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Kimberly Dawn Farris Date

HEALTHY LIFE, HEALTHY BABY, HEALTHY ME: PROMOTING POSITIVE REPRODUCTIVE HEALTH OUTCOMES: A COMMUNICATION CAMPAIGN PLAN TO COMBAT ADVERSE BIRTH OUTCOMES AMONG HIGHER SOCIOECONOMIC STATUS AFRICAN AMERICAN WOMEN

BY

Kimberly Dawn Farris
Degree to be awarded: M.P.H.
Career MPH

Dan Rutz, MPH Committee Chair	Date
Sarita K. Davis, PhD, MSW Committee Member	Date
Melissa Alperin, MPH, MCHES Chair, Career MPH Program	Date

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BY

Kimberly Dawn Farris
M.P.H., Emory University, 2014
Ph.D., The University of Texas at Austin, 2005
M.S.W., Clark Atlanta University, 2000
A.B., University of Georgia, 1996

Thesis Committee Chair: Dan Rutz, MPH

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Abstract

HEALTHY LIFE, HEALTHY BABY, HEALTHY ME: PROMOTING POSITIVE REPRODUCTIVE HEALTH OUTCOMES: A COMMUNICATION CAMPAIGN PLAN TO COMBAT ADVERSE BIRTH OUTCOMES AMONG HIGHER SOCIOECONOMIC STATUS AFRICAN AMERICAN WOMEN

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Racial disparities in birth outcomes, including pre-term delivery, low birth weight, and infant mortality continue to be a serious reproductive health issue. In the general population, African American women have disproportionately higher rates of pre-term and low birth weight deliveries and higher rates of infant mortality than women from other racial/ethnic groups. Previous studies also show that African American women with higher levels of education and income are more likely than poorer, less-educated African American women and women from other racial categories to experience adverse birth outcomes. Thus, upward socioeconomic mobility apparently does not contribute to improved birth outcomes for this population. Traditionally, public health programs and policies have targeted women of color in lower income groups; however, the literature suggests that all vulnerable population subgroups must be targeted, including those from higher SES backgrounds. The poorly understood need and continuous poor birth outcomes provides an opportunity to begin addressing this issue with multiple strategies that will contribute to change with activities addressing education, policy, and environment issues for the target audience of African American women and other stakeholders, including physicians, reproductive health professionals and organizations, along with researchers and policymakers.

Thus, the focus of this campaign is to inform target audiences of risk factors related to adverse birth outcomes and to persuade the audiences to facilitate change in attitudes and behaviors. The goals of this proposed communication plan are to increase awareness and knowledge of risk factors for adverse birth outcomes among African American women; instill the importance of proactive self-care in reproductive healthcare; and, encourage support among peers with shared experiences as a means of celebrating positive outcomes. Additional areas of importance include determining education needs and outlining ethical and cultural considerations as it relates to the development and implementation of campaign tools. Behavior change objectives for each audience type are based on the life course model and ecological approach. The campaign approach, specifically social marketing and media advocacy will be thoroughly described. Finally, the role of policy, strategy for change and the evaluation plan will also be discussed.

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CHAPTER ONE: INTRODUCTION

Introduction

Health researchers have long noted racial disparities in birth outcomes, including pre-term delivery, low birth weight, and infant mortality (Dole, Savitz, Siega-Riz, Hertz-Picciotto et al., 2003; Dominguez, Schetter, Mancuso, Rini, & Hobel, 2005; Neggers, Goldenberg, Cliver, & Hauth, 2006). In the general population, African American women have disproportionately higher rates of pre-term and low birth weight deliveries and higher rates of infant mortality than women from other racial/ethnic groups. In 2013, the National Vital Statistics Report documented the percentage of pre-term deliveries among live births across ethnicities as 11.4%; African American women represented the highest group at 16.3%. Similar disparate results were found among low birth weight deliveries during the same reporting year. The percentage of low birth weight deliveries across ethnicities was 8.0%, but African American women represented 13.0% of low birth weight deliveries (Hamilton, Martin, Osterman, & Curtis, 2014). Low birth weight and pre-term deliveries are the leading causes of infant mortality among African Americans, and throughout the first year of life, there is a disproportionately high risk of death for babies born to African American women (March of Dimes, 2013). In 2011, the National Vital Statistics Report documented the infant mortality rate of 6.05 per 1,000 live births across ethnicities, a figure that was not significantly different from the 2010 rate of 6.15 per 1,000 live births. For African Americans, the infant mortality rate also did not change significantly from 2010 to 2011, at 11.63 per 1,000 live births in 2010, compared with 11.42 per 1,000 live births in 2011. The mortality rate for African American infants was 2.2 times the rate of 5.05 deaths per 1,000 live births for white babies (Minino, 2013).

Numerous studies in the reproductive health literature have examined disparities in adverse birth outcomes, specifically pre-term and low birth weight deliveries and infant mortality among poor women of color (Dole et al., 2003; Dominguez et al., 2005; Giscombe & Lobel, 2005; Martin, Osterman, & Sutton, 2010; Morin, 2008; Neggers et al., 2006). A small but growing body of literature has also focused on African American women in higher socioeconomic status (SES) categories (Jackson, Phillips, Hogue, & Curry-Owens, 2001; Jones, 2003; Krieger, Smith, Naishadham, & Babeau, 2005; Williams, Mohammed, Leavell, & Collins, 2010). This literature shows that African American women with higher levels of education and income are more likely than poorer, less-educated African American women to suffer adverse birth outcomes, including low birth weight, pre-term deliveries, and fetal death. Educated African American women from higher SES backgrounds are more likely than women from other racial categories to experience negative birth outcomes (Giscombe & Lobel, 2005). Thus, upward socioeconomic mobility apparently does not contribute to improved birth outcomes for African American women (Colen, Geronimus, Bound, & James, 2006). It is a common perception that as SES rises, positive health outcomes increase; for African American women, however, the opposite appears to be true (Giscombe & Lobel, 2005; Williams & Jackson, 2005). This surprising disparity signifies the need for additional research on causative factors and also expanded public health strategies to increase awareness for both practitioners and the public.

Traditionally, public health programs and policies have targeted low-income women of color because of their disproportionally high rates of infant mortality. However, this literature suggests that to truly eliminate reproductive health disparities, public health agencies must target all vulnerable population subgroups, including those from higher SES backgrounds. Researchers have considered various demographic and behavioral explanations for this disparity, including psychosocial risk and/or coping factors among African American women with higher education and income (Jackson et al., 2001; Krieger et al., 2005). However, there is no real consensus on what is causing disparities in birth outcomes between subgroups of African American women. The combination of the poorly understood need and continuous poor birth outcomes suggests the need to employ multiple strategies that will both illuminate underlying mechanisms and define effective interventions, A logical starting place would appear to be the inclusion of activities to address education, policy, and environment issues for the target audience of African American women and other stakeholders, including physicians, reproductive health professionals, and organizations. This approach may uncover the specific issue or issues to be addressed; therefore, allowing for a more directed intervention and prevention approach.

Purpose Statement

Significant disparities in health outcomes have consistently been found for women of color compared with counterparts from other ethnicities. In particular, the evidence has shown higher rates of disease and mortality, delayed cancer screening and detection, late follow-up care, higher maternal and infant mortality rates, and higher incidences of HIV/AIDS and other STIs (National Association of Social Workers, 2004). Historically, research has suggested that these disparities are more pronounced among women in the lowest SES categories (Giscombe & Lobel, 2005; Williams & Jackson, 2005; Williams et al., 2010); however, recent studies show evidence that more affluent peers are actually at greater risk. Specifically, findings suggest that African American women with higher levels of income and education are more likely to experience adverse birth outcomes than their lower income counterparts, **perhaps** as a result of variables including stress, racial discrimination, and psychological well-being, with mitigating influences of spirituality and religious participation and social support (Dominguez, 2011; Dominguez et al., 2005; Jackson et al., 2001; Jackson et al., 2012).

There is no clear consensus on the causative factors for the outcomes experienced by African American women from higher SES backgrounds. Additionally, it is not clear that the results of this research have been relayed to those who are most affected. The health inequalities discussion, including on this issue, has grown among health professionals through documented research, program development and implementation, and social marketing strategies, but adverse birth outcomes statistics show an ongoing need for the development of more activities focused on this population.

Thus, the purpose of the proposed campaign plan "Healthy Life, Healthy Baby, Healthy Me: Promoting Positive Reproductive Health Outcomes" is to educate African American women from middle to high SES backgrounds about disparities in adverse birth outcomes. Other potential stakeholders (thus the targets for intervention) include medical professionals and healthcare practitioners, reproductive health organizations, policymakers, and researchers. The campaign aims to raise awareness and knowledge of higher rates of negative health outcomes in this population before, during, and after pregnancy. It will also inform women in this population of ways to mitigate their risk factors and advocate for good health care.

Initially, this campaign must focus its efforts on **informing** target audiences of established risk factors related to adverse birth outcomes and how these factors may affect them personally. Project activities will aim to raise awareness among the primary audiences: African American women, medical professionals, and healthcare practitioners. The campaign will target African American women in middle to higher SES categories between the ages of 25 and 44 years old. SES brackets will be defined by income and level of education, and will focus on individuals with bachelor-level degrees and higher. Medical professionals targeted for intervention will include obstetricians and gynecologists, and health care professionals will include physician's assistants, nurses, nurse practitioners, and other relevant practitioners. These groups will be targeted because of their direct interaction with women from this population and their high potential to promote positive change in their health outcomes.

The goal of informing the target population is to help them take the best advantage of the full range of reproductive and maternal health services. Specifically, the proposed campaign aims to increase the knowledge base in this population about reproductive health risks and the importance of preconception and prenatal services as well as pregnancy and postpartum services. It is proposed that this increased knowledge base will empower women to make more informed choices regarding their prenatal, pregnancy, and post-natal care.

Secondary audiences will include partners/spouses of this population, reproductive health–focused organizations, policymakers, and researchers. Partners/spouses represent an important group to include as they play a major role in supporting their significant others before, during and after pregnancies. Their inclusion is significant based on understanding any direct and indirect attitudes and behaviors, either positive or negative that also potentially impacts birth outcomes. Historically, reproductive health organizations have tended to focus their resources on those deemed most disenfranchised, specifically, women from lower SES groups and with little education. Involving those agencies in the proposed campaign will offer the opportunity to develop and implement health promotion activities that are targeted to higher SES women, who are not traditionally served by reproductive health awareness campaigns. Additionally, informing legislators of this issue could promote more informed decision-making regarding reproductive health care laws and policies. Engaging all of these secondary audiences can advance understanding of underlying factors responsible for the birth-outcome disparity among higher SES women.

The second goal of **persuading** is to facilitate change in attitudes and behaviors in the population of interest. Specifically, this population will be persuaded not only to recognize possible contributing factors but also to be proactive in their healthcare and treatment. In particular, the campaign will aim to persuade women to ask relevant questions of their reproductive health providers as they receive prenatal, pregnancy, and postpartum care. The goal for medical providers and healthcare professionals is to raise their self-awareness and influence decision-making about additional treatment options and/or intervention strategies for this population. Additionally, legislators can use information gained through the campaign to reform current laws, develop new laws, and propose funding for initiatives that support reproductive health research and services.

The "Healthy Life, Healthy Baby, Healthy Me" communication campaign will begin with a social marketing campaign at the grassroots level. Once the communication campaign has been established among primary target audiences, "Healthy Life, Healthy Baby, Healthy Me" will expand to a wide-ranging, higher-level audience of policy makers by way of a media advocacy approach. At the outset, the campaign will focus on developing and distributing messages tailored to the primary target audiences (African American women and healthcare professionals) to:

- Increase awareness of adverse birth outcomes among higher SES African American women;
- Increase knowledge of risk factors for adverse birth outcomes among African American women;

- Instill the importance of proactive self-care in reproductive healthcare for this population; and,
- Encourage support among peers who have shared experiences as a means of celebrating pregnancies.

Following the implementation of the grassroots campaign, the second portion of the "Healthy Life, Healthy Baby, Healthy Me" campaign will begin with the development of media advocacy to reach secondary audiences such as policymakers. This targeted communication strategy is intended to encourage and inform future prevention and intervention strategies. Additionally, a comprehensive evaluation plan will be developed to examine the process and effect of the proposed communication strategies.

Education Needs

In the literature examining adverse birth outcomes for African American women, many authors are focused on providing recommendations for future research activities as well as identifying potential areas of policy development and advocacy efforts. However, other recommendations highlight the need for more education to be developed and geared toward the affected women and healthcare providers from various professions as well, first focusing on health disparities. For example, when considering the role of racism as a social determinant and its effect on birth outcomes, Dominguez (2011) notes that "there is a considerable lack of knowledge about racial health disparities among physicians and the general public" (p. 11). In this instance, she suggests that:

> Social workers in health care and community settings can coordinate health disparities presentations during staff meetings, lunch breaks, and grand rounds by partnering with hospital and clinic administrators, local public health officials, researchers, and grassroots

> organizations to ensure the information presented is current, accurate, pertinent to the setting, and highlights local efforts to address the problem. Town hall meetings may also be effective in bringing together the lay public and community and political leaders to learn about and discuss the relevant issues. A key aim of these educational efforts should be to frame racial health disparities as a problem for all Americans, not just the minority population who suffer from them, by highlighting the implications for society at large. (p. 11)

Along with education needs, the ability to open dialogue is also imperative as it can also identify gaps in knowledge. Documentaries such as *Unnatural Causes: Is Inequality Making Us Sick*, specifically episode 2 entitled When the Bough Breaks, encourages discussion on pregnancy outcomes with comprehension and discussion questions that focus on the role of racism, chronic stress, and health disparities over the life course. Additional suggested activities include defining three types of racism and the possible health effects associated with each, brainstorming about potential policies or actions that would assist in addressing the effects, and developing steps that would be required to make them effective (Strain, MacLowery, & Stange, 2008).

Ethical Considerations

Ethical dilemmas arise when public health interventions address sensitive topics such as adverse birth outcomes and reproductive health in general. The most notable dilemmas for this proposed campaign include targeting, labeling, privileging, and promises. Additionally, various groups may maintain different values that will also influence the reproductive health behaviors and choices. These dilemmas can be difficult to solve; thus, public health professionals must carefully consider them when implementing an intervention strategy.

The Targeting Dilemma

Targeting different segments of the population, specifically, determining who should be included in the campaign’s planned activities and messages raise several concerns (Guttman, 1997). One concern is whether the campaign will further magnify the disparity (gap) between those with more opportunities and those with fewer, as well as whether the emphasized issues are more relevant based on the cultural group. In many cases, health campaigns target populations considered underserved. However, critics point out that in order to adequately address inequalities in healthcare, there must be inequalities in other areas of life as well (Guttman, 1997).

For example, many interventions focused on addressing adverse birth outcomes target women in lower SES categories by examining the relationship between biologic, sociodemographic, and behavioral factors and birth outcomes (Bryant, Worjoloh, Caughey, & Washington, 2010). Variables consistently researched include, but are not limited to, pre-existing health conditions such as hypertension, diabetes, obesity, and sexually transmitted infections (STIs) including HIV status (biologic factors; Abu-Saad & Fraser, 2010); maternal nutritional status; participation in risky behaviors such as smoking, drinking, and/or substance use, and sexual behaviors while pregnant (behavioral factors); and social circumstances such as poverty, maternal stress, being uninsured or underinsured; as well as availability and accessibility of quality obstetric care (sociodemographic factors; Bryant et al., 2010).

Although the targeted population does not fit the traditional definition of “underserved” because of their attainment of higher education and income, inequities are still accounted for as related to race/ethnicity, gender, and other physical or sociodemographic variables and their relationship with maternal and child health outcomes and the overall health status. A connection is made between the traditional risk factors with other inequities such as those identified by the U.S. Department of Health's health promotion and disease prevention agenda of Healthy People 2020, specifically in topic areas of maternal, infant and child health and social determinants of health (DHHS, 2014a).

Within the topic of maternal, infant, and child health, physical and social determinants of health are easily applied to the target population for this campaign. Physical determinants of health, specifically environmental factors, can shape a woman's overall health status before, during, and after pregnancy by directly affecting her health or her ability to engage in healthy behaviors. Social determinants of maternal health also include pre-pregnancy health behaviors and status, which are influenced by environmental and social factors such as access to health care and chronic stress (DHHS, 2014b). Social determinants of health focus on "conditions in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (DHHS, 2014c). Specifically, areas including the social community context, health and healthcare, and neighborhood and the built environment are easily applied to the primary target population of African American women (DHHS, 2014c). If campaigns do not address factors such as structural inequalities, there is still a chance the target group will not have an opportunity to adopt the health-related recommendations; thus, the purpose of the campaign message and activities will not meet the full benefit for the intended population (Guttman, 1997).

To reduce the chance of this dilemma, the campaign will use two theoretical frameworks, the life course model and the ecological approach, to guide the development of the message and tools utilized. Research has shown that an integrated approach to address multiple factors, specifically social and broader system-level factors simultaneously through an ecological model perspective, is imperative. The consideration of risk and protective factors together over the life course takes into account the exposures at all points in life with the potential to modify disease risk (Morin, 2008). Additionally, the role of culture will also be explored in terms of ensuring that the developed plan meets the needs of the target groups.

The Labeling Dilemma

In some instances, the campaign may contribute to unintended outcomes that are considered harmful for individuals and larger communities. Specifically, the labeling dilemma may contribute to potential harm in three ways:

1. Labeling or stigmatizing individuals,
2. Denying the less-privileged the pleasures they can afford (meaning withholding pleasures for the less-privileged based on their label of being disadvantaged),
3. Unfairly placing the responsibility and blame on individuals and groups. (Guttman, 1997, p. 165)

The association of a certain medical condition with a specific group or population is challenging because they may then be labeled as ill or stigmatized if the conditions are undesirable. Professions such as public health and social work live by the principle of do no harm, which obliges service providers to bring no harm to their client population. There are two interrelated concerns specifically related to this dilemma that include: (a) to what extent the label will increase the target population's anxiety through the assignment of a role, and (b) causing individuals not to trust an intervention because they already possess the health condition or the attributes and this label is something to avoid at all costs (Guttman, 1997).

Many times the goal of the campaign is to encourage participation in activities so those at risk are identified and provided with management or prevention strategies. But what if the intervention instead affects the individuals’ sense of identity? The overarching dilemma is to consider how to advise the target population of potential risk for serious health complications without labeling them, in turn contributing to their anxiety, which will affect well-being and sense of being.

In a study lead by Jackson (2007), the collaborative approach used allowed participants in the study to be a part of an iterative multi-method process. The key objective was to ensure that voices of African American women were heard through sharing their experiences of variables being examined, including racism and gendered stress. The data collection method for this community-based participatory approach included interviews, focus groups, and the administration of surveys that assessed stress, anger, anxiety, and active coping of nearly 600 women living in Atlanta, Georgia; thus, the voices of the research collaborators (African American women) informed every aspect of the research.

Results of this study also contributed to the identification of best practices in areas such as respect and care shown by healthcare professionals; recommendations for improving healthcare access, satisfaction, and outcomes; and training and accountability of the availability and accessibility of quality maternal healthcare (Jackson, 2007). Finally, acknowledgement of the need to confront structural issues such as employment, housing, education, and safety were also identified as being directly connected to the improvement of birth outcomes. This study provides insight into identifying methods of limiting this dilemma.

The Privileging Dilemma

At the other end of the spectrum of the labeling dilemma lies the privileging dilemma. This dilemma raises the question: “To what extent does the campaign privilege certain stakeholders or ideologies” (Guttman, 1997, P. 171)? The author also notes that placing focus on a particular medical condition or intervention may prioritize the condition, in turn privileging certain individuals or social institutions over others. This dilemma includes the affected population as well as the organizations and professionals who specialize in the area of reproductive health. The ethical concern raised could potentially highlight who is privileged by a campaign, either purposefully or inadvertently, and the implications for society as a whole (Guttman, 1997).

It is possible that individuals and institutions representing and serving this population may use the proposed intervention for their personal gain, or it may result in an unfair advantage or lead to receiving compensation, monetary or otherwise, that benefits the institution rather than the target population. Kass (2001) notes that, “public health is the societal approach to protecting and promoting health. Generally, through social rather than individual actions, public health seeks to improve the well-being of communities…” (p.1776). If the outcome of implementing this intervention does not assist in improving the well-being of this affected group, then the individuals and/or institutions are not fulfilling the true goal of the campaign or the field.

Furthermore, there are serious political, economic, and social consequences and privileges when a particular physical condition is labeled as a medical condition. Once defined as a matter of health or disease, diagnosis, treatment or control, an intervention must be implemented by the medical professional (Guttman, 1997). Guttman also asks, “To what extent, we need to ask, do particular organizations or groups have more access to information that will support their claims regarding which health issues should be focused on, or which strategies should be adopted?” (p. 172). The identification as an important condition along with treatment through the promotion of a campaign results in individuals being placed in a social position over others. This is a significant dilemma for the identified population because they do not have some of the major characteristics of the traditionally underserved group due to their income and education level.

The Promises Dilemma

The final dilemma, which directly relates to how health campaigns contribute to social values, is the promises dilemma. Campaigns advising individuals to implement specific behaviors and health practices in order to be healthy are providing promises that may turn out to be less advantageous in practice than in theory. The influence of this promise is challenging from a practical and moral perspective (Guttman, 1997). Guttman also points out that this dilemma is related to doing harm by raising expectations of participants as well as the public good in terms of potentially overburdening the healthcare system. The final concern is justice in terms of the effect on those who may not have the opportunities to adopt the health promotion techniques; in turn, this may lead to feelings of inadequacy, guilt, or hopelessness (Guttman, 1997). Although the intended population would not in the traditional sense be without the availability or accessibility of quality reproductive healthcare services, there may be other outcomes such as infertility or other pregnancy complications that would negate the intended campaign message for the women seeking and receiving treatment and care.

Cultural Considerations

In addition to the ethical dilemmas discussed, cultural considerations must be taken into account to maximize the effectiveness of “Healthy Life, Healthy Baby, Healthy Me” as a public health awareness campaign. For this population, the role of culture expands beyond belonging to the same race/ethnic group and gender. Other similarities exist including educational attainment, professional status, and similar experiences across the life cycle such as structural racism, gender discrimination and stress. Therefore, important cultural implications exist within health communication and promotion efforts. Dutta (2007) notes that “there is a growing awareness that culture needs to be taken into account in the ways in which health communication is theorized and practiced” (p. 304).

Campaigns focused on other health issues such as heart disease have examined the meaning of messages as it relates to women’s retention and understanding of health messages (Tindall & Vardeman-Winter, 2011). In 2002, the National Heart, Lung, and Blood Institute and three founding partners (American Heart Association, U.S. Office of Women’s Health, and WomenHeart: The National Coalition for Women with Heart Disease) developed *The Heart Truth* campaign, which is a national heart health education and awareness campaign for women. The organizations used public relations, marketing, branding, and strategic communication management techniques in an attempt to reach their target population, women of color. The campaign logo and symbol was the Red Dress, which specifically “link[ed] a woman’s focus of her ‘outer self’ to the need to also focus on her ‘inner self’, especially her heart health” (NHLBI, n.d.-a, as cited by Tindall & Vardeman-Winter, 2011, p. 282). The red dress was used as a “visual red alert” to convey that heart disease does not care what you wear; in fact, it is the number one killer of women. Several communication tools were used including: a website, and various campaign materials such as brochures, fact sheets, posters, handbooks, tip sheets, videos, wallet cards, print PSAs, and speaker’s kits (NHLBI, n.d.-a, as cited by Tindall & Vardeman-Winter, 2011).

In a qualitative study conducted by Tindall and Vardeman-Winter (2011), two research questions were developed to guide the study. First, the authors asked: What cultural factors contribute to how women of color make meaning of messages from a health communication campaign targeted to them? The themes that emerged from this question included: the impact of relatives' health, imagined sense of the heart-diseased body, loss, empowerment of knowledge, and complicated relationships with doctors (Tindall & Vardeman-Winter, 2011). Second, they asked: To what extent do women of color actively seek information about heart disease? Emerging themes for this question included: inaccuracy in message recall, limited information seeking on healthy behaviors, limited problem recognition among women, and reactions to recognizing the problem, and perceived constraints around complying with the materials.

The authors' intent was to explore how public relations campaigns, heart disease, and meaning making addresses individual- and community-level decisions that influence retention and understanding of health messages. Findings showed that many women recalled messages about heart disease but did not actively seek information on prevention, detection or treatment of heart disease. Also, many participants did not have an accurate understanding of heart disease, with the majority indicating their perception as a "vague" disease. Most women complimented the materials' design as well as the presented information but also noted that there was still missing information that would prompt them to seek further information. Finally, participants connected understandings and meanings of heart disease to the previously mentioned themes. The authors believed that these meanings, conceptually, are cultural factors due to the common, shared understanding of the ideas and relationships in heart disease communication by women of color.

The findings of *The Heart Truth* campaign provides some lessons learned that assists in building on the gaps identified through the themes. For example, using formative research on all developed tools assists in pretesting areas such as accuracy of message recall, problem recognition and reactions, the likelihood of behavior change, and perceived constraints with the materials. Focus groups conducted with the target population, such as those used by Dr. Fleda Mask Jackson in her 2002 study also provides participant feedback. Furthermore, this provides an opportunity for feedback on the cultural relevance of the messages developed in the campaign materials. Revisions to the "Healthy Life, Healthy Baby, Healthy Me" campaign made after these steps will strengthen the meaningfulness of the campaign and assist in meeting the goals of informing and persuading the intended audiences.

For "Healthy Life, Healthy Baby, Healthy Me" to successfully communicate these points, the needs of the following key stakeholders must be considered: higher SES African American women, medical professionals and reproductive health organizations, researchers and policymakers. Recognition of dynamics within and between each group is important as communication efforts and methods of relaying information to the intended audience, also known as the communication channels, will be targeted.

(1) Higher SES African American women: Many individuals strive to live and participate in healthy behaviors, such as exercising daily, eating nutritiously, and visiting doctors. Women have a number of concerns in addition to their primary health such as reproductive health, specifically maternal and child health that must also be addressed. For those pregnant, parenting, or planning pregnancies, the potential of experiencing an adverse birth outcome is an area of significant concern. As women plan pregnancies and become pregnant, understanding the impact of positive and harmful behaviors on healthy births is imperative. Disparities found based on race support the identification of African American women as key stakeholders because they would directly benefit the most from maternal and child health-related interventions as well as through the implementation of reproductive and maternal and child health-related policies attempting to limit adverse birth outcomes.

Women may be aware of behaviors that possibly contribute to adverse outcomes, choosing not to participate in the behaviors and seeking health care regularly and intently; however, the aforementioned disparate outcomes and unknown causes uncovered in recent literature may affect their ability to identify and/or assess their own risk for adverse outcomes. Male spouses and partners are also a key group to target as well. Just as women may be unaware of these new findings, their partners must also be informed and persuaded to provide support for their wives and girlfriends. Any non-supportive behaviors and/or actions from this group can also severely impact the birth outcomes. Additional attention must be given in communicating with this audience to inform them of the latest findings, in turn, increasing knowledge, raising awareness and persuading this group to be proactive in their reproductive care including preconception care, which will influence outcomes during pregnancy and postpartum.

(2) Medical professionals and reproductive health-focused organizations: Medical professionals including primary care physicians, obstetricians/gynecologists (OB/GYNs), nurses and nurse practitioners, midwives and other relevant practitioners have the most interaction and possibly the most influence on the reproductive health of this population. Reproductive health organizations such as March of Dimes, Healthy Start programs, and other local-level organizations and coalitions often focus on reducing the rates of infant mortality and improving perinatal outcomes. Therefore, these groups are key actors as they continue to report key reproductive health findings, develop and implement interventions and provide various services to women.

Historically, there have been trust issues between individuals of color and medical professionals. Distrust of professional medicine within the African American communities dates back to the enslavement of African Americans, including significant events such as the Tuskegee

Syphilis Study (Wasserman, 2013 as cited by Okeke, 2013), the story of Henrietta Lacks, and others. Over time, views of the medical profession and institutions have been shaped by the use of African Americans for scientific and medical testing and breakthroughs. Stereotyping has been an intersecting factor affecting use of medical care and support by African American women (Okeke, 2013). It is also noted that "the concept of medical mistrust can not only be seen as a historical perspective but also from the perspective of sociological social distance" (Okeke, 2013, p.6).

Social distance is defined as "a concept that refers to one's place in society compared to someone else's place in society. Social distance includes race and ethnicity, gender, sex, sexuality, age and social class" (Okeke, 2013, p.6). When the concept is applied to physician trust, research findings show that lower SES individuals and people of color are more skeptical toward medicine, in general due to their knowledge of historical medical abuse (Schnittker, 2013 as cited in Okeke, 2013, p.6). Additionally, disparities have been discussed in terms of the availability and accessibility of quality health care services. It is also important to understand the lack of culturally relevant services provided also impacts comfort level and other areas of using health services including the doctor-patient relationship. For the target group of higher SES women, an assumption is made that income and education level serve as mediating factor in terms of higher SES women having greater access and wider selections of services. However, the importance of including culturally relevant messages within this campaign remains necessary to the successful promotion of positive reproductive health outcomes.

With doctors being the first line of defense in terms of addressing health issues, they are also considered key actors in interventions to reduce disparities-related health outcomes. Raising awareness of the most recent study results show the increase of adverse birth outcomes among this population is imperative due to their direct interaction and high potential to promote positive changes. Additionally, this group can encourage patients to take advantage of the full range of reproductive and maternal health services. Historically, resources provided by reproductive health organizations have focused on those deemed most disenfranchised, specifically women in lower SES groups. Fine-tuning their focus to include higher SES women not traditionally served by many organizations potentially assists the organizations in meeting their mission, goals, objectives, and vision. Additionally, widening their perspective would also assist in reaching a larger audience from a systemic level. This would also offer higher SES women the ability to receive additional resources and/or services from widely recognized organizations within their communities; in turn, increasing knowledge, changing behaviors, while meeting the community's needs.

(3) Researchers and policymakers' promotion activities: To date, there has been a significant increase in research focusing on births of higher SES women. The current momentum provides opportunities for recommendations and lessons learned from past findings to be developed and integrated into practice and evaluated to determine effectiveness. Once validated, the findings of past research assist in holding the attention on the significance of the issue. Researchers also play a major role in presenting valid, reliable, and timely information to the public, in turn assisting in establishing and promoting trust in the intended campaign message.

Policymakers are also considered key actors due to their direct involvement with the decision-making process for reproductive health care laws and policies. Ostlin, Eckermann, Shankar Mishra, Nkowane, and Wallstam (2007) highlight critics' thoughts that gender roles and health-related behaviors linked to roles in many health promotion programs have led to individual-level behavioral change, instead of a policy change at the societal level. However, the umbrella broadens to policies including understanding the role of gender and health promotion, gender inequities, and determining policy actions needed within reproductive health. Previous literature highlights the need for rethinking gender-based health promotion activities to specifically include cultural beliefs, the availability and accessibility of committed service providers, additional social inequities, and the influence of religious and spiritual beliefs Ostlin et al. (2007) notes that,

> "…together gender and sex, often in interaction with socioeconomic circumstances, influence exposure to health risks, access to health information and services, health outcomes and the social and economic consequences of ill-health. Recognizing the root causes of gender inequities in health is crucial therefore when designing health system responses…" (p. 26).

Changes made at the individual level is one step but including policy change at a systemic level also assists in strengthening the outcomes for society as a whole.

Doyal (2000) notes that "if policies for the promotion of gender equity are to be realizable their goal must be the equitable distribution of health relates resources" (p. 931). The author goes on to note that in spite of the fact that men and women share the same biology, it is clear that a woman's reproductive health is overwhelmingly affected by who they are and where they live. Thus, health promotion policies and activities are found to be most meaningful when the target communities and groups are involved in all aspects of policy and program development (Ostlin et al., 2007). This serves as an opportunity for policymakers to advocate on behalf of this group, and for women to also advocate for themselves. The promotion of "gender-sensitive research to inform the development, implementation, monitoring and evaluation of health promotion policies and programs is also desirable” (Ostlin et al., 2007, p.30). Specific policy and evaluation recommendations will be discussed later in this proposed plan.

CHAPTER TWO: COMMUNICATION CAMPAIGN PRINCIPLES

The method of the message delivery of "Healthy Life, Healthy Baby, Healthy Me" is tailored for each identified audience. Plain language should be used in communication in an attempt to prevent the material from becoming overly technical to the audience. Due to the severity of adverse birth outcomes, information should be presented in a way that will promote discussion without instilling fear. There should be feelings of empowerment among audience members regarding the ability to identify and assess their risk and contributing behaviors. This may lead to adverse birth outcomes as well as an exhibition of an increased level of confidence to openly communicate with their medical provider. The needs of an audience must be taken into account due to the range and diversity of audience members; therefore, messages should be customized to address cultural/linguistic appropriateness, literacy, numeracy, and use of a native foreign language, if applicable (Nelson et al., 2002).

Public health interventions and their related communication efforts raise ethical issues. Obviously, ethical dilemmas, specifically those addressed in this plan – targeting, labeling, privileging, and promises – should be considered in order to retain the audiences' trust and attention and as to not cause harm. In consideration of these dilemmas, one or more of the following strategies may be required including: rationalization, compromise, or retreat. Given the extent of this health issue, retreating is not a viable option. Viewing adverse birth outcomes through the eyes of multiple audiences (higher SES African American women, medical professionals and reproductive health-focused organizations, researchers and policy maker) is a prudent approach to creating ethical solutions using the strategies of rationalization and compromise. It is important to present reliable, credible, and timely information to the public and key stakeholders to promote trust in the message. The promotion of a culture of transparency, two-way communication with the audience and trust, a convincingly genuine concern for the public good, are also needed.

Campaign Approach

As specified in the purpose statement, the overarching aim of the "Healthy Life, Healthy Baby, Healthy Me: Promoting Positive Reproductive Health Outcomes" communication campaign is to educate African American women from middle to high SES backgrounds about disparities in adverse birth outcomes. Other potential stakeholders include medical professionals and healthcare practitioners, reproductive health organizations, researchers, and policymakers. The focus of this campaign is to: (1) **inform** target audiences of risk factors related to adverse birth outcomes and how these factors may affect them personally, and (2) **persuade** in order to facilitate change in attitudes and behaviors, to not only recognize possible contributing factors but also to be proactive in health care and treatment. The campaign approach will include social marketing methods and media advocacy due to the need to both inform and persuade. Additionally, behavior change objectives for each of the primary audience types are based on the life course model and the ecological approach and will directly contribute to achieving the overall goal of the campaign.

The life course model is defined as:

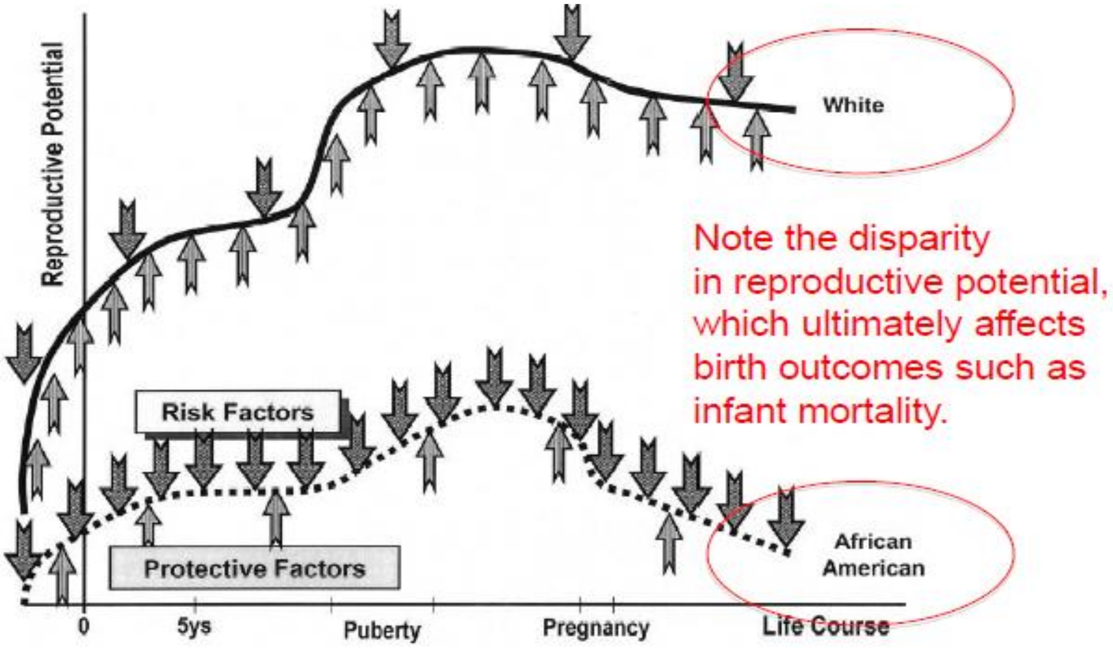
> "…a conceptual framework that helps to explain health and disease patterns – particularly health disparities – across populations and over time. Instead of focusing on differences in health patterns one disease or condition at a time, the life course model points to broad social, economic and environmental factors as underlying causes of persistent inequalities in health for a wide range of diseases and conditions across population groups. The life course model is population focused, and firmly rooted in social determinants and social

> equity models. Though not explicitly stated, the life course model is also community (or "place") focused, since social, economic and environmental patterns are closely linked to community and neighborhood settings" (HRSA, 2010, p.2).

Inequalities in birth outcomes, such as infant mortality, are described by, and many times linked to, the early access, described in terms of type and frequency of service provision, and quality of prenatal care. The life course model, in contrast, suggests that inequalities result from differences in protective and risk factors between groups of women over the course of their lives. It is a complex combination of biological, psychological, and social protective and risk factors contributing to an individual throughout the life span. Examples of inequalities include SES, race and racism, neighborhood conditions, quality of health care and disease status, stress, and inadequate nutrition.

As a result, the health of one generation will direct affect the health status of the next one (Lu & Halfon, 2003). This model can also assist in explaining race/ethnic disparities in factors that impact reproductive health such as prenatal care, SES, chronic stress, and experiences with racism. In the figure below, there is a distinct difference between risk and protective factors along with reproductive potential over the life course of African American when compared to white women (see Figure 2.1).

Figure 2.1 Racial Disparities in Infant Mortality Using the Life Course Model



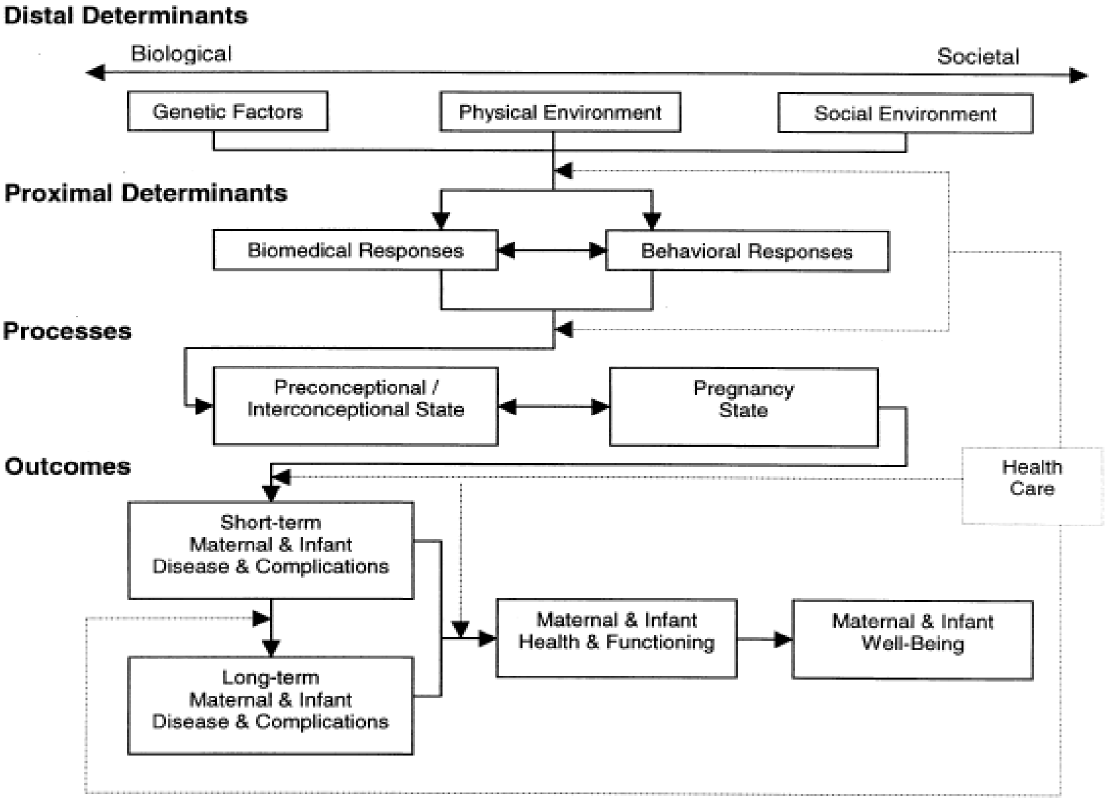
Source: Lu & Halfon (2003)

In reproductive health, specifically maternal and child health, this model suggests that interventions developed to reduce risks and increase protective factors can serve as a change to the health trajectory of individuals and populations (HRSA, 2010). Dominguez (2011) notes a fundamental part of explaining “the African American reproductive disadvantage is in understanding the manner in which racism, both interpersonally and institutionally manifested, impacts African American women throughout their lives and across generations” (p.10). The author also notes that racism has unique adaptational challenges; therefore, the application of a stress and health framework may assist in exploring various mechanisms that link the psychosocial experience of racism with biological processes resulting in poor pregnancy outcomes (Dominguez, 2011). Understanding the life course model creates opportunities to build on the understanding and identification of additional protective factors, in turn reducing the risk factors. Finally, it is noted that the public, medical community and political leaders must be educated about racial disparities in adverse birth outcomes to grow support from multiple populations.

Previous strategies implemented to improve perinatal health have primarily focused on the prenatal, intrapartum, and immediate postpartum periods. The strategies have failed to sufficiently address the long-lasting effect of any significant health issues and risky behaviors occurring during childhood and/or adolescence, and into womanhood on maternal and child outcomes. Thus, experts have increasingly recognized that improving outcomes must include strategies targeting factors across the life course, not exclusively in the prenatal period. Specifically the development of programs and interventions need to focus on the built environment, which also supports equitable, healthy and thriving communities.

To do so, Misra, Guyer and Allston (2002) developed a woman-centered framework that could be applied over the life course targeting prevention and intervention strategies to young women as they transition from pediatric care to family practice, internal medicine, and reproductive health practice. For example, a contributing factor to high blood pressure is stress, which if not appropriately managed, can negatively impact a birth outcome. However, if management of the condition is planned for and communicated across medical specialties during the planning portion of pregnancy, then women are more aware of the implications to be addressed when becoming pregnant. Therefore, the woman-centered life course approach calls for a different focus with regard to public health interventions and settings for communicating health information (Grason & Misra, 2006). Figure 2.2 displays the pictorial view of various factors that potentially influence health status over the life course.

Figure 2.2 Perinatal Health Framework



Source: Misra, Guyer, & Allston (2003)

Within the Perinatal Health Framework, the distal and proximal determinants focus on risk factors for maternal and child health outcomes. The distal level focuses on risk factors that place an individual or population at greater susceptibility to proximal risk factors. Primary categories of distal risk factors include genetic factors, the physical environment, and the social environment (Misra et al., 2003). Genetic factors, for example, include having twins or siblings or gene-environment interaction (genetic and environmental factors that combine to affect risk of diseases/disorders), while physical environment factors include air pollution or crowding, and social environment factors include SES, race, stress, social network/support, life events, or family violence. These factors are also more relevant in terms of increasing or decreasing an individual’s predisposition toward developing various health conditions, engaging in high-risk behaviors, or being exposed to potential toxins.

The proximal level includes risk factors that directly affect individual health status, specifically representing behavioral and biomedical responses. The difference between behavioral and biomedical characteristics is the relationship between high-risk or protective behaviors and a woman’s health status, along with the influences of physiological and biological characteristics of certain health conditions. Examples of biomedical responses include chronic disease, infertility, or stress. Behavioral responses include alcohol/drug use, smoking, nutrition, sexual behaviors, or assisted reproductive technology (ART) utilization and psychological factors such as stress, self-efficacy, depression or anxiety. It is important to note that psychological factors are included in behavioral as well as biological responses with both behavioral and biomedical responses providing important intervention targets. Finally, the intervention occurring between distal and proximal risk factors also determines overall health status (Misra et al., 2003).

The “processes” level in the middle of the framework connects the framework to a woman’s life course showing the transition from preconceptual/interconceptual state to the “event” of conception and the pregnancy state. The framework also includes three groups of outcomes, which differs between the mother and infant. The outcomes, displayed below in Table 2.1, include: (1) diseases and complications, (2) health and functioning, and (3) well-being.

Table 2.1. Maternal and Infant Outcomes

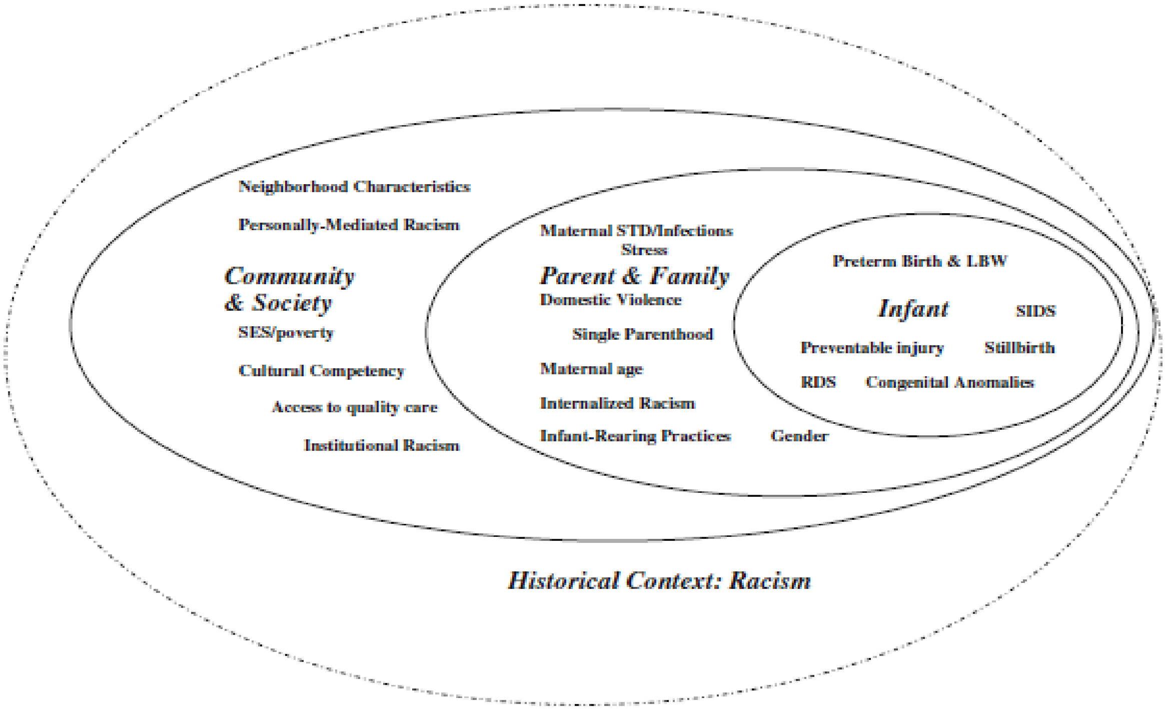
Maternal	**Infant**
Short-term diseases and complications	***Short-term diseases and complications***
Pre-eclampsia	Preterm birth
Gestational diabetes	Low birth weight
Emergency department visits	Congenital malformations
Maternal mortality	Respiratory distress syndrome
Long-term diseases and complications	***Long-term diseases and complications***
Postpartum depression	Celebral palsy
Pregnancy weight gain retention	Chronic pulmonary disease
Risks during subsequent pregnancies	
Maternal health and functioning	***Infant health and functioning***
Life expectancy	Learning disabilities
Maternal well-being	***Infant well-being***
Economic stability	Attachment
Positive relationships	School achievement
Autonomy	Employment
Personal growth	
Self-acceptance	
Purpose in life	
Environmental mastery	

Source: Misra, Guyer, and Allston, 2003.

The authors separate short-term and long-term diseases and complications for consistency in the way perinatal outcomes are traditionally grouped for monitoring and research purposes. They state the intent is “to call attention to a broader array of outcomes than is typically considered” (Misra et al., 2003, p. 69). Outcomes such as low birth weight deliveries, pre-term births and maternal mortality are consistently measured with most of the other areas tracked on a periodical basis. Finally, the areas of health and functioning and well-being are assessed with various global measures such as life expectancy, self-reported health status, life satisfaction, autonomy, and others. Figure 2 also shows that health care can modify the relationships among the different components of the framework. In this context, health care is defined “as the broad range of activities from primary prevention to medical interventions to screen for or treat specific disease processes. The mix of preventive and therapeutic will vary at different levels of the model…" (Misra et al., 2003, p. 70).

The communication campaign methods are also based on the ecological model, which suggests that a public health issue such as adverse birth outcomes is a result of a group of factors occurring at all levels. Specifically, this model proposes two concepts: "(1) that individual behavior affects and is affected by the social environment and (2) that behavior both shapes and is shaped by multiple levels of influence" (Alio et al., 2010). The following figure (see Figure 3) illustrates the ecological model as it relates to factors contributing to racial disparities in adverse outcomes.

Figure 2.3. Ecological Model for Adverse Birth Outcomes among African American Women



Source: Alio et al. (2010)

The three categories shown in the model include: (1) infant outcome and characteristics, (2) parental and family characteristics and practices, and (3) community demographic and societal characteristics. This particular model also includes the historical context of racism as experienced by African American mothers. Internalized racism has been recognized as a risk factor for adverse birth outcomes among African American women. It is defined as "the acceptance of stigma and negative messages about intrinsic worth which translates to embracing self-devaluation, and helplessness" (Alio et al., 2010, p. 561). The first layer, maternal and family characteristics, is critical in determining a newborn's health. Other areas of importance include cultural beliefs of child rearing practices and internalized racism, as well as life stressors which strongly affect pre-conception and conception health. Thus, the framework suggests that personal and family characteristics are strongly influenced by other layers such as the larger community and society in which this population lives (Alio et al., 2010).

Factors including SES, neighborhood characteristics and access to quality healthcare, institutionalized racism, and community stressors also impact the overall health of mothers and their babies (Alio et al., 2010). As previously noted, SES and access to quality healthcare are not the main variables of concern due to the population's attainment of higher levels of education, income and ability to access higher quality services; however, when considering the impact over the life course, the variables cannot be completely removed when attempting to determine the best strategies for the communication plan development. Both models (life course and ecological) are included to acknowledge the experiences of this group beginning at their conception based on their mothers' experiences, continuing over the life course, in turn affecting their unborn children. Lifetime experiences must be placed in the context of understanding individual-level factors, environmental and community-level factors, and system-level factors. The interaction of contributing factors to adverse birth outcomes over time and in each area highlights the need for intervention strategies to address all levels with meaningful contributions over the life course.

Social Marketing and Behavior Change Objectives

Social marketing is defined as the application of marketing tools to positively influence voluntary behavior. The overall goal of social marketing is to increase value and decrease cost to the intended users. Applying a marketing mix is a necessary when introducing any new product or service (Healey & Zimmerman, 2010). The social marketing strategy for "Healthy Life, Healthy Baby, Healthy Me" takes into account the main components of the marketing mix, known as the "Four P's of Marketing", in developing behavior change for each target audience. The "Four P's" are: product, price, place, and promotion. Product is defined as the behavior being requested of the audience along with the associated benefits, and/or services that support behavior change. Price is the financial, emotional, psychological, or time-related cost or barriers that the audience faces in making the desired behavior change. Place is the location where audiences will be exposed to the campaign's product or where desired behaviors will be executed. Finally, promotion includes communication messages, materials, channels, and activities that reach the audiences (Turning Point, n.d.).

In addition to the "Four P's", research shows that "communication campaigns rely heavily on the use of culturally sensitive messages to persuade the public to change attitudes or behaviors toward a health or environmental risk" (Dutta, 2007 as cited in Tindall & Vardeman-Winter, 2011). Culture can be too narrowly defined; therefore, conducting formative research is suggested to determine how a group collectively gives meaning to objects, symbols, languages, relationships and events (Tindall & Vardeman-Winter, 2011). Table 2 provides a summary of the “Healthy Life, Healthy Baby, Healthy Me” communication campaign’s key behavior change objectives intended for the primary audiences.

Table 2.2: Summary of Behavior Change Objective By Audience

Audience	
Who is the intended audience?	African American women, ages 25-44, in middle to higher SES categories
What are the actions to be taken by the audience?	• Recognize factors related to adverse birth outcomes. • Understand the related risks (age, race/ethnicity, overall health status, experiences with racism, stress, etc.) associated with adverse birth outcomes. • Increase in proactive communication with reproductive health providers as they receive prenatal, pregnancy, and postpartum care. • Identification of areas for improvement – selection of culturally aware practitioners, change in any risky behaviors, and incorporation of positive practices to assist in improving reproductive and overall health.
Product	
What is the fundamental product?	• Higher SES African American women will experience a reduced risk of adverse birth outcomes that could potentially impact their current pregnancy or future pregnancy plans. • A sense of pride and peace of mind in actively participating in positive behaviors. • Actively contributing to a brighter future for self and child or children.
How will this contribute to the program goal?	• Higher SES African American women will have increased awareness and knowledge, which will assist in mitigating risk factors and advocating for good health care.
How will this meet the needs of the audience (benefits)?	• Higher SES African American women will feel more empowered during their pregnancy or pregnancy planning, through the positive changes made to assist in improving their health as well as the health of their babies.
Price	
What are some potential hindrances to desired behavior change?	Higher SES African American women may perceive the following costs from adopting the behavior: • Feelings of incorrect knowledge or conflicting notions about adverse birth outcomes. • Not attributing associated risk factors to be a pertinent issue for their impending motherhood • Fear of criticism by medical professional/experiencing adverse outcome after receipt of information • Guilt of contributing to an adverse outcome
Place	
Where will the message exposure occur?	Doctors' offices, other healthcare professional facilities, reproductive health organizations, community-based settings (churches, social group meetings), media (TV, Radio, Internet including social media)
Promotion	
What channels could be used for the message?	Print (banners, posters, flyers), social media websites, campaign website, public service announcement, radio, television
What is the timeframe for the behavior change to occur?	A logic model timeframe will be utilized to determined behavior change: short-term (less than 2 years), intermediate (2-4 years), long-term (5-7 years).
What are examples of indicators that will be used to quantify the amount of change?	• Proportion of audience who knows factors and risks related to adverse birth outcomes. • Proportion of women who report increased communication with their health providers. • Number of adverse birth outcomes reported for this population.

Audience	
Who is the intended audience?	Medical professionals and reproductive health organizations
What are the actions to be taken by the audience?	• Recognize factors related to adverse birth outcomes on a population not traditionally deemed as disenfranchised. • Understand the related risks (age, race/ethnicity, overall health status, experiences with racism, stress, etc.) associated with adverse birth outcomes through reviewing the most recent evidence-based reproductive health research focused on this population. • Encourage two-way communication between provider and patient to ensure patients are aware and knowledgeable about adverse birth outcomes as they receive prenatal, pregnancy, and postpartum care. • Assess and identify areas for provider/patient communication improvement, including the evaluation of services provided to ensure cultural awareness of practitioners and the encouragement of positive practices in order to improve reproductive and overall health. • Know the latest recommendations available to this population as they transition from pediatric care to family practice, internal medicine and reproductive health practice. • Organizations will have the opportunity to develop and disseminate additional resources to the affected population. Reach a wider audience and number of communities with the most up-to-date findings, in turn increasing knowledge and changing behaviors.
Product	
What is the fundamental product?	Medical professionals will see changes in health pre, during and post pregnancy, due to the benefits of the increased knowledge and behavior changes. Organizations will continue to reach their mission, goals, objectives, and visions through active participation in reducing adverse birth outcomes. Positively influencing key patient groups and actively participating to professional competency.
How will this contribute to the program goal?	Health professionals and organizations will actively contribute to improvements in reproductive health.
How will this meet the needs of the audience (benefits)?	Health professionals are often the first line of defense in overall health, providing the highest quality of services, will demonstrate their commitment to health and wellness of this population. Organizations will become a collaborative partner in working toward eliminating birth disparities.
Price	
What are some potential hindrances to desired behavior change?	Medical professionals and organizations may perceive the following costs from adopting the behavior: • Fear of being blamed for adverse birth outcomes after recommendations are given. • Lack of support from administration and other stakeholders. • Fear of losing financial support for other disenfranchised populations
Place	
Where will the message exposure occur?	Doctor’s offices, other healthcare provider offices, reproductive health organizations
Promotion	
What channels are used for the message?	Print (banners, posters, flyers, magazines), social media, campaign and, office website, PSAs, radio, TV
What is the timeframe for the behavior change to occur?	A logic model timeframe will be utilized to determined behavior change: short-term (less than 2 years), intermediate (2-4 years), long-term (5-7 years).
What are examples of indicators that will be used to quantify the amount of change	• Proportion of audience who recognizes and understands related risks as well as effective intervention strategies. • Improvement in evaluation of findings related to service provision

Audience	
Who is the intended audience?	Researchers and policymakers
What are the actions to be taken by the audience?	• Evaluating results of new research studies focused on this population in order to make recommendations for practice, policy, and future research. • Presenting valid, reliable, and timely information to the public regarding this issue and focusing on this population. • Develop, implement, monitor and evaluate health promotion policies and programs based on the findings of gender-sensitive research. • Develop and implement policies and activities targeting communities and groups that are not traditionally considered "underserved". • Support the expansion of funding for the development of research centers, career-development opportunities, and awards for planning and implementation grants that focus on improving reproductive and maternal outcomes.
Product	
What is the fundamental product?	Researchers will potentially uncover more applicable findings to this population, therefore identifying recommendations for integration in health care and reproductive health care settings. Recommendations may also include clinical and provider integration, which would allow providers to take active roles in the dissemination of health promotion messages. Opportunity to show leadership in tailored public service approach to an important constituent group.
How will this contribute to the program goal?	Researchers and policymakers will continue to develop, implement, and evaluate programs and policies that will assist in addressing adverse birth outcomes with the intention of eliminating disparities among this population.
How will this meet the needs of the audience (benefits)?	It will allow the audience to proactively participate in increasing knowledge base through research, developing programs/policies to support activities, laws/policies, leading to positive outcomes.
Price	
What are some potential hindrances to desired behavior change?	Researchers and policymakers may see the following costs from adopting the behavior: • Limitations of financial support for continued research based on the availability of funds through various funding mechanisms. • Loss of support from constituents if there is disagreement about areas with the most need.
Place	
Where will the message exposure occur?	Organizations with reproductive health divisions, departments, or centers, reproductive health advocacy groups, social media websites, blogs, Op-eds, editorial board meetings.
Promotion	
What channels could be used for the message?	Prints (banners, posters), full information for interested readers, social media websites, local and national-level newspapers, PSAs, radio, TV
What is the timeframe for the behavior change to occur?	A logic model will be utilized to determined behavior change: short-term, intermediate long-term.
What are examples of indicators that will be used to quantify the amount of change	• Number of research studies continues to increase specifically related to this population. • Increase in support for additional policies and revising/expanding older policies.

CHAPTER 3: MESSAGE STRATEGIES

Message Strategies

Mass media campaigns are public health communication strategies used to raise awareness of health issues. Campaigns also assist in increasing knowledge and self-efficacy for improving health as well as encouraging health behavior change. These strategies have the capability for contributing to considerable changes in population health, and application to various health promotion areas; however, there are significant challenges in terms of the amount of competition with regard to other media sources.

Due to the distinctiveness of the audiences for “Healthy Life, Healthy Baby, Healthy Me”, a multimodal communications approach is considered as the most effective in reaching the goals of this plan. As previously noted, formative research is imperative in determining the needs of the targeted population. Analyses including pretesting of the messages will be used for the target audiences to ensure that selection of communication channels is appropriate with each audience. Additional analyses will include assessing the results of the evaluation strategies used for the development and implementation of the campaign. Once the “right messages” have been identified, the next step includes the distribution of a comprehensive channel mix including interpersonal communication (physicians/healthcare professionals/patients), print and mass media, and social media. The use of a diverse combination of communication strategies increases the likelihood that messages will be integrated into the audiences’ health-related decision making processes. The effectiveness and success of the “Healthy Life, Healthy Baby, Healthy Me” communication campaign should be measured by the increased awareness and knowledge about adverse birth outcomes among higher SES African American women, reproductive health physicians and other healthcare providers, researchers and policymakers.

Developing the Right Message

Mass media campaigns promoting healthy behaviors are considered to be major tools used to improve the public's health. Each year, significant amounts of money, time and effort are invested into local and national-level campaigns but success of the interventions is varied and the effectiveness of the effort is oftentimes difficult to measure (Randolph & Viswanath, 2004). Campaign planning has focused on individuals and how attitudes and behaviors have changed with the "right messages". The implementation of the plan uses money and time to ensure that the "right message" gets out the greatest number of times to the "right" audience. Therefore, Randolph and Viswanath (2004) suggest that for a campaign to be successful, the first condition to meet is "successful manipulation of the information environment by campaign sponsors to ensure sufficient exposure of the audience to the campaigns message and themes" (p. 421), which influences the information environment and maximizes exposure. Change in the information environment is brought about by purchasing media time or space or by having time and space donated by television networks, radio stations, and newspapers for public service advertisements (PSAs). The messages can be supplemented with other approaches including the distribution of health education materials or generation of new coverage of the issue through campaign events.

Additional factors include:

- Using social marketing tools to create the appropriate messages for distribution and, creative marketing and messages, where possible; and
- Creating concomitant structural conditions such as a supportive environment/opportunity structure that allows the target audience to make the recommended change (supportive environment) (p. 422).

Paying careful attention to messages can contribute to redefining the issue for the target audience, in turn enhancing the probability of campaign success (Randolph & Viswanath, 2004, p. 425). Another benchmark for a successful campaign is the existence of a supportive environment which enables individuals to make changes in health behaviors as called for in the campaign. Randolph and Viswanath note that

> "…the success of a mass media campaign in promoting change in a behavior depends on the nature of the environment that will facilitate the change and structural changes that accompany or are concomitant with campaigns. The relationship between structural changes and the media coverage, including campaigns, is reciprocal. Media attention can strengthen the supportive environmental for forming community coalitions and also in lending legitimacy for policy and environmental changes. Structural changes can also compensate for media campaign effects because these tend to attenuate over time. Structural or environmental changes combined with media campaigns could potentially enable sustainability" (p. 426).

Additional aspects to be considered by all campaigns to succeed include:

- Developing campaigns with a careful understanding of the determinants of health behavior that could potentially lead to desired health outcomes (theory-based campaigns); and
- Process analysis, especially assessing exposure to campaign messages could serve as useful intermediate markers both in making midcourse correction and in explaining final campaign outcomes (process analysis and exposure assessment) (Randolph & Viswanath, 2010, p. 422).

To also assist in developing the right message, a spectrum of prevention suggests a comprehensive matrix for building environmental structure, recognizing the need for a tiered approach, which draws on various levels of influence. This structure requires the use of media advocacy strategies, social marketing tools, collaborating partners such as local coalitions and other organizations, and a theoretical base, specifically a model of behavior change. Figure 4 shows the spectrum of prevention.

Figure 3.1. Spectrum of Prevention

Strengthening individual knowledge and skills
Promoting community education
Educating providers
Fostering coalitions and networks
Mobilizing communities and neighborhoods
Changing organizational practices
Influencing policy and legislation

Source: Rattray, Brunner, and Freestone, n.d.

This framework is designed to address complex and significant public health issues with strategies accounting for multiple determinants of health, in turn giving practitioners a structure to consider a range of efforts that can be used to address a single issue. It is also a tool for improving collaboration between agencies and programs within a larger institution because it helps coordinate the efforts of different groups working on the same issue. It provides the ability for groups from diverse backgrounds to come together, share information, highlight service gaps, and develop joint plans to achieve public health outcomes (Rattray, Brunner, & Freestone, n.d.).

Given that messages can redefine issues for target audiences, it is imperative that attention is given to the campaign message, specifically as it relates to framing and tailoring the campaign (Randolph & Viswanath, 2004). Use of gain-framed messages when promoting prevention (Rothman et al., 1999), as well as combining fear appeals and action messages to increase perception of susceptibility and self-efficacy are significant factors in successfully changing behavior (Witte & Allen, 2010). Additionally, messages must be thoughtfully tailored to the target audience with a demonstration of an in-depth understanding of knowledge, attitudes, beliefs, opinions and needs (Rimer & Kreuter, 2006). Formative research is also required in tailoring messages with a focus on participatory education goals, in turn, supporting health literacy as well as empowerment (Randolph & Viswanath, 2004).

The first key step in developing and executing a message strategy around adverse birth outcomes in higher SES African American women will include a research-based audience analysis as well as message presentations. These steps will assist in identifying the messages that will be most successful in increasing knowledge, motivation, and self-efficacy within the target audiences. The primary message for the campaign uses letters that spell the word “baby”, specifically:

Be Educated

Advocate for Best Services

Be Proactive and Communicate with Your Doctor for Yourself and Your Baby (Your Patients for medical providers or Your Community for researchers and policymakers)

Your Health are Important, Your Baby is Important, Your Voice is Important

In addition to this primary message that forms the basis of the “Healthy Life, Healthy Baby, Healthy Me” campaign and various marketing strategies, additional secondary messages will be developed and tailored for each of the target audiences (higher SES women, reproductive health physicians and healthcare providers, researchers and policymakers). These messages will express the significance of adverse birth outcomes, educate on the findings of the literature in terms of contributing factors, encourage proactive communication with physicians and other healthcare providers, and encourage researchers and policymakers to continue with research and advocacy for policy changes to reduce, and eliminate adverse outcomes. The exact language and visual components of the messages will depend on the outcomes of the formative research.

Determining the Appropriate Channel Mix

To ensure that campaign messages are sufficiently exposed to the target audiences, a range of health communication strategies must be used with a mix of communication channels. Evans (2006) notes that "social marketers face challenges such as increased numbers and types of health issues competing for the public's attention, limitations on people's time, and increased numbers of communication channels, including the internet. A multimodal approach is the most effective way to reach audiences about health issues…" (p. 1207). The internet continues to play a major role in shaping two-way communication between the information provider and the information seeker.

Findings from a 2011 study conducted by the Pew Research Center's Internet and American life Project showed that the overall internet adoption rate has leveled off at approximately 78%, but adults who are already online are doing more with significant differences in use related to age, household income and educational attainment (Zickurh & Smith, 2012). Furthermore, the ways that people connect to the internet also varies as there has been a transition from going online from a desktop computer to the use of cell phones, laptops, e-book readers, and tablet computers. Results showed that six in ten adults (63% of those surveyed) go online wirelessly with one of the aforementioned devices (Zickurh & Smith, 2012).

In addition to internet use, it is important to consider the utilization of social media as a means of gathering information. Duggan and Smith (2013) provided an update for social media for the Pew Research Center, reporting that approximately 74% of online adults use a social networking site of some kind with Facebook being the most dominant platform used. In 2013, results show that approximately 71% of online adults used Facebook, which is an increase from 67% who reported use in 2012. Of those who used Facebook in 2013, 76% were women with the same percentage reporting their race as African American. The authors also emphasized that approximately 42% of adult users continue to diversify use to other platforms such as LinkedIn, Pinterest, Twitter and/or Instagram (Duggan & Smith, 2013). The utilization of social media is also widely used for gathering health facts. Results of a 2012 Pew Research Internet Project found:

- 72% of internet users reported looking online for health information within the past year.
- 70% of U.S. adults got information, care or support from a doctor or other health care professional.
- 60% of adults got information or support from family and friends.
- 31% of cell phone owners, and 52% of smartphone owners, used their phone to look up health/medical information.
- 35% of U.S. adults reported going online specifically to try to figure out what medical condition they or someone else may have.
- 7 in 10 U.S. adults have tracked a health indicator for themselves or someone else. Of that number, 35% share their tracking records or notes with another person/group.

Additionally, when asked who they turn to for help, either online or offline:

- 70% of U.S. adults got information, care, or support from a doctor/healthcare professional.
- 60% of adults got information or support from family/friends.
- 24% of adults got information or support from other with the same condition.

  (Pew Research Internet Project, n.d.)

In 2012, the Institute of Medicine (IOM) conducted a study examining attitudes toward health-related data sharing through social media and current medical care. The results of this study show:

- 94% of American social media users agree with sharing their health data to help doctors improve care.
- With anonymity, 94% of American social media users with a medical condition would be willing to share their health data to help doctors improve care and 94% would also be willing to share health data to help other patients like them (Grajales et al., 2014).

The consistent use of social media sites such as Facebook, Twitter and the growing use of other sites such as Instagram and LinkedIn assists in sharing and spreading messages. For the "Healthy Life, Healthy Baby, Healthy Me" communication campaign, social marketing will be used to increase awareness among African American women of potential causes and consequences leading to adverse birth outcomes. Additionally, this tool will be used to engage and encourage this group to participate in meaningful dialogue, by sharing their stories of pre-pregnancy, intrapregnancy, and postpartum experiences.

There are a number of key points that must be addressed in order to create an effective social marketing campaign including:

- Know your audience: The audience must be at the center of every decision made about the campaign because social marketing “begins and ends” with the audiences. Additionally, potential barriers must be identified and the developer of the campaign cannot be included the audience.
- It’s all about action: To develop a valuable campaign that leads to action, there must be heightened awareness and a shift in attitudes and increase in knowledge. The campaign must be clear in stating what the audience should do.
- An exchange for behavior change is a must: The audience must be offered something appealing in return for a change in their behavior (Turning Point, n.d.).
- Finally, the audience must believe that exchanging information is worth it. In other words, what they are receiving through participation supports their values.

The “Healthy Life, Healthy Baby, Healthy Me” communication campaign will use a number of communication channels to reach the various target audiences.

Interpersonal Communication

As previously noted, in most cases, an individual’s doctor is the initial point of contact and direct interaction regarding health issues. Fong Ha et al. (2010) notes that doctors’ communication and interpersonal skills include the ability to gather information so they may provide patients with accurate diagnoses, counsel appropriately, provide therapeutic instructions, and establish caring relationships. Three main goals of effective doctor-patient communication include: (1) creating a good interpersonal relationship, (2) facilitating exchange of information, and (3) including patients in decision-making (Fong Ha et al., 2010). For the purpose of this communication campaign, healthcare professionals will include doctors (especially OB/GYNs), nurses, nurse practitioners, midwives, and other medical specialists that this population will come in contact with regarding their reproductive health.

Based on the doctor's efforts to ensure their patients receive the highest quality of care, the trust established between the doctor and patient serves as the interpersonal communication for this campaign. Good doctor-patient communication provides an opportunity to assist in regulating patients' emotions, facilitating comprehension of medical information, and allowing better identification of patients' needs, perceptions and expectations. In turn, patients will feel a higher level of comfort and heightened sense of satisfaction as related to their care, especially in sharing information for accurate diagnosis of health issues, following the doctor's advice, and adhering to treatment recommendations (Fong Ha et al., 2010). Doctors and other health care professionals will also be asked to direct their identified patients to various media sources (print media and social media sites) to learn even more about protecting against adverse birth outcomes.

Print Media

Print media, such as posters, flyers, and postcards, will be used with doctors and other healthcare professionals, where women go for doctors' visits. The print media will feature 2-3 well-known, respected spokespersons from various professional outlets in order to gain the attention of the targeted population. The spokespersons (described in the spokesperson approach section) will be African American women and featured in the print media. For healthcare professionals, educational tools such as pamphlets, posters, as well as actual measurement tools that could be used with patients including those that assess depression, psychological well-being, experiences of racial discrimination, spirituality and religiosity will be provided. Also, a curriculum for health providers will be provided to pass on to first time mothers, potentially leading to individual or group educational classes focusing on maternal and child health. Additionally, educational tools will be available for distribution in healthcare provider offices that identifies associated risk factors including age, ethnicity, and psychosocial factors such as stress, depression, and anxiety in addition to regular health screenings during pregnancy. The tools will also promote preconception health messages such as healthy eating, physical activity, stress relieving techniques, and a listing of websites for organizations with more information.

The 2008 documentary series entitled "*Unnatural Causes: Is Inequality Making Us Sick*?, which premiered on the Public Broadcasting Service station addressed various issues related to health disparities including infant mortality and adverse birth outcomes for African American women. The two-part episode entitled "*When the Bough Breaks*" highlighted issues such as the impact of chronic stress over the life course, institutional racism and other experiences on birth outcomes of higher SES African American women. The authors of this documentary also developed discussion questions and activities to assist in opening a dialogue in the public health community (Strain et al., 2008). This documentary and the discussion questions can be used in educational classes geared toward planning pregnancies as well as for women who are currently pregnant. This documentary has opened the door for more research and health promotion activities such as this proposed communication campaign.

The design for all print media will follow the guidelines of the CDC's health literacy website (CDC, 2012). Recommendations include suggestions for design, organization, layout, graphics and wording of health messages as well as ensuring that messages are "clear, relevant and appropriate" (CDC, 2012). All materials, whether written or media, will be culturally appropriate for the target audiences.

Mass Media and Media Advocacy

Mass media, such as TV commercials, PSAs, and news stories, will also be used to reach target audiences. Media outreach, such as television and radio ads sponsored by the March of Dimes and CDC's Division of Reproductive Health, that cater to the demographic, including but not limited to Black Entertainment Television (BET), BET Centric (a new subsidiary of BET networks with programming devoted specifically to women of color), TVOne, the Oprah Winfrey Network (OWN), and the LifeTime cable TV channel as well as magazine ads in publications such as Ebony, Essence and Jet magazines will also feature the "Healthy Life, Healthy Baby, Healthy Me" spokespersons, which will be very similar to the campaign's printed materials.

The campaign will also include media advocacy including news releases, opinion-editorials (op-eds) and letters to the editor of local and national level newspapers such as the Atlanta Journal Constitution, Washington Post, and/or Huffington Post, as well as participation in editorial board meetings. Additionally, the spokespersons will be used to assist in raising awareness of key messages, and encouraging partnerships between collaborating organizations interested in prevention of adverse birth outcomes. Collaborative partnerships developed by organizations can also assist in building support for the development and implementation of laws and policies through acknowledging affected population and communities.

Social Media

Social media sites used for this communication campaign include Facebook, Twitter, Instagram, and LinkedIn. The results of the studies conducted by the Pew Research Center show how important social media sites have become in individuals' lives and as a part of daily interaction. Therefore, using the CDC's best practices for social media, the "Healthy Life, Healthy Baby, Healthy Me" communication campaign will begin with the development of a Facebook page. Guidelines from the best practices include: recommendations for length and frequency of posts, the use of plain language, recommendations for promotion activities, "friends" engagement, and evaluation methods (CDC, 2012). Based on the evaluation findings, other sites will be developed and implemented, using this opportunity to include more reproductive health promotion as well as promotion of women and children's health and wellness.

Engaging Prominent Spokespersons

As a means to attract attention to this communication campaign, spokespersons, specifically those who will be identified through the formative research activities will be identified as potential participants. The use of recognizable figures within the marketing mix (flyers, PSAs, social media sites, etc.) provides an opportunity to make the campaign efforts relevant, both directly and indirectly, by using message reinforcement to the target audiences. Messages must be presented in ways that attracts attention, conveying personal relevancy to the audience (Nelson et al., 2002). A greater effect of the campaign methods may be achieved through utilizing recognizable spokespersons with the opportunity and ability to employ interpersonal influence on the targeted audiences, therefore assisting change of the environmental conditions that shapes behaviors. The approach also assists in message reinforcement, targeting audience members who are open to receiving informative and persuasive messages, along with those who are not yet committed but may be influenced by the spokespersons at a later time (Atkin & Rice, 2010).

For example, the U.S. Department of Health and Human Services Office of Minority Health utilizes Tonya Lee Lewis, an accomplished African American author and producer, as their national spokesperson for the *A Healthy Baby Begins with You* campaign to raise awareness about infant mortality, particularly in African American communities. Ms. Lewis also produced a documentary regarding the campaign's efforts (DHHS, 2012). With the ever-growing influence of individuals who are considered influential and relatable, the spokesperson selection process must include the following five attributes: trustworthiness, expertise, attractiveness, respect and similarity to the target audience (Sierchio, 2011). Individuals like Ms. Lewis provide power due to the ability to generate interest, while maintaining credibility, which translates to a potentially long-lasting effect on health promotion and campaign activities with the target population. In addition to name recognition, identifying other high profile women with a history similar to this population assists in the campaign's impact in terms of the ability to empathize with the target population, women of color.

Developing Key Partnerships

The "Healthy Life, Healthy Baby, Healthy Me" campaign is focused on informing and persuading primary audiences to become more knowledgeable regarding causes of adverse birth outcomes, and more active in their health care to mitigate associated risks. The formation of collaborative partnerships is imperative to widen the message reach. Previous literature notes that working across agencies and market segments in collaboration is important to make health "the default choice" for all individuals and communities. Partnerships are defined as collaborations of two or more organizations or individuals that work together to achieve a shared vision or goal (Healey & Zimmerman, 2010).

Furthermore, the foundation of cross-sector collaboration also ensures that initiatives are integrated well, which allows difficult issues to be resolved. Partnerships and collaborations have additional benefits including improving the message reach across communities and combining talents and resources of all collaborating organizations. Without collaboration, the task of optimizing public health becomes more difficult to accomplish as very few organizations are able to do it on their own (Tennyson, 2003). This communication campaign has a diverse audience that is well-suited for establishing collaborative relationships in an attempt to move the message even further beyond the initial, planned audiences. Key organizations include: the Division of Reproductive Health within the Centers for Disease Control and Prevention, the March of Dimes, the National Institute of Child Health and Human Development, the Office of Minority Health and other local grassroots and non-profit organizations. Additionally, various hospitals, doctors' and healthcare provider offices will be identified for participation as well.

Division of Reproductive Health (Centers for Disease Control and Prevention)

The inclusion of a federal agency is well-suited for collaboration with other organizations due to the wealth of information and resources that is currently available as well as that which will be developed through the communication campaign. The CDC can serve as a source for technical assistance, as it currently publishes information on maternal and child health, as well as adverse birth outcomes including low-birthweight births, pre-term births and infant mortality. Additionally, this agency has the PRAMS surveillance system, which monitors changes in maternal and health indicators in participating states that serves as a base for creating other systems that specifically cater to higher SES women or revising the current system to include this population. The establishment of any additional collaborative partnerships possibly strengthens the impact of the collaborating partner and CDC's message delivery due to the timely and credible information distributed by this agency. These reasons lead to the belief that "Healthy Life, Healthy Baby, Healthy Me" will be useful for the CDC as a collaborative entity in this communication campaign.

Reproductive Health Organizations

Reproductive health-focused organizations such as the March of Dimes are also considered to be plausible in terms of establishing collaborative relationships. March of Dimes houses national and local offices across states. They offer educational tools focused on peristats and various birth outcomes as well as conduct research and participate in advocacy efforts. The mission focus of this organization is premature births and birth defects, which makes it a logical choice for partnering in terms of reaching a wider audience and using the two-way relationship to assist in meeting the goals and objectives of participating organizations as well as this communication campaign. Additionally, March of Dimes encourages parents to share their stories, which allows individuals to see that they are not experiencing any challenge alone (March of Dimes, n.d.). Based on the aforementioned information, this organization would be a credible source of information on adverse birth outcomes. Other local level and grassroots organizations with a reproductive focus also offer an opportunity to reach areas that may not receive the information on adverse birth outcomes; therefore, it will be important to identify organizations in the collection of formative research that may be helpful in this endeavor.

CHAPTER 4: THE ROLE OF POLICY

The Role of Policy

A consistent goal of the previous and current Healthy People initiatives, including Healthy People 2010 and Healthy People 2020 is to "improve the health and well-being of women, infants, children, and families". The Maternal, Infant and Child objective states that

> "…improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. The objectives of the Maternal, Infant, and Child Health topic area addresses a wide range of conditions, health behaviors, and health system indicators that affect the health, wellness, and quality of life of women, children, and families" (DHHS(b), 2012).

The most common factors affecting pregnancy and childbirth include: preconception health status, age, access to appropriate preconception and interconception health care, and poverty (DHHS(b), 2012). The physical and social determinants such as lack of access and demographic variables including income and family educational attainment, respectively, as well as the importance of the life course perspective, have been thoroughly discussed. However, the inclusion of African American women who are not traditionally viewed as "disadvantaged" still shows there is much work to be done.

Policy Options

As one considers future policy options to address this disparity, it is important to reflect on policy efforts previously implemented to address disparities in reproductive health care. First, research documented the substantial economic consequences of unintended pregnancies, particularly for teenagers as it relates to reduction in workforce participation, completing education, and living in poverty. Second, researchers noted that closely spaced pregnancies and births, either very early or late in reproductive years, potentially lead to adverse health outcomes for mothers and their children. Finally, research showed that while women at all income levels wanted a similar number of children, women in lower income categories had more children than desired due to lack of access to affordable, accessible, and effective contraceptives (Boonstra, 2008).

As an initial answer to these issues, Title X of the Public Health Service Act in 1970 was the only established national program that exclusively addressed the provision of family planning services. Bipartisan support allowed for then President Nixon to sign the title into law, which made contraceptives available to all who requested them, also requiring service provision for lower income individuals at no cost or a sliding scale fee. Additionally, Title X prompted the development of national clinical networks providing “high quality, affordable contraceptive services” to women in lower SES categories.

As with many policies, negative consequences of Title X included the potential for an adverse impact on liberation as well as potential oppression. Particularly, there were concerns regarding historical attempts to deliberately regulate the fertility of particular populations including women of color and in lower SES categories, as well as women with disabilities, as a means of social control (Boonstra, 2008). Various patient protections were put in place to ensure voluntary participation and to combat ethical issues including: (1) the opportunity to choose from a broad range of contraceptives, (2) a guarantee of non-coercion into particular methods, and (3) prohibiting service providers from placing conditions on receiving government assistance as it relates to accepting contraceptive methods (Boonstra, 2008).

In addition to project grants and contracts for family planning services, Title X also provides funding for training, specifically for professionals working on family planning services projects. The Department of Health and Human Services (DHHS) states “the purpose of the training is to promote and improve the delivery of family planning services” (DHHS(d), n.d.). Training grants include ten general training and technical assistance grants with centers focusing on male family planning, clinical family planning and a national training center. Finally, funding is also available for research projects that focus on biomedical, contraceptive development, behavioral, and program implementation fields related to family planning and population (DHHS(d), n.d.). Specifically, research and evaluation projects are focused on issues related to service delivery. The Office of Family Planning had an estimated $297,400,000 in total funds appropriated for the 2012 fiscal year. The overarching goal is to “ensure and improve the quality of family planning services”.

The second significant development was the enactment of the Pregnancy Discrimination Act of 1978, which required all employers, except small businesses, to cover pregnancy-related care. Until this time, women and families were financially responsible for their care. While the implementation of this act assisted women with private insurance, there was still a gap for women in lower income categories (Boonstra, 2008). Thus, the expansion of Medicaid provided a shift in payment of pregnancy-related care for eligible participants but only as a short term solution. Women who initially obtained access to services upon becoming pregnant often lost coverage 60 days post-pregnancy (Johnson, 2012). The loss of coverage is most problematic for women who experience complications, have a pre-term delivery or low birth weight experience. The findings of the research prompted some state Medicaid-funded agencies to focus on improving quality and continuity of care for childbearing age women (Johnson, 2012). These policies are most applicable to this “new” group experiencing disparities, which calls for consideration of policies focused on addressing this unmet need.

Based on previous policies, the following options are proposed to address the elimination of reproductive health disparities among higher SES African American women including: (1) implementation of health promotion efforts to improve birth outcomes specifically targeting higher SES African American women and other women of color, (2) development of maternal risk screening programs for all expectant mothers with a focus on understudied areas that potentially influence birth outcomes, and (3) expansion of funding to develop research centers, career-development opportunities, and awards for planning and implementation grants that focus on improving reproductive and maternal outcomes. These policy options can specifically inform media advocacy activities.

Analysis of Options

Implementation of Health Promotion Efforts

The first option is support for development and implementation of health promotion efforts, such as this proposal, to improve birth outcomes that specifically target higher SES African American women. In addition to the efforts focused on informing and persuading the population of interest, legislators can also utilize the information learned to assist in guiding the development and support for reforming current laws, developing new laws, and proposing funding for new initiatives and laws to support reproductive health research and services.

The provision of funding and policy support for health promotion activities for organizations including CDC’s Division of Reproductive Health, National Institute of Child Health and Human Development, March of Dimes, the Office of Minority Health, and others is imperative. Activities include those previously mentioned in this proposed campaign plan such as the development and implementation of mass media activities/awareness campaigns including educational tools, media outreach with celebrity spokespersons, and the utilization of social media.

Development of Maternal Risk Screening Programs

The second policy option is the development of maternal risk screening programs for all expectant mothers with a focus on understudied areas that potentially affect birth outcomes. Currently, surveillance projects such as the Pregnancy Risk Assessment Monitoring System (PRAMS) collects state-specific, population-level data on participants' attitudes and experiences before, during and post-pregnancy (CDC, 2012). While the system allows CDC and states to monitor changes in maternal and child health indicators such as unintended pregnancy, utilization of prenatal care, breastfeeding practices, and behavior risk factors such as smoking and drinking, the focus is generally on low SES women. With recent findings suggesting an increased focus on societal and psychosocial issues including stress, experiences with racism, potential genetic explanations, and other issues must also be considered. Developing a surveillance system that includes measures of the aforementioned social and psychosocial factors as well as rethinking screening methods to increase data collection among this "new" understudied population can assist in making important contributions to the development of intervention and prevention strategies.

In searching for recent legislative acts submitted for consideration, proposals have focused on maternal death surveillance instead of screening currently pregnant women. For example, on March 3, 2011, the *Maternal Health Accountability Act of 2011* was introduced with the intention of amending *Title V, Maternal and Child Services*, of the Social Security Act. Under this act, the Secretary of Health and Human Services would award grants to states for: (1)

mandatory reporting to the state department of health by health care providers and other entities for pregnancy-related deaths; (2) establishment of a state maternal mortality review committee on pregnancy-related deaths occurring within each state; (3) implementation and use of comprehensive care abstraction forms by such committees to preserve the uniformity of the information collected; and (4) annual public disclosure of committee findings (H.R. 894, 2011). The Public Health Service Act would also be amended for the implementation of specific research and demonstration activities used to eliminate disparities in maternal health outcomes with the focus on women currently pregnant as well as those participating in preconception care, which also needs additional focus and attention.

Expansion of Funding for Research

The third policy option is the expansion of funding to develop research centers, career development opportunities, and awards for planning and implementation grants that focus on improving reproductive and maternal outcomes. Based on recent findings, more research is needed investigating the intersection of stress, experiences with racism and discrimination, and other behavioral, social, environmental and institutional factors (Rosenthal & Lobel, 2011). In 2011, Representative Lucille Roybal-Allard of California introduced H.R. 2141, *Maximizing Optimal Maternity Services for the 21st Century* as an amendment to the Public Health Service Act, which was referred to the Subcommittee on Health.

A portion of this bill directed the Secretary of Health and Human Services (HHS) to support establishing two additional Centers for Excellence on Optimal Maternal Outcomes to conduct maternal outcomes research. Additionally, education and professional opportunities are identified through designating maternal care health professional shortage areas, a loan repayment program is recommended to assist in lowering shortages, and the development of planning and implementation grants addressing workforce disparities are also highlighted. It appears the bill died; therefore, continued advocacy for these areas is needed (H.R. 2141, 2011).

Continuation of funding for community-based programs sponsored by CDC, such as Racial and Ethnic Approaches to Community Health (REACH) offer coalitions and programs that advance this initiative to eliminate reproductive health disparities is essential. Programs such as REACH also provide early access to services needed to lower infant mortality rates and other adverse birth outcomes through prevention and intervention strategies. Finally, it provides educational and training opportunities for early to mid-career professionals in addressing reproductive health disparities (CDC, 2014).

Strategy for Change

The passage of the Affordable Care Act, as a portion of health care reform in 2010, expanded access to preventive services for women with more guidelines adopted in 2011, which included more reproductive health services. Since accessibility and availability of services does not seem to be the major issue for this particular population, the strategy for change needs to consider a combination of policies that will assist in raising awareness for the target population, identify more accurate and efficient methods of targeting this new high-risk population, and collaboration with agencies/organizations to implement prevention and intervention strategies.

Therefore, the strategy includes development and implementation of policies over an identified period of time. Prior to implementation of any methods, a better understanding of highly impacted communities is needed. The development of surveillance methods to monitor birth outcomes will potentially assist in accurately identifying high risk women in this group. Once high-risk groups are identified, prevention and intervention strategies can be implemented.

- Engagement in a comprehensive reproductive health campaign will assist in educating and raising awareness of high rates of adverse birth outcomes among high SES African American women. The aforementioned methods such as development of educational tools, media campaigns, and utilization of social media also offer opportunities for informing and educating the target population.
- Based on the surveillance findings, funding will be provided for the development of research centers and professional development opportunities as another implementation strategy for new prevention and intervention activities with the potential to uncover evidence-based findings that add to the reproductive health practice, policy, and research.

CHAPTER FIVE: EVALUATION

Evaluation

The proposed evaluation plan is three-fold including a plan to evaluate policy as well as a process and outcome evaluation for the proposed campaign. Program evaluation is an essential element of the policy process, from the initiation of the development through the implementation and must be thoroughly conceptualized and documented. The CDC notes that program evaluation is "an essential organizational practice in public health; however, it is not practiced consistently across program areas, nor is it well integrated into the day-to-day management of most programs" (CDC, 1999). While it may not be practiced consistently, the CDC recognized that, "effective program evaluation is a systematic way to improve and account for public health actions that involve procedures that are useful, feasible, ethical, and accurate" (CDC, 1999). It is my belief the evaluation of any proposed policy or program should include the following:

1. A thorough description of the legislative history of the policy or program to be evaluated.
2. Identification of stakeholders, including agencies responsible for implementation and the recipients of services.
3. A thorough description of the policy or program including an overview of goals and objectives.
4. A thorough description of the data collection plan including selection of methodological approach (quantitative, qualitative, or mixed methods).
5. Preparation of a report based on the evaluation including the identification of strengths and limitations, recommendations for changes, and any suggested improvements for the policy or program.

As part of the evaluation, I would advocate for the use of a clear logic model. The Kellogg Foundation defines the logic model as "a picture of how your program (policy) works and the theory and assumptions underlying the program" (Kellogg Foundation, 2004). A logic model provides a roadmap of your program, the planned activities, and changes or results that program hopes to achieve, leading to the impact of the program on the organization, community or system (Kellogg Foundation, 2004).

Process evaluation is recommended to begin with implementation to ensure that “Healthy Life, Healthy Baby, Healthy Me” is serving the target population as planned, and whether the number of women being served is more or less than expected. Additional evaluation will allow for the opportunity to obtain target audience feedback, assess that objectives were met, and monitor campaign costs. Empirical data for the process evaluation will be collected and analyzed to assess the delivery of communication methods through defining the campaign’s intention, and identifying any gaps between campaign design and delivery. Similarly, empirical data will be collected for the outcome evaluation to assess the campaign’s impact and effectiveness at various stages including short-term, intermediate and long-term outcomes for this population.

The evaluation questions will focus on addressing four identified core areas of program implementation and outcomes including: (1) education, (2) social marketing, (3) campaign partnerships and collaborations, and (4) campaign implementation. The overarching question posed to address the process is: Has the ‘Healthy Life, Healthy Baby, Healthy Me’ campaign been successful in attaining the anticipated implementation objectives inform audiences and persuade behavior change? Additional questions include: What problems have been encountered in implementing objectives of the campaign? Are the intended target audiences being reached? Specific process evaluation questions include:

- Was the media campaign components for implementation (i.e. PSAs/Flyers/Posters/Social media activities) completed as indicated?

- How were target audiences identified for participation?
- Were the campaign methods provided to the intended individuals?
- How were connections made between collaborating agencies, partners, and stakeholders?
- What were the strengths in implementation of the campaign methods?
- What were the barriers or challenges in implementation of the campaign methods?
- Did the target audiences understand the campaign messages?
- Were resources available to sustain media campaign activities?
- Was the appropriate structure in place to maintain campaign activities?
- Was the appropriate staff in place to offer the intended activities?
- What were the collaborators’ perceptions?
- Were the target audiences satisfied with the activities provided by the campaign?
- Were the partners and organizations satisfied with the collaborative process of the campaign methods?

Quantitative data will be collected periodically throughout the actual implementation of the campaign strategies and will be obtained through the following indicators:

- Number of participants (prospective and current mothers, doctors, other reproductive health care professionals) in educational training
- Number of planned trainings
- Number of completed trainings
- Number of media outlets contacted (TV news spots, local news media)
- Number of outlets implementing messaging
- Number of messages distributed
- Percentage of messaged distributed by type (social media outlets, smart phone app)

- Percentage of target audiences seeking campaign tools (posters/flyers/pamphlets) due to media exposure by type
- Percentage of organizations recruited for training and participation due to media exposure
- Number of organizations contacted for partnerships
- Number of partnerships formed
- Percentage of partnerships formed by organizational type

The outcome evaluation will assess the impact of the campaign at various stages (short-term, intermediate, and long-term) of outcomes for the target audiences. The combination of evaluation methods will provide a thorough understanding of the development, implementation, and effectiveness of the services, validating the purpose of the proposed program and its impact on the intended at-risk/underserved populations of interest. The overarching question for the outcome evaluation is: Has the 'Healthy Life, Healthy Baby, Healthy Me' campaign been successful in attaining the anticipated outcome objectives (increased knowledge and awareness, self-reported behavior changes, etc.) for target audiences? Additional questions include: Are the target audiences exhibiting the expected changes in knowledge, attitudes, and behaviors, or awareness? Can the exhibited changes be attributed to the 'Healthy Life, Healthy Baby, Healthy Me' campaign? Specific outcome evaluation questions include:

- Did campaign activities achieve intended outcomes/positive effects for expectant mothers, women in pre-pregnancy planning stages, OB/GYNs, and other reproductive health professionals?
- How did the target audiences change in knowledge, attitudes, behaviors, or awareness?
- What is the impact of participation on outcomes, specifically self-reported feelings of empowerment in seeking quality reproductive services (or self-reported increase in

utilization of new findings with patients that fall within the identified demographic, or number of adverse outcomes for target population)?

- What were the consequences of these changes?
- Did the campaign activities have any unexpected effects?
- Which groups responded best/worst to the media activities?
- How can the planning of campaign activities be improved?

A combination of quantitative and qualitative data will be collected to assess awareness and behavior change and will be obtained through the following indicators:

- Percentage of target audiences reporting satisfaction with campaign materials
- Number of participants from target audiences
- Percentage of target audiences reporting change in awareness, attitudes, and behaviors
- Number of satisfaction surveys/pre- and post-surveys distributed
- Percentage of surveys completed
- Comparison of level of awareness, attitudes, and behaviors pre- and post-intervention
- Number of social media outlets utilized
- Number of responses by social media outlet
- Number of tracked adverse births reported among women vs. doctors
- Review of comments from open-ended questions/comments section on survey tools
- Cost per campaign participant

Gathering Credible Evidence

As noted above, data will be gathered through identifying utilization of campaign methods including educational programs, media tools and participant feedback. Results from a pre- and post- survey to assess changes in awareness, attitudes, and behaviors of the targeted audiences will also be developed and collected. Additional sources of data include statistics from the CDC, March of Dimes and other sources reporting the number of adverse birth outcomes among the identified population will assist in comparing the results of this campaign to previous efforts.

Justifying Conclusions

Data analyses will provide the ability to compare results of the proposed interventions with previously conducted programs. Also, findings will build on evidence of the importance of this endeavor. Limitations identified through the evaluation will provide stakeholders opportunities to consider areas of improvement, including but not limited to, identification of participants, revision of campaign methods or implementation strategies, and/or reporting procedures.

Ensure Use and Share Lessons

The process and outcome evaluation allows stakeholders to actively participate in the evaluation process during the actual implementation of the campaign activities. A collaborative relationship will be encouraged throughout the development, implementation and evaluation of this campaign. Having the opportunity to gain immediate feedback from stakeholders throughout the process ensures appropriate utilization as well as the ability to share lessons learned throughout each stage of the campaign.

The purpose of the ‘Healthy Life, Healthy Baby, Healthy Me’ campaign is to ultimately reduce the number of adverse birth outcomes among higher SES African American women. The overarching aim of this campaign is to inform and persuade the identified target audiences through increasing awareness and encouraging behavior change. Ultimately, it is hoped that identified communication methods will encourage African American women who are pregnant or attempting to become pregnant to understand the risk factors related to adverse birth outcomes and how they may affect them personally as well as to take a proactive stance in their reproductive health.

For doctors and other reproductive health professionals, it is hoped they will assess their direct interaction with this population and encourage their patients to take the best advantage of the full range of reproductive and maternal health services, potentially leading to positive health outcomes. Finally, for reproductive health policymakers, it is hoped they will recognize the need to support reproductive health legislation that allocates funds for the development of more innovative services through health promotion efforts and maternal risk screening programs, as well as continued support and expansion of research and career development opportunities through organizations such as the CDC's Division of Reproductive Health, National Institute of Child Health and Human Development, March of Dimes, the Office of Minority Health and others.

Consideration of the proposed policy and program options offers the reproductive health community and larger public health community with a collaboration opportunity that would meet several objectives including: increasing awareness among African American women and reproductive health professionals and policymakers of a phenomenon that is adversely affecting an otherwise affluent group; improving maternal and child health by increasing healthy birth outcomes for a population at risk: and ensuring access to reproductive health information and services to patients, professionals and policymakers.

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