outcomes (preterm or low birth weight birth, congenital anomalies, or infant death) include the following: African-American race; prior preterm birth; maternal age <18 or >40 years; poor nutrition and vitamin intake prior to pregnancy; low socioeconomic status; cervical or uterine anomaly; premature cervical dilatation or effacement; multiple pregnancy; and polyhydramnios.

Some of the modifiable risk factors for poor birth outcomes include the following: behavioral risk associated with use of tobacco, alcohol, medication, or recreational drugs; short interpregnancy interval; absent prenatal care; anemia; infection [bacteriuria/urinary tract infection (UTI); sexually-transmitted infection (STI)], such as gonorrhea, Chlamydia, bacterial vaginosis, Group B  $\beta$ -hemolytic streptococcus, HIV/AIDS; and periodontal disease); chronic disease (diabetes, hypertension/preeclampsia/eclampsia, asthma, and obesity); depression (prenatal and post-partum) and other mental-health conditions; and strenuous work and/or high environmental stress. Early recognition of the onset of preterm labor as well as the absence of fetal movements is necessary for the expectant mother. Also, for the infant, breast feeding, immunizations, treatment of acute and chronic disease, and safe sleep (on the back, on a firm surface, with no blankets or soft toys, no bedsharing, no environmental tobacco smoke, and no overheating) offer protective factors from increased risk of death during the first year of life.

Although cultural competency and cultural humility, as well as psychosocial support and care coordination, are essential components of preconception, prenatal, and interconception care, good medical and health care are necessary for those who have modifiable health risk factors. In fact, one might imagine a woman with gestational diabetes that is inappropriately managed. Even though the woman has a strong social support system and has reduced behavioral risk, if her diabetes is not well managed during pregnancy, and her blood glucose is out of control, the infant will be at risk for preterm birth, low birth weight or macrosomia, congenital anomalies, and infant mortality. Medical care, both preconceptionally and prenatally, should be delivered using best-practice or evidence-based methods.

The Wisconsin Department of Health and Family Services Healthy Birth Outcomes Project has a statewide team (chaired by Murray L. Katcher, MD, PhD, and Tina Mason, MD) to examine evidence-based medical practices that may result in improved birth outcomes. The team will produce its report in late summer 2008. The following evidence-based databases are being reviewed: PubMed Clinical Queries, Cochrane Database of Systematic Reviews, DARE (Database of Abstracts of Reviews of Effects), ACP (American College of Physicians) Journal Club, and POEMS (Patient Oriented Evidence That Matters). In addition, guidelines from the American College of Obstetricians and Gynecologists (ACOG), the American Academy of Pediatrics (AAP), and the American Academy of Family Practice are

being reviewed. Finally, UpToDate and the National Guidelines Clearinghouse (NGC) will also be used. After completion of the topical reviews, an assessment of the strength of evidence will be made. Although more than 20 topics will be reviewed in this manner, only a few are expanded upon below.

An epidemiologic analysis of Wisconsin birth outcomes data, including racial disparities, has been completed using the Perinatal Periods of Risk (PPOR) methodology ([http://www.citymatch.org/ppor\\_index.php](http://www.citymatch.org/ppor_index.php)), and it will be updated in 2008 by race and by geographic area in Wisconsin. This analysis will be done by the Wisconsin Division of Public Health in partnership with county and city health departments in the affected areas. The results will point to the most relevant interventions, as determined by Wisconsin data.

The evidence-based workgroup is examining the following list of topics, their relationship to birth outcomes, and the strength of the available evidence:

1. Breast feeding
2. Prevention of sudden unexpected death in infancy (SUDI)—safe sleep (bed sharing, back to sleep, tobacco use, etc.)
3. Community Health Worker/Doula/Home-Visiting Programs
4. Preconception/interconception care (including unplanned pregnancy, family planning; use of multivitamins with folic acid; stress over the life course)
5. Urinary Tract Infection screening (nitrite, leukocyte esterase, U/A, culture), treatment, and proof of treatment success
6. STI screening, detection, treatment, and proof of treatment success (Group B  $\beta$ -hemolytic streptococcus; gonorrhea, Chlamydia, bacterial vaginosis, etc.)
7. Perinatal mental health/depression and stress screening and treatment
8. Domestic violence screening and treatment
9. Use of 17 alpha-hydroxyprogesterone caproate (17-P) and/or tracking systems where a previous LBW/premature baby (less than optimal outcome) or infant death
10. Oral health and periodontal disease
11. HIV testing for pregnant women
12. Tobacco/smoking cessation
13. Maternal drug and alcohol use
14. Recognition of signs preterm labor and diminution of fetal movement
15. Interconception spacing of at least 18 months
16. Prenatal screening panel use
17. Patient education/empowerment/use of health navigator for medical office and referral visits
18. Effect of geography/environment (zip code/census tract) for toxin exposure (lead, etc.)
19. Effect of Infant immunization
20. Indications for elective C-sections/vaginal birth after Caesarians (VBACs)

21. Chronic disease management: diabetes, hypertension/preeclampsia, asthma, obesity

Some investigations of these topics are already in progress by use of evidence-based literature searches. The committee is looking at how certain medical (and some non-medical) procedures might be used within the new Wisconsin Medicaid pay-for-performance model. These activities would certainly be aided by the intellectual capital of the faculty and students of UWMSPH. We have some strong indications that our most vulnerable mothers are not receiving the excellent prenatal care described in the evidence-based literature and guidelines of prominent professional societies.

Some examples of early findings from the Wisconsin Department of Health and Family Services Healthy Birth Outcomes Project statewide team to examine evidence-based medical practices:

### **PREVIOUS PRETERM BIRTH**

- Prior preterm birth (PTB) is a strong predictive factor for PTB (2-20 times, when compared with women with no prior history of PTB); recurrence is often at approximately the same gestational age; highest risk for morbidity and mortality when previous PTB occurred 20-26 weeks gestational age
- Risk of recurrent PTB

**Table. Risk of recurrent preterm birth in a third pregnancy**

<b>Obstetrical history</b>	<b>Risk of PTB (%)</b>
Two prior preterm births	42
Both 32-36 weeks	33
Both <32 weeks	57
Term birth followed by PTB	21
PTB followed by term birth	13
Two prior term births	5

*Data from: McManemy, et al., 2007*

- Several randomized controlled trials have shown that using 17-P in women who have had a previous preterm birth is effective at decreasing the rate of preterm birth in the current pregnancy.

- References
  - Mercer, BM, Goldenberg, RL, Moawad, AH, et al. The preterm prediction study: effect of gestational age and cause of preterm birth on subsequent outcome. *Am J Obstet Gynecol*. 2005;192:882.
  - National Institute of Child health and Human Development Maternal-Fetal Medicine Units Network. *Am J Obstet Gynecol* 1999; 181:1216.
  - McManemy, J, Cooke, E, Amon, E, Leet, T. Recurrence risk for preterm delivery. *Am J Obstet Gynecol* 2007; 196:576.

## **SHORT INTERPREGNANCY INTERVALS**

- Interpregnancy interval between the birth of one child and conception of the next appears to be one of the factors associated with preterm birth (<37 weeks), low birth weight (<2500 g), and growth restriction (<10th percentile of weight for gestational age); the highest risk for these outcomes occur at interpregnancy intervals of <6 months; the least risk for intervals of 18-23 months; and there is an increasing risk thereafter.
- Recommendations — No prospective studies exist in which attempts were made to avoid short or long interpregnancy intervals in a population. The data available are insufficient for making definitive conclusions or evidence-based recommendations regarding pregnancy spacing.
- In general, meta-analysis of controlled studies suggests that the optimal interpregnancy interval is approximately 18 to 59 months.
- The highest risk of preterm birth appears to be with interpregnancy interval <6 months. However, the increased risk of preterm birth associated with a short interpregnancy interval is small compared to such risks as a previous preterm delivery or multiple gestation. Unlike many individual medical and demographic risk associations, short interpregnancy interval is a variable that an individual woman can control. Encouraging child spacing by delay in resumption of sexual intercourse, prolonged breast feeding, and use of contraception are readily available measures that can lengthen the interpregnancy interval and may be good public health policy. Women with a history of preterm birth, low birth weight, or small for gestational age infants should probably space their pregnancies at least 6 months apart; the role of reproductive health and family planning may be important in this effort.
- References:
  - Zhu, BP, Rolfs, RT, Nangle, BE, Horan, JM. Effect of the interval between pregnancies on perinatal outcomes. *N Engl J Med* 1999; 340:589.
  - Conde-Agudelo, A, Rosas-Bermudez, A, Kafury-Goeta, AC. Birth spacing and risk of adverse perinatal outcomes: a meta-analysis. *JAMA* 2006; 295:1809.
  - Miller, JE. Birth intervals and perinatal health: an investigation of three hypothesis. *Fam Plann Perspect* 1991; 23:62.



- Winkvist, A, Rasmussen, KM, Habicht, JP. A new definition of maternal depletion syndrome. Am J Public Health 1992; 82:691.
- Grade 2C recommendation: a very weak recommendation; other alternatives may be equally reasonable.

## **INFECTION**

A clear association exists between infection/inflammation and preterm birth (PTB). Placental pathologists have found that 20-75% of PTBs have evidence of chorioamnionitis, and 30-60% have positive membrane cultures. Microorganisms associated with PTBs produce prostaglandins that contribute to cervical softening. They also induce an inflammatory response through the hypothalamic/pituitary/adrenal axis.

## **STIs**

- STIs in pregnancy result in a variety of unfortunate outcomes, depending upon the infection in question.
- The CDC recommends that pregnant women be screened for the following STIs early in pregnancy:
  - HIV (retest high-risk women in third trimester)
  - Syphilis
  - Hepatitis B surface antigen
  - Chlamydia (retest women under 25 years old or otherwise high-risk in third trimester)
  - Gonorrhea, if pregnant woman is considered at-risk
  - Hepatitis C, if pregnant woman is considered at-risk
  - Group B  $\beta$ -hemolytic streptococcus may cause infant death from sepsis or meningitis
  - Bacterial vaginosis, if pregnant woman is considered high-risk for preterm labor
- A screening for STI should occur at the first prenatal visit. If positive, treatment, proof of success, and re-screening should occur throughout the pregnancy.
- References:
  - Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5511a1.htm>

## **UTI**

- There is a preponderance of evidence that supports an association between asymptomatic bacteriuria during pregnancy and preterm delivery or low birth weight.
- The efficacy of screening and treatment to reduce UTI and improve birth outcomes is clearly demonstrated within the evidence. According to USPSTF

guidelines: “The U.S. Preventive Services Task Force strongly recommends that all pregnant women be screened for asymptomatic bacteriuria using urine culture at 12-16 weeks' gestation.”

- References:
  - Smaill F, Vazquez JC. Antibiotics for asymptomatic bacteriuria in pregnancy. Cochrane Database of Systematic Reviews 2007, Issue 2. Art. No.: CD000490. DOI: 10.1002/14651858.CD000490.pub2.
  - U.S. Preventive Services Task Force. Screening for Asymptomatic Bacteriuria: Recommendation Statement. February 2004. Agency for Healthcare Research and Quality, Rockville, MD.  
<http://www.ahrq.gov/clinic/3rduspstf/asymbac/asymbacrs.htm>

## **TOBACCO USE**

Smoking is the most important modifiable risk factor associated with adverse pregnancy outcomes. In populations of women with a high prevalence of smoking, it is estimated that cessation during pregnancy could prevent:

- 10 percent of perinatal deaths
- 35 percent of low birth-weight births
- 15 percent of preterm deliveries

In addition, smoking and secondhand smoke exposure increases the risk of infertility, placental abruption, preterm premature rupture of membranes, and placenta previa. Smoking during and after pregnancy also provides increased risk for infant death from SUDI/SIDS, as well as increased morbidity from respiratory disease..

- Women should have access to evidence-based programs for decreasing tobacco use preconceptionally, prenatally, and after delivery.

## **SIDS**

- SIDS is the leading cause of infant death in the US between one month and one year of age. In the black community, the incidence of SIDS is more than twice as high as the white community, indicating a significant disparity.
- Evidence supports the effectiveness of in-hospital educational programs for new mothers and caregivers using the AAP's safe sleep guidelines. Additionally, providing newborns with a crib and safe bedding both ensures a safe place to sleep and reinforces the safe sleep principles. Follow-up calls at both 2 and 6 months would provide additional reinforcement.
- Safe sleep guidelines include the following:
  1. Always place babies on their backs for sleep.
  2. Place babies on a firm sleep surface, such as on a safety-approved crib mattress, covered by a fitted sheet.

3. Keep soft objects, toys and loose bedding out of a baby's sleep area.
  4. Avoid smoking in a baby's environment.
  5. Keep babies from overheating while at sleep.
  6. Avoid bed sharing; babies are safest when sleeping alone in their own bed in proximity to the parent.
  7. Pacifiers may have a protective effect by keeping the upper airway open.
- References:
    - Pickett, K.E., Luo, Y., Lauderdale, D.S. "Widening social inequalities in risk for sudden death syndrome." *American Journal of Public Health* (November, 2005).
    - Burd L., Peterson M. Face F.C. Shervold, Klug. "Efficacy of a SIDS risk factor education methodology at a Native American and Caucasian site." *Maternal Health Journal*, (July 11, 2007).
    - Moon, K.Y., Oden, R.P., Grady, K.C. "Back to sleep: an education intervention with women, infants and children program clients." *Pediatrics* (March, 2004).
    - Colson, E.R., Joslin, S.C. "Changing nursery practices gets inner-city infants in the supine position for sleep." *Achieve of Pediatric Medicine* (July, 2002).
    - Srivatsa, B., Eden, A.N. "Infant sleep position and SIDS: a hospital-based intervention study." *Journal of Urban Health* (September, 1999).

## UNPLANNED PREGNANCY

- The evidence supports a link between infant mortality/poor birth outcomes and unplanned pregnancy.
- Evidence for intervention, however, is difficult to find. Contraception, including condoms and Plan B, did not appear to reduce unplanned pregnancy by a statistically significant margin. Educational alternatives seem to be slightly more helpful, especially when multifaceted and tailored toward specific populations.
- References:
  - DiCenso A, Guyatt G, Willan A, Griffith L. Interventions to reduce unintended pregnancies among adolescents: a systematic review of randomised controlled trials. *BMJ* 2002; 324: 1-9.
  - Kirby DB. The 'safer choices' intervention: its impact on sexual behaviors of different subgroups of high-school students. *J Adol Health* 2004; 12(6) 110-25.
  - Kost K, Landry DJ, Darroch JE. The effects of pregnancy planning status on birth outcomes and infant care. *Fam Plann Perspect.* 1998(30) 5: 223-30.

- Puffer RR. Family planning issues relating to maternal and infant mortality in the United States. Bull Pan Am Health Organ 1993; 27(2): 120-34.

## DEPRESSION

- Prevalence during pregnancy is estimated to be greater than 11%.
- The direct link between depression and infant mortality as an endpoint is not well examined; surrogate endpoints including low infant birth weight are more readily accessible, but still lacking in volume and clarity.
- Little consensus exists regarding proper screening and treatment of depression in pregnancy.
  - Experts do agree, however, that screening for depression should occur on a regular basis throughout the perinatal period. ACOG guidelines state that “a positive response to both questions suggest the need for further evaluation”:
    - Over the past 2 weeks, have you ever felt down, depressed, or hopeless?
    - Over the past 2 weeks, have you felt little interest or pleasure in doing things?
  - Treatment options range from psychotherapy and counseling, medications including SSRIs, and electroconvulsive therapy for refractory cases.
- References:
  - ACOG Committee Opinion No. 343, August 2006 -- Psychosocial Risk Factors: Perinatal Screening and Intervention
  - Gaynes BN, Gavin N, Meltzer-Brody S, Lohr KN, Swinson T, Gartlehner G, et al. Perinatal depression: prevalence, screening accuracy, and screening outcomes. Evidence Report/Technology Assessment No. 119. (Prepared by the RTI–University of North Carolina Evidence-based Practice Center, under Contract No. 290-02-0016.) AHRQ Publication No. 05-E006-1. Rockville (MD): Agency for Healthcare Research and Quality; 2005.
  - Zuckerman B, Amaro H, Bauchner H, Cabral H. Depressive symptoms during pregnancy: relationship to poor health behaviors. Am J Obstet Gynecol 1989;160: 1107–11.
  - Pignone M, Gaynes BN, Rushton JL, Mulrow CD, Orleans CT, Whitener BL, et al. Screening for depression. (Prepared by the RTI–University of North Carolina Evidence-based Practice Center under Contract No. 290-97-0011.) Systematic Evidence Review No. 6. Rockville (MD): AHRQ; 2002. Available at: <http://www.ahrq.gov/downloads/pub/prevent/pdfser/depser.pdf>.

## DOMESTIC VIOLENCE

- Although the evidence does not support the assertion that domestic violence alone during pregnancy results in poor birth outcomes, the presence of domestic violence correlates well with other factors that have been shown to result in poor birth outcomes including substance abuse, tobacco use, late onset of prenatal care, stress, trauma, lower levels of education, and lower

socioeconomic status. In other words, **domestic violence is indirectly related to poor birth outcomes.**

- The incidence of domestic violence increases during pregnancy.
- The evidence that routine screening for domestic violence in pregnant women reduces poor birth outcomes is insufficient, because there are too many links in the chain connecting domestic violence and birth outcomes to evaluate direct causation. However, many respected authorities including ACOG and the Canadian Task Force on Preventive Services recognize the value of screening for domestic violence as an aspect of good obstetrical care. Therefore, **screening for domestic violence in pregnancy is recommended.** There is currently no consensus regarding a “best” method for domestic violence screening.
- Advocacy programs have been shown to improve outcomes for pregnant victims of domestic violence, but there is no direct evidence to demonstrate that reducing domestic violence in pregnant women will improve birth outcomes.
- References:
  - ACOG Committee Opinion No. 343, August 2006 -- Psychosocial Risk Factors: Perinatal Screening and Intervention
  - Boy A, Salihu HM. Intimate partner violence and birth outcomes: a systematic review. *Int J Fertil Womens Med.* 2004 Jul-Aug;49(4):159-64.
  - Sullivan, C. M. (2003). Using the ESID model to reduce intimate male violence against women. *American journal of community psychology*, 32(3-4), 295-303.

## HOME VISITS

- “Babies born to socio-economically disadvantaged mothers are at higher risk of a range of problems in infancy. Home visiting programs are thought to improve outcomes, both for mothers and children, largely through advice and support.” (Bennett et al)
- These programs are effective in reducing child abuse and neglect
- The Task Force on Community Preventive Services recommends supporting early childhood home visiting interventions for prevention of child abuse and neglect in families at risk of maltreatment.
- In selecting and implementing interventions, communities should carefully assess the need for such programs (e.g., the burden of child maltreatment) and clearly define the target populations. Home visiting programs support parenting and life skills, prenatal care, and case management.
- High-risk target populations have included teenage parents; single mothers; families of low socioeconomic status; families with very low birthweight infants; parents previously investigated for child maltreatment; and parents with alcohol, drug, or mental health problems.
- The population that might benefit is large.

- On the basis of strong evidence of effectiveness, the Task Force recommends early childhood home visitation for the prevention of child abuse and neglect.
- The Task Force found insufficient evidence to determine the effectiveness of early childhood home visitation in preventing violence by visited children, violence by visited parents (other than child abuse and neglect), or intimate partner violence in visited families. (Note that insufficient evidence to determine effectiveness should not be interpreted as evidence of ineffectiveness.)
- Programs delivered by professional visitors (nurses or mental health workers [with either post-high school education or experience in child development]) yielded more beneficial effects than did those delivered by paraprofessionals. Programs delivered by nurses demonstrated a median reduction in child abuse of 48.7% (interquartile range: 24.6%–89.0%); programs delivered by mental health workers demonstrated a median reduction in child abuse of 44.5% (interquartile range not calculable). For paraprofessional visitors, effects were mixed: the median reduction in child abuse was 17.7%, but the variability of the findings is reflected in the interquartile range of -41.2%–65.7%. In programs using paraprofessionals, beneficial effects were consistently evident only when programs were carried out for >2 years.
- The literature is ambivalent regarding the use of home visits to improve birth outcomes; however, some studies have shown that birth outcomes in black women were improved with the use of home visits. (Donovan et al)
- Guidelines to make home visits effective were recommended by Ciliska et al:
  - Involvement of community agencies
  - Initial intense weekly home visits
  - Most impact in high risk due to socially disadvantaged group
- References:
  - Bennett C, Macdonald GM, Dennis J, Coren E, Patterson J, Astin M, Abbott J. Home-based support for disadvantaged adult mothers. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD003759. DOI: 10.1002/14651858.CD003759.pub2.
  - Donovan EF, Ammerman RT, et al. Intensive home visiting is associated with decreased risk of infant death. *Pediatrics*. 2007; 119:1145-1152.
  - Ciliska D, Mastrilli P, et al. The effectiveness of home visiting as a delivery strategy for public health nursing interventions to clients in the prenatal and postnatal period: a systematic review. *Primary Health Care Research & Development*. 2001; 2 41-54.
  - Centers for Disease Control and Prevention. First reports evaluating the effectiveness of strategies for preventing violence: early childhood home visitation and firearms laws. Findings from the Task Force on Community Preventive Services. *MMWR* 2003;52(No. RR-14):1-9.