

The Impact of Stress, Racism & Poverty on Black Infant Mortality in Wisconsin

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Executive Summary

For the past 30 years in Wisconsin, an African-American infant has been two to three times more likely to die in the first year of life than a white infant.¹ Provisional data for infant mortality in Dane County, Wisconsin showed a rate of 20.9 per 1,000 live births in 2015 and 17.6 in 2016; far worse than country estimates for Serbia (5.9), Botswana (8.6) and Syria (15.2)² during the same period. Furthermore, in the 2016 America's Health Rankings, the United Health Foundation indicated that Wisconsin's black/white infant mortality rate disparity ratio of 2.9 is among the highest in the nation.

Contributing factors to poor health outcomes for black mothers and children include toxic stress, racism, and poverty. Many interventions are in place to improve black infant mortality in Wisconsin, yet the upward trend of black infant mortality rates remain persistently and unacceptably high. This paper explores the impact of stress, poverty, and racism on black infant's mortality in Wisconsin. In particular, the paper considers the role of toxic stress in maternal health and birth outcomes, and how policies to reduce such stress might improve black infant mortality. State-level policy options are available for consideration, include:

- ❖ **Extending Medicaid Coverage through one-year post-partum to:**
 - Remove barriers to access to care and provide adequate time to find insurance that meets needs and budgets.
 - Reduce stress that vulnerable and marginalized women experience.
 - Promote longer intervals between pregnancies and better health status going into subsequent pregnancies.

- ❖ **Initiating Medicaid support for housing services to:**
 - Reduce homelessness and other hardships.
 - Lift families out of poverty, and allow families to move to safer, less poor neighborhoods.
 - Provide opportunities for educational, developmental, and health benefits.

- ❖ **Eliminating the birth cost recovery policy to:**
 - Reduce the stress that black mother's experience (not having access to health insurance, adequate food, and childcare).
 - Encourage early entry to prenatal care.
 - Encourage continued presence in relationships by non-marital fathers.

Successful implementation of these policies will lead to reduced inequities, reduced stress in black mothers, and subsequently, an improved black/white infant mortality gap in Wisconsin.

Introduction

Wisconsin leads the nation on racial disparities in birth outcomes. The leading cause of infant mortality in Wisconsin is preterm birth.³ Preterm infants are infants born before 37 weeks gestation. Compared to infants born at term, preterm infants have a low birth weight (5.5lbs or less). As such, these infants may face significant health challenges and may even die before their first birthday.^{4,5}

In Wisconsin, the vast majority of preterm infants are infants born to black mothers.⁶ Racial discrimination may be at the core of black infant mortality in Wisconsin. Racism deprives black mothers of socioeconomic necessities such as access to education, nutritious food, economic opportunities, and safe housing.

The life course exposures to these challenges contribute to chronic stress, which in turn impact black infant mortality.⁷

Stress

Stress has a major impact on infant mortality rates. Stress is the reaction to a physical or psychological challenge or a threat.⁸ When the body is stressed, it releases a stress hormone called cortisol into the bloodstream. While cortisol is an essential hormone, when the stress response is activated for an extended period of time and cortisol levels remain high it can lead to adverse health outcomes for the mother, fetus, and infant.^{9,10}

There are three types of stress responses — positive stress response, tolerable stress response and toxic stress response.¹¹ A positive stress response is sporadic; it is mild and short-term. In the presence of protective factors, the body recovers from positive stress.¹²

Unlike positive stress response, that is mild and short term; tolerable stress response is sustained and more severe.¹³ Example of tolerable stress response includes coping with the death of a loved one or a divorce¹⁴. In the presence of protective factors or buffers, the body can recover from tolerable stress. However, when protective factors are insufficient or absent, the body is unable to recover from the stress response and damages to the brain, and other body organs can occur.¹⁵

Toxic stress response differs substantially; it is the activation of stress response for an extended period. When this occurs, blood pressure and stress hormones such as cortisol remain high, and long lasting damage to the brain and other organs occurs.¹⁶ Examples of toxic stress response include constant exposure to extreme poverty or food insecurity.¹⁷ While toxic stress does not

solely predict or determine the health of an individual, it can impact health outcomes and predispose an individual to many social and economic inequities.¹⁸

Toxic stress can impact the ways an individual learns and responds to stressors or illnesses.^{19, 20}
²¹ Toxic stress leads to a phenomenon called “accelerated aging” or “weathering effect” which is characterized by a decline in health status or well-being.²² This in turn leads to poor health outcomes. Especially for black women, “accelerated aging” leads to preterm delivery, low birth weight, and very low birthweight^{23,24,25,26} and neonatal mortality.^{27,28}

Stress and Black Infant Mortality

Both acute and chronic perineal stressors impact birth outcomes. Acute perineal stressors, occurring shortly before or during pregnancy, may impact the immune system without affecting its normal function. Chronic perineal stressors are caused by exposure to chronic stress such as extreme poverty or perceived racial discrimination over the life course.^{29,30,31} Chronic stress weakens or suppresses the immune system and dysregulates the neuroendocrine function.

The impact of chronic perineal stressors, particularly racial discrimination, impact black women on a more frequent basis by impacting genetic expression, and creating “weathering effect” or “accelerating aging”.³² Chronic perineal stressors can lead to preconceptional hypertension and chronic diabetes, to placental insufficiency,^{33,34,35,36,37,38,39,40,41,42} preeclampsia, and consequently, spontaneous preterm birth.^{43,44,45,46,47,48}

Beside chronic exposure to psychosocial and environmental stressors, maternal perception of stress also impacts birth outcomes. Studies have indicated that cortisol (stress hormone) level in black women is comparable to cortisol levels seen in individuals with posttraumatic stress disorder and other chronic stress syndromes.^{49,50} Black women are regularly exposed to chronic stressors such as racial discrimination, poverty and neighborhood violence. They often lack resources and social support and feel less self-sufficient resulting in low self-esteem. Black women who report high levels of perceived toxic stressors throughout their life course tend to have poorer health outcomes and subsequently, preterm deliveries and high rates of black maternal mortality.^{51,52,53,54,55} The U.S. has the highest rate of maternal mortality deaths within one year from the end of pregnancy of any developed country, and that rate has been rising over the past 15 years.^{56,57} There are vast racial disparities in maternal mortality in the U.S. The rate of black women that are dying in childbirth, or shortly after is three times more than that of white women.⁵⁸

A significant body of evidence indicates the deleterious effects of racism on health outcomes among African Americans.^{59,60,61,62,63} Racism produces psychosocial or affective responses including: stress, anger, depression and anxiety, which subsequently trigger physiological responses directly associated with chronic diseases. Studies reveal that African Americans experience discrimination or interpersonal racism throughout the life course or during pregnancy.^{64,65,66,67,68} Two hospital-based case-control studies of low-income, inner-city populations, restricted to black mothers and their infants, found that mothers who give birth to very low birth

weight infants were approximately three times as likely as mothers of normal birth weight infants to report having experienced racial discrimination.^{69,70}

Furthermore, Fleda Mask Jackson and colleagues embarked upon research with the expressed purpose of developing a stress measure to assess racial and gendered stress among African American women. Their research was conducted over a 10-year period in two phases; phase one involved mostly non-pregnant women and phase two enrolled women who were in the first to second trimester of their pregnancy.

From this, a robust methodology, the Jackson, Hogue, Phillips Contextualized Stress Measure (JHP) was developed as an instrument to assess and interpret the intersection of the stressors of race and gender. The results indicated that black women often encounter racism and gendered stress at many levels, strive to meet the needs of others especially relatives and family members, while ignoring their own needs, and turn to high vigilance as a mean of coping; high vigilance, in turn, contributes to further toxic stress.⁷¹ The results also made evident, the significant associations between chronic diseases, especially cardiovascular disease, and gendered racism, anger, and anxiety.⁷²

Poverty, Toxic Stress, and Birth Outcomes

Structural racism contributes to inequitable distribution in wealth and subsequently, poverty.^{73,74} In the United States, individuals who belong to racial groups that have been historically marginalized are more likely to experience poverty.⁷⁵ Poverty is a significant risk factor for social, emotional, and health issues.⁷⁶ Inequalities in health largely reflect inequalities in variables at the individual and household levels, such as education, income, location, and housing characteristics.

Poverty contributes to family hardship and stress. Individuals who experience poverty lack assets such as social belonging, cultural identity, respect, and dignity, information and education.^{77,78,79, 80} People who experience poverty are often at risk of food insecurity, housing insecurity, violence and crime victimization, incarceration, depression, and chronic disease. Among all the states, Wisconsin faces some of the largest racial disparities in poverty.⁸¹ The racial disparity in Wisconsin is increasing at a faster rate than for the nation as a whole.⁸² The graphic in Figure 3 below indicates the dimension of poverty disadvantages.

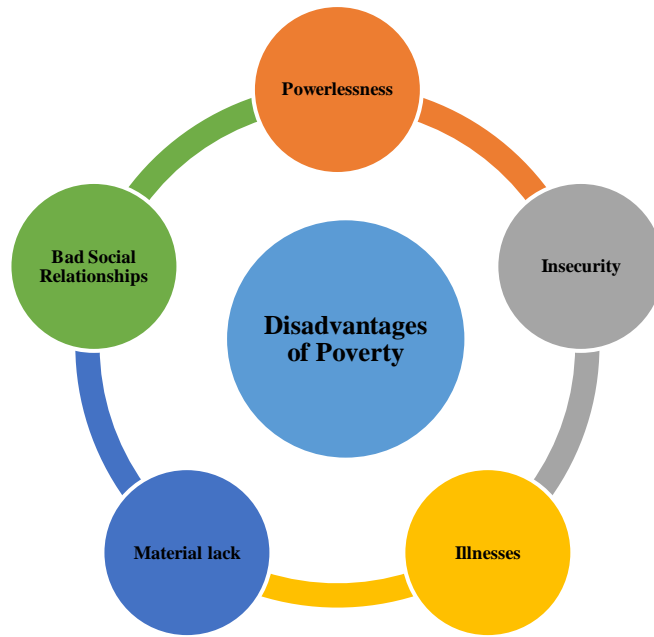


Figure 3. Disadvantages of Poverty

Furthermore, poverty contributes substantially to African American women’s poor birth outcomes.⁸³ The rate of African American women who live in poverty is twice that of white non-Hispanic women.^{84,85} The unavailability and inaccessibility of resources, along with the lack of social support and connectedness prevent African Americans to escape poverty and its ill effects. Consequently, African American women face chronic stressors such as those associated with inadequate housing, poor education, and high crime neighborhoods. This positions African American women at risk of chronic diseases caused by chronic stressors, which consequently, impacts black birth outcomes.

Poverty alone does not explain poor birth outcomes, especially black infant mortality. Black women who are well educated and do not live in poverty also experience negative birth outcomes such as preterm birth and low birthweight.⁸⁶ Studies revealed that birth outcomes of college educated African American women is comparable to that of non-college-educated, unemployed, and uninsured white women. Other women who are more likely to live in poverty such as first generation Mexican American women have birth outcomes that are comparable to white women from higher socioeconomic backgrounds.^{87,88} These findings offer the argument that poverty may be a contributing factor to poor birth outcomes, but not the sole explanation for it. Other factors that may contribute to black infant mortality includes segregation.

Effect of Poverty & Residential Segregation on Black Infant Mortality

Segregation is the residual of decades of institutional racism and exclusionary zoning practices.^{89,90} Most black individuals in the United States live in segregated communities, often in poor neighborhoods despite their social and economic backgrounds.^{91, 92}

Consequently, middle-class blacks are also exposed to environmental stressors that lead to toxic stress such as limited social contacts, neighborhood deterioration, crime, lack of employment and educational opportunities, economic deprivation, and loss of tax base and community infrastructure.⁹³ These contextual exposures may increase the risk of poor pregnancy outcomes and contribute to the higher rates of black infant death.⁹⁴ Furthermore, individual-level factors such as less physical activity, inadequate diet, lack of social support, stress, and reduced access to medical care accentuate the isolation effects of segregation at predicting an infant's risk of dying.⁹⁵

Even though residential segregation may contribute to black infant mortality, racial clustering may be a protective factor against preterm birth. A study of the effects of residential segregation on preterm birth revealed that social ties and networks within segregated communities can offset environmental stressors and protect against preterm birth. Moreover, poor black women who live in relatively wealthier "black" neighborhoods tend to have better birth outcomes compared to poor black women who live in racially mixed neighborhoods. Thus, poverty and residential segregation are intertwined and the combination of both accentuate the impact of each.⁹⁶ Social connectedness serves as a protective factor and lessens the health damages triggered by toxic stress.^{97,98} Socially connected individuals tend to live longer than individuals that are socially isolated.⁹⁹ Similarly, regarding pregnancy, women who are socially connected tend to have improved birth outcomes compared to those who lack social support. Despite the protective effects of social connectedness, toxic stressors often outweigh the body's capacity to cope, causing damages to almost every system of the body.^{100,101,102}

Policy Analysis

Three Policies That May Reduce Stress, Improve Maternal Health, and Promote Positive Birth Outcomes

Extend Medicaid Coverage Through 1-year Post-Partum

Leverage Medicaid Support for Housing Services

Elimination of the Birth Cost Recovery Policy (BCR)

Local assessment bears out similar conclusions to some of the national studies on African American birth outcomes. The Dane County Health Council, in Dane County, Wisconsin, initiated a community engagement campaign around the African American low birthweight crisis in our community in March 2018.¹⁰³ The assessment was titled, *Saving Our Babies: Advancing Black Maternal, Child & Family Well Being in Dane County to Improve Births Outcomes*. The assessment identified some of the same challenges noted on a national level including, but not limited to, racism, poverty, and chronic stress.¹⁰⁴

Many participants in the assessment cited policies such as the “Cliff Effect” that penalize mothers/parents by removing income, housing, or childcare assistance safety nets immediately (versus incrementally) when they experience slight increases in income/employment status. Moreover, policies that penalize unmarried women such as the Birth Cost Recovery (BCR) Policy or Birth Tax were often mentioned. According to the participants, the BCR policy often results in the loss of critical family-stabilizing supports such as childcare and healthcare coverage loss if the women refuse to provide the father’s name to child support agencies.¹⁰⁵

The high cost of living and housing was a significant concern and obstacle for most participants, their families, and extended families. Even though most participants had stable housing (81%), many, especially those who were low-income, reported past or present experiences with homelessness and housing. Participants expressed concerns about rising rents and neighborhood gentrification. Participants also cited financial stress and economic uncertainty among the top sources of stress impacting black women and families as they navigate daily life, pregnancy, and parenting.

Black women who participated in the assessment expressed the presence of bias at some point in their interactions with healthcare professionals, even with positive healthcare experiences. They reported that they do not feel heard or believed when expressing their health concerns, needs or illnesses. Many of the participants linked the poor quality of care to race, gender, income, and negative stereotypes. Furthermore, the participants expressed that the type of health insurance that they have often determined the quality of care that they received. Participants with Badger Care or Medicaid especially expressed that they received lower quality of care and were treated with less respect than those on private insurance.

Overall, participants communicated an alarming state of stress in “living while black” in Dane County. Racism, discrimination, bias, economic insecurity, and social isolation collectively impose barriers to opportunity and lead to toxic stress which in turn has adverse effects on birth outcomes.

The following policy proposal grew from the Dane County Saving our Babies assessment and a larger literature review.

Proposed policy 1

Extending Medicaid Coverage Through one-year Post-Partum

Extending Medicaid policy through one-year post-partum will:

- ❖ Remove barriers to access to care and provide adequate time to find insurance that meets needs and budgets.
- ❖ Reduce stress that vulnerable and marginalized women experience.
- ❖ Encourage longer intervals between pregnancies and healthier pre-pregnancy status for mothers.

Current status of Medicaid Post-partum Coverage in Wisconsin

Currently, Wisconsin Medicaid/BadgerCare Plus covers eligible pregnant women with household incomes up to 300% of the federal poverty level. Medicaid eligibility resulting from pregnancy is temporary, and the coverage is usually terminated 60 days after delivery.^{106,107,108} After the Medicaid eligibility is terminated 60 days post-partum, the Medicaid system determines if the mother qualifies for health care coverage as a parent. In order to continue to qualify for continued Medicaid coverage, the mother cannot have a household income that exceeds 100% of the federal poverty level. (The mother can also submit an application for Family Planning Only Services (FPOS) if her income is up to 300 % of the federal poverty level.)¹⁰⁹

The Impact of Post-partum Care on Birth Outcomes

The lack of postpartum health care coverage contributes to short interpregnancy interval, which is known to impact pregnancy outcomes, especially infant mortality.^{110,111} Studies show that, among all women that experience poverty, women of color have the highest rate of short interpregnancy intervals.¹¹² Furthermore, because the impacts of short interpregnancy intervals are accentuated by chronic stress, the interventions to address women's health risks during pregnancy need to occur prior to conception and before subsequent pregnancies. Moreover, chronic health conditions caused by chronic stress that make pregnancy more dangerous, such as diabetes and hypertension, are more prevalent in black women. The period following birth is a critical time when women need holistic care in order to safely transition from birth; during this period, new mothers need to receive services that are essential to their wellbeing, and the wellbeing of their children.¹¹³ The availability of resources such as postpartum Medicaid coverage up to one year after delivery can offset some of the consequences of chronic stress and improve maternal and child health.^{114,115,116}

The loss of Medicaid coverage may also interfere with the mother's ability to receive mental health and postpartum depression-related care, putting both mother and child at risk. Perinatal depression includes major and minor depressive episodes that occur during pregnancy or in the first 12 months after delivery.¹¹⁷ Depression is prevalent among all women during pregnancy or during the postpartum period; however, the statistics are even more austere for African-

American women.¹¹⁸ A 2016 study revealed that mothers of color suffer from postpartum depression at a rate of 38 percent, compared with 13 to 19 percent for all mothers.¹¹⁹ Losing insurance 60 days postpartum does not allow mothers to receive adequate services, especially those that are already struggling to receive adequate postpartum depression care, or should the depression onset begins after coverage termination.^{120,121,122,123} Extending Medicaid coverage through one year postpartum can significantly improve birth outcomes in Wisconsin. Figure 8. below depicts the short-term and long-term benefits of extending Medicaid through one year post-partum.

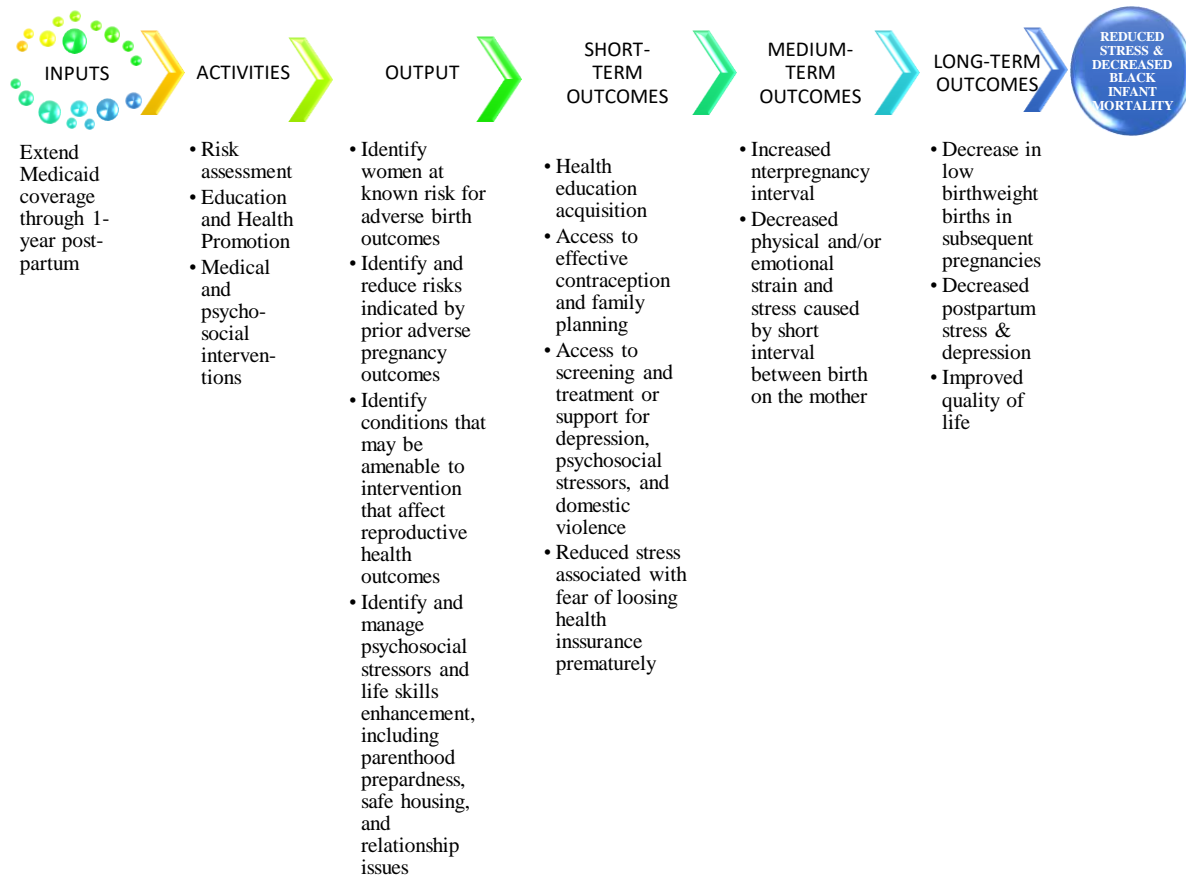


Figure 8. Logic Model- Extending Medicaid Coverage Through one -year Post-Partum^{124,125,126,127}

Proposed Policy 2

Initiate Medicaid support for housing services: leverage Section 1115 Medicaid Research and Demonstration waiver toward health integration, care coordination, and supportive housing services for the target population.¹²⁸

Providing housing support to high risk-individuals will:

- ❖ Reduce homelessness and other hardships.
- ❖ Help lift families out of poverty, and allow families to move to safer, less poor neighborhoods.
- ❖ Provide opportunities for educational, developmental, and health benefits.

Current Government Supported Housing Assistant Programs in Wisconsin¹²⁹

In 2015, the Center for Medicaid Services (CMS) issued an informational bulletin that allows states to leverage Medicaid benefits to support housing related services for individuals with disability, older adults needing long-term services and supports, and those experiencing chronic homelessness.¹³⁰ One of the Medicaid demonstration programs included in the guidelines, identified Section 1115, which could be leveraged for state-level housing related collaborative activities. Section 1115 allows states the opportunity and flexibility to use Medicaid for innovative programs designed to address health equity and improve health outcomes for vulnerable and low-incomes individuals. Pilot programs that Section 1115 may be used for need to be person-centered, evidence based, sustainable, focused on capacity building, and address determinants of health from an upstream perspective.^{131,132,133,134, 135,136}

Section 1115 Medicaid waiver cannot be directly used to pay for housing cost,¹³⁷ but can be used to pay for supportive housing services such as case management and care coordination.¹³⁸ Supportive housing differs from affordable housing. The supportive housing model provides a safe, stable, and permanent housing along with community-based supportive services to individuals with complex needs that are homeless, or at risk of becoming homeless. Other states are beginning to use Medicaid in the housing services arena. States that currently have a Section 1115 waiver for housing support services include California, Colorado, Hawaii, Oregon, and Washington.¹³⁹ Programs that are currently in place in Wisconsin to address housing insecurity mainly focus on providing financial assistance.

The table below provides a description of current government supported housing assistance programs in Wisconsin.

Programs	Eligibility
Rural and Economic Development Loans	<ul style="list-style-type: none"> • Also known as Section 502. • Offer home rehabilitation loans to improve safety and sanitary home conditions, and to make homes disabled-accessible
Home Improvement Loan Program	<ul style="list-style-type: none"> • Offers home improvement/repair loans and home energy loans at an interest rate below the market rate to homeowners with low or middle incomes. • Offer home energy incentives for energy conservation projects.
Low-Income Energy Assistance Program	<ul style="list-style-type: none"> • Provides energy assistance for low-income renters and homeowners. • Eligibility is based on income and proof of “energy burden”.
Weatherization Programs	<ul style="list-style-type: none"> • Provides free weatherization to eligible low-income customers.
Rent Assistance for Public Housing	<ul style="list-style-type: none"> • Provides housing for low-income families and persons who are 62 years old or older and single, have a disability, or are displaced by government action or disaster. • Qualified applicants pay up to 30 % of income for rent; income limit for eligibility is set by local housing authority.
Section 8 Housing Subsidies	<ul style="list-style-type: none"> • Provides income-based housing subsidies through the federal Department of Housing and Urban Development contracts. • Tenant pays their portion of rent, and HUD pays the difference between rent charged on the private market and the tenant’s contribution.
Rural Rent Assistance	<ul style="list-style-type: none"> • Provides rent assistance program similar to the Section 8 program in rural areas. • Income based; tenant contributes up to 30% of income toward rent.

The Impact of Housing and Neighborhood Conditions on Health

Good health depends on having homes that are safe and free from physical hazards. Individuals who live in safe and healthy neighborhoods and homes feel more stable and secure, live longer, and experience less health problems caused by chronic stressors such as chronic diseases and infections.^{140 141,142} Poverty and racism are contributing factor to housing instability. Individual’s social and economic status determines where and how they live.^{143,144} Poor people tend to live in

impoverished neighborhoods and are exposed to high stressors such as violence and crime and are more likely to spend at least 30 percent of their income on housing.¹⁴⁵

In addition, the ill effects of poverty influence the ability to pay for rent or mortgages, or utility bills. Thus, people who live in poverty experience higher rates of housing insecurity such as frequent unplanned relocation and foreclosure. This, in turn, leads to chronic stress and adverse health outcomes.^{146,147, 148} Families who are continuously struggling to meet basic needs are often forced to make tradeoffs between housing and well-being and social enhancers such as nutritious food, health care or needed prescriptions, and good paying jobs.^{149,150,151} The stress associated with housing exacerbate existing toxic stress such as those associated with racism and create adverse long-lasting health consequences.^{152,153}

The concentration of substandard housing in less advantaged neighborhoods further compounds racial and ethnic, as well as socioeconomic disparities in health. Housing discrimination prevents many low-income and minority families to relocate to healthy neighborhoods.¹⁵⁴ People of color may experience racism in housing. Persistent inequities limit socioeconomic mobility and decrease access to goods, services, and resources, all of which lead to poor living conditions that adversely affect health.^{155,156} In Wisconsin, African Americans experience the highest rate of homelessness; an African American living in Wisconsin is 7.5 times more likely than a White individual to experience homelessness.¹⁵⁷ Ultimately, African Americans are more likely to experience chronic stress and subsequently exhibit poor health outcomes. Leveraging Medicaid to support housing services for women of childbearing age (age 15 to 49)¹⁵⁸ can have significant impact on health outcomes.

There is a need to supplement existing state programs that provide housing services for high risk individuals with supportive housing. This can be accomplished through initiation of Medicaid reimbursement for housing supportive services at the state level.^{159,160}

Case management and care coordination programs that are provided by supportive housing services include ensuring that rent is paid on time, living conditions are decent and healthy, and participants have access to medical services, transportation services, mental health and substance abuse services, health education, and job coaching. Organizations that provide services for homeless individuals view supportive housing as a best practice for ending homelessness and improving health outcomes.¹⁶¹ In Wisconsin, Section 1115 could be leveraged to fund and build capacity among community health care workers. Leveraging Medicaid to support housing services allows high risk individuals the flexibility to choose where they live and receive services to remain in housing.¹⁶² Research shows that providing supportive housing to qualified individuals can effectively and efficiently improve their health outcomes.¹⁶³ Removing agents of ill health can result in more considerable cost savings from direct health care costs of all families, especially those who live in or near substandard housing.¹⁶⁴

Below, Figure 7. describes the short-term and long-term benefits of Medicaid support for housing services.

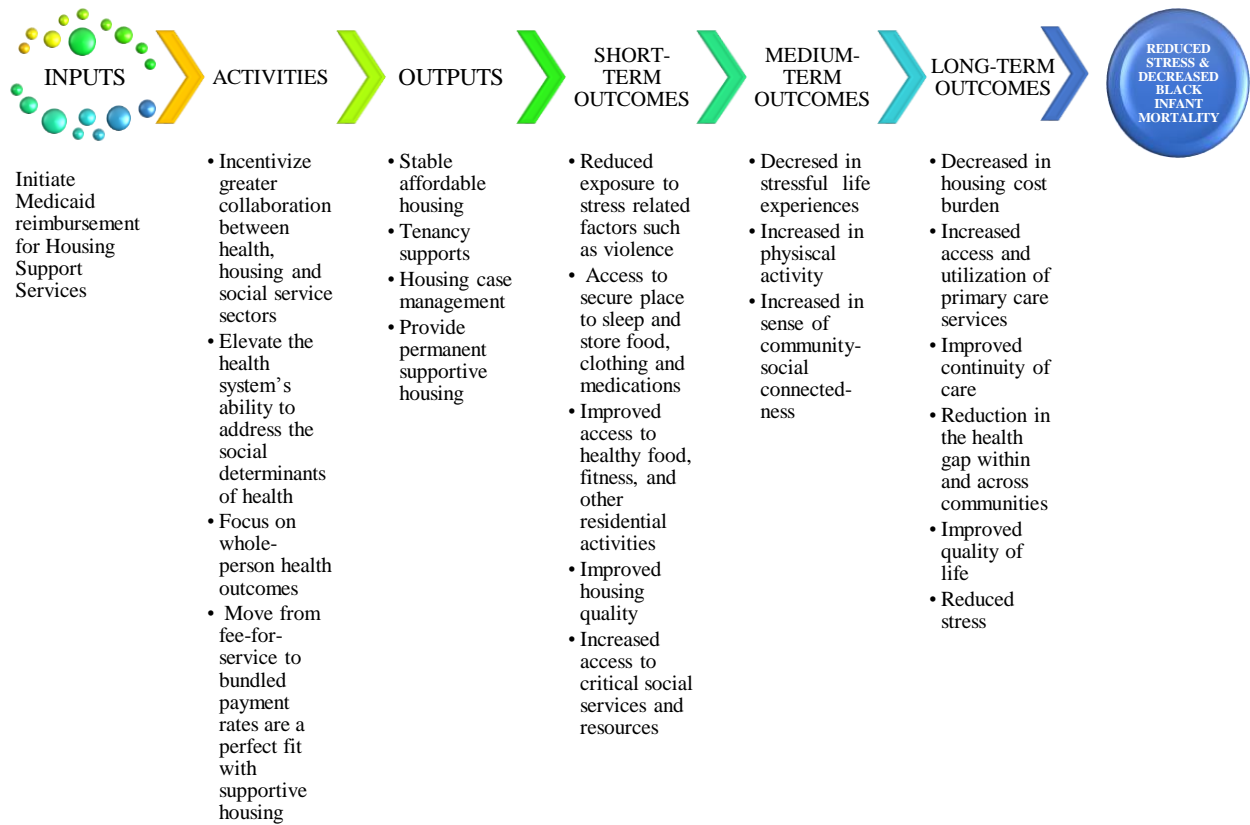


Figure 7. Logic Model- Medicaid support for housing services^{165,166,167,168}

Policy 3

The Birth Cost Recovery Policy (BCR)

Proposed policy

Eliminate the Birth Cost Recovery Policy (“the Birth tax”)

The elimination of the BCR policy will achieve the following improvements for pregnant and childbearing women:

- ❖ Reduce the stress that black mother’s experience from not having access to health insurance, adequate food, and childcare.
- ❖ Encourage early entry to prenatal care.
- ❖ Encourage continued presence in relationships by non-marital fathers.

Current BCR Policy and Process in Wisconsin

BCR is a collection process directed by the State of Wisconsin and implemented by County Child Support Agencies (CSA) to pursue the recovery of Medicaid supported birthing costs from unmarried, often non-custodial fathers.¹⁶⁹ The repayment process is enforced by the CSA,¹⁷⁰ set by a judge or court commissioner in family court,¹⁷¹ and linked to child support obligation payments. The obligated father is ordered to pay 85 percent of the amount of birth cost recovered to Medicaid, and 15 percent is given to CSA as incentive to pursue BCR. None of the funds collected from the identified father goes back to the family.¹⁷²

In 2015, BadgerCare Plus supported 5,114 births to black women, 90% of which, were unmarried mothers.¹⁷³ BadgerCare Plus is a state and federal program that provides health coverage for low-income residents in Wisconsin.¹⁷⁴ Unmarried women who receive BadgerCare Plus benefits are required to cooperate with the CSA during the BCR process by providing the name of the father. The father’s name is then forwarded to the CSA and after delivery, the CSA pursues the father to obtain Medicaid birth-related costs. Failure of a mother to cooperate with CSA results in sanctioning and consequently, removal of critical family-stabilizing supports such as Temporary Assistance for Needy Families (TANF), Medicaid, State Children’s Health Insurance Program (SCHIP), Food Stamps, and/or Childcare public assistance. Mothers can decide not to provide the father of their child’s information due to reasons such as domestic violence. In this case, she can request a “Good Cause Exemption”.¹⁷⁵ If a mother requests a good cause exemption, she is required to provide proof of qualification.^{176,177} Good cause is then granted or denied by the County Income Maintenance Agency.^{178,179} A report published by Health Watch Wisconsin revealed that between 2011 and 2015, an annual average of 512 Good Cause exemptions were filed and an average of 144 of these were granted each year.¹⁸⁰

Impact of BCR on Black infant mortality

Wisconsin remains one of the few states to collect birth cost.^{181,182} Wisconsin is also the only state that requires cooperation to qualify for all public assistance programs (TANF, SCHIP, food stamps, childcare).¹⁸³ Since the majority of fathers charged with BCR orders are lower income fathers who are less likely to have a private insurance. The harmful economic and child support compliance process of the BCR policy disproportionately affects lower-income mothers and children.¹⁸⁴

Pregnant mothers who are aware of the BCR policy may delay applying for BadgerCare Plus for fear of revealing the father of their child, and desire of maintaining stable relationships. The benefits of encouraging mothers to seek and receive prenatal care and the estimated cost of poor birth outcomes far outweighed the potential birth cost amount recovered from non-marital fathers.¹⁸⁵ Various health care professionals suspect that the BCR policy delays entry to prenatal care and contributes to stress. They recommend the repeal of the BCR policy as one of the multifaceted approaches to improve birth outcomes in Wisconsin.^{186,187,188} The Medicaid birth cost judgment that a CSA collects from affected fathers from 2011 to 2016 amount to nearly \$106 million. Eliminating the BCR policy will result in significant immediate financial loss for the state. Nevertheless, doing so would eliminate the impact of BCR on black women and their families.¹⁸⁹

Conclusion

Stress, racism and poverty are contributing factors to black infant mortality in Wisconsin. In the absence of effective policy interventions, these three factors will continue to lead to inequitable health outcomes. Policies and programs can influence health factors and affect health outcomes. A multifaceted policy approach can help reduce health disparities and improve health outcomes. Wisconsin should consider investing in the determinants of health to improve health outcomes.

Three policy changes may help improve birth outcomes for black infants in Wisconsin:

❖ **Extending Medicaid Coverage through one-year post-partum to:**

- ✚ Remove barriers to access to care and provide adequate time to find insurance that meets needs and budgets.
- ✚ Reduce stress that vulnerable and marginalized women experience.
- ✚ Promote longer intervals between pregnancies and better health status going into subsequent pregnancies.

❖ **Initiating Medicaid support for housing services to:**

- ✚ Reduce homelessness and other hardships.
- ✚ Lift families out of poverty, and allow families to move to safer, less poor neighborhoods.
- ✚ Provide opportunities for educational, developmental, and health benefits.

❖ **Eliminating the birth cost recovery policy to:**

- ✚ Reduce the stress that black mother's experience (not having access to health insurance, adequate food, and childcare).
- ✚ Encourage early entry to prenatal care.
- ✚ Encourage continued presence in relationships by non-marital fathers.

The complete elimination of the black/white infant mortality gap in Wisconsin will require a system thinking approach and a multi-sectoral collaboration. At the core of solving this issue, lays addressing racism. Just like infectious disease was a significant public health challenge in the 18th century that required an organized public health response, racism is among the most significant public health challenges of the 21st century. Racism impacts health outcomes on many levels. A profound understanding of racism will help shape an organized public health response to it, and consequently, a response to issues such as the high rate of black infant mortality.

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