The Health of Women & Girls in Louisiana:
Racial Disparities in Birth Outcomes
Acknowledgements

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# Table of Contents

Acknowledgements ................................... i
Purpose Statement ..................................... iii
Executive Summary ................................. iv
Framing the Issue ................................. 1
History of Maternal and Child Health in Louisiana ....... 5
Organization of the Report ......................... 8

**Section 1**

**Societal Conditions**

Poverty, Unemployment, Education ............... 10

Structural Racism ..................................... 11
Access to Prenatal Care ............................ 12

**Section 2**

**Community Conditions & Interpersonal Factors**

Concentrated Disadvantage ....................... 14
Racial Residential Segregation .................. 15
Violence ............................................. 16
Patient/Provider Interaction ...................... 17

**Section 3**

**Individual Level Factors**

Income, Education ................................. 20
Health Insurance Coverage ...................... 21

Recommendations ................................. 22

**Appendices**

Data Sources ....................................... 24
References .......................................... 25
Purpose Statement

This report emerged from a continuous collaboration between two organizations within Tulane University; The Mary Amelia Douglas-Whited Community Health Education Center (MAC) and Newcomb College Institute (NCI) that share the goal of working in partnership with the New Orleans community to promote women’s equality. As a follow-up to our previous report on the health of women and girls in the Greater New Orleans Area, we delve deeper into select health indicators and reasons behind racial, ethnic and socioeconomic disparities in these indicators. This first follow-up report focuses on reproductive health and the stark racial disparities in adverse birth outcomes among women in not only the New Orleans area but also in the state as a whole. Evidence-based and data-driven programs are the most successful at improving health. It is our hope that providing data will enable us all to change the course of these extreme disparities in health outcomes including adverse birth events.

Globally, there is emphasis on improving health by reducing inequalities that are widespread, persistent, unnecessary, and unjust. This will require definitive action on the social determinants of health, which are far-reaching and include conditions such as socioeconomic status, social support, discrimination, and the built environment. It is well established that place and context matter with respect to health outcomes. This report focuses on the multiple socioecological contexts that may drive racial disparities in adverse birth outcomes. Ours is a purpose-driven goal to provide evidenced-based data to policy makers, academicians, healthcare providers, social workers and others charged with using it to improve the lives of women, children and families. We aim to work with these entities to move the needle on socioeconomic and racial disparities in adverse birth outcomes. This report is very much in line with the missions of MAC and NCI.

The mission of the MAC:
To advance equitable health and wellbeing for all women. The center creates and supports evidence-based, population-specific health programs for women across the life course and seeks to serve the community in ways that promote inclusiveness and diversity with respect to women’s health issues across the life course.

The mission of the NCI:
To cultivate lifelong leadership among undergraduate women at Tulane University; empower women by integrating teaching, research, and community engagement at Tulane University; preserve, document, produce, and disseminate knowledge about women to honor the memory of H. Sophie Newcomb and carry forward the work of Newcomb College by providing a woman-centered experience in a co-ed institution.

Please join us in our continued efforts to improve the status of women and girls in our region.

Katherine P. Theall, PhD, MPH
Associate Professor of Public Health
Cecile Usdin Professorship in Women’s Health
Director, Mary Amelia Douglas-Whited Community Women’s Health Education Center

Sally J. Kenney, PhD
Newcomb College Endowed Chair
Executive Director, Newcomb College Institute
Professor of Political Science
Executive Summary

This report is a smaller, sub-study of our larger ongoing Report on the Status of Women and Girls, first published in 2013. In the larger report, we examine the health status of women in Greater New Orleans and the state of Louisiana. This previous report highlighted many racial disparities in indicators of health behavior, reproductive health, cardiovascular disease, infectious disease, and cancer, as well as in select social determinants of health. Most striking was the observed racial inequity in the occurrence of adverse birth outcomes – babies born too small and/or too soon. While this problem is not unique to New Orleans or Louisiana, its magnitude and persistence in this state led us to focus this sub-study on birth outcomes:

- **Louisiana ranks second highest among all US states for rates of infant mortality** (death before age 1), low birth weight (the percentage of babies born weighing less than 2,500g or 5.5lbs) and preterm births (the percentage of babies born before 37 completed weeks of gestation). Low birth weight and preterm birth are conditions that increase risk for infant mortality, neonatal morbidity, and long-term deficits in growth and development.
- Rates of infant mortality, low birth weight and preterm birth are **two to three times higher** among Non-Hispanic Black women in Louisiana compared to rates among non-Hispanic White women.

Framed in a context of historical and contemporary structural racism, we explore reasons why such stark racial inequities in birth outcomes persist despite successful efforts to promote near universal prenatal care coverage and more spending on healthcare than any other country in the world. We find that features of the neighborhoods and communities in which women are born, grow, live, work, and play shape their opportunities to live healthy lives and deliver healthy babies if and when they become pregnant. For example:

- Rates of preterm birth and low birth weight are **higher** in Louisiana parishes characterized by marked racial residential segregation, concentrations of poverty, and violence.
- Rates of preterm birth are **lower** in Louisiana parishes where there is greater racial equality in educational attainment between White and Black members of the community.

Results also suggest that in addition to these features of the community, there are issues related to healthcare access that may also be contributing to the large racial inequity in pregnant women’s experience of adverse birth outcomes. For example, in some parishes, there is a shortage of obstetricians (OB) to serve low-income Medicaid women who become pregnant. In 2013, there were 20 parishes that had no OB Medicaid provider, requiring women to travel longer distances to receive prenatal care. Furthermore, patient-physician interactions may be an important factor in determining the likelihood that women experience optimally healthy pregnancies, yet due to the disproportionately low representation of Black and Latino individuals enrolled in medical schools in Louisiana, non-White patients have limited options for seeking non-White health care providers.

Overall this report highlights a number of opportunities to improve women’s health and advance maternal and child health equity. **Our recommendations include** policies that increase investment in early childhood education, civic participation for people of color, equal access to housing, safe spaces to interact, transportation, schools, clinics, and grocery stores, and improved education and training of medical professionals, among others. These actions are crucial to efforts that address the unequal playing field established by our state’s long history of racial oppression and to ensure all women in Louisiana have an equal chance of delivering a healthy newborn.
FRAMING THE ISSUE

Understanding the persistence of racial disparities in birth outcomes requires historical contextual framing and identification of the contemporary U.S. as an unequal society.
**Framing the Issue**

Louisiana ranks second highest among all U.S. states for rates of low birth weight (<2500g / 5.5lbs) and preterm birth (<37 weeks gestation), conditions that increase risk for neonatal morbidity and long-term deficits in growth and development. In Louisiana, Black women are at particularly high risk and experience disproportionately higher rates of these adverse birth outcomes relative to other women in the state (Figures 1a, 1b).

Compared to White women, Black women in Louisiana are up to three times more likely to have a low birth weight baby, and almost twice as likely to give birth preterm and/or to experience the death of a child under 1 year of age. These racial disparities persist despite extensive advocacy and programming such as the 2010 Governor’s Commission on Perinatal Care and Infant Morality and a Birth Outcomes Initiative at the Louisiana Department of Health and Hospitals (DHH) currently the Louisiana Department of Health (LDH) and Maternal and Child Health (MCH) programs and policies. These initiatives identified the importance of prenatal care and increased adequate prenatal care coverage to over 80%. While this is an important step towards achieving equitable health for women and children in the state, significant racial disparities in adverse birth outcomes remain.

Understanding the persistence of racial inequities in birth outcomes requires historical contextual framing and the identification of the contemporary US as an unequal society. Beginning as far back as the 17th century, systemic oppression of people of color by White Americans – including genocide of indigenous people, centuries of slavery, legal segregation, and a discriminatory criminal justice system – established racial hierarchy. As the dominant group, Whites in the US have and continue to unfairly benefit from generations of socioeconomic advantage, and with it greater opportunities in education and employment, healthier neighborhood environments, higher quality health care and greater political power. The creation and perpetuation of this inequitable system of opportunity and privilege constitutes structural racism. While individual-level experiences of racism may involve interpersonal exchanges and intentionally or unintentionally-held racist beliefs, structural racism is “a feature of the social, economic, and political systems in which we all exist.” Evidence of structural racism is apparent in Louisiana, where the proportion of Whites with a college degree is nearly twice that of Blacks, median household income among White households is double that of Black households, and incarceration occurs at a rate nearly 5 times.
higher among Blacks compared to Whites. Systemic racism is often used synonymously with structural racism. For the purposes of this report, we use the term structural racism, which places more emphasis on the underlying historical, cultural, and social psychological aspects of our currently racially-stratified society.

A growing body of research is beginning to reveal how structural racism divides the health of the nation along racial lines. While race itself is a social construct with no biological basis, when considered within the context of a racially-stratified society it becomes a strong predictor of health and illness.

Structural racism restricts access by people of color to health-promoting factors known collectively as the Social Determinants of Health: the social, economic and environmental factors in which people are born, grow, live, work (i.e. wealth, income, safe housing, quality education and health care). The result is a health disadvantage among socially-marginalized groups who lack resources to prevent and treat disease. Essentially, social inequality becomes embodied and manifests physically in the form of poor or declining health. For pregnant women, the consequences of embodiment may be transgenerational as their experiences of stress and poor health can lead to alterations in her fetus’ gene expression, a process known as epigenetics. These changes in gene expression, not the genes themselves, can have important health implications for healthy functioning of their children later in life. For example, fetal undernourishment and other harmful social and physical environments in which women become pregnant and give birth can lead to changes in gene expression in the fetus and increase their own risk of later life hypertension, insulin resistance, stress hormone levels and stress reactivity.

The striking racial inequity in adverse birth outcomes in Louisiana and nationwide is evidence of the harmful effects of racism on population health. Stress arising from interpersonal experiences of racism can bear immediate and long-term physiologic effects on both the woman and her fetus, leading to intrauterine growth restriction and premature labor. Chronic stress or physiologic “wear and tear” arising from the contextual effects of structural racism may lead to earlier declines in health among Black women, who experience significantly larger and earlier age-related risk for adverse birth outcomes compared to Whites. For Black women, the intersectionality of birth, their race, and gender-based disadvantaged status implies unique sources of discrimination and stress that may affect reproductive health in particular: power disadvantages in obstetric practices and abuses by the medical system; contradictory societal pressures exerted on Black women regarding whether and when they should have children; and historical and contemporary stereotypes related to sexuality and motherhood.

The following section of this report describes the historical context of maternal and child health and racial inequality unique to Louisiana.
An abandoned incubator, where newborn babies would have slept, left in a Charity Hospital corridor in New Orleans, LA, post Hurricane Katrina.
HISTORY OF MATERNAL AND CHILD HEALTH IN LOUISIANA

Our state’s history is an important foundation from which to consider current racial disparities in adverse birth outcomes presented in this report.
History of Maternal and Child Health in Louisiana

A long history of racial inequality in Louisiana has impacted the health of Louisiana residents, in particular Black women and children. It is important to examine the racial disparities in adverse birth outcomes described in this report in light of the historical context of maternal and child health programming in Louisiana (Figure 2).

In 1935, Congress enacted Title V as part of the Social Security Act, seeking to protect children and mothers through an array of programs implemented by the states with the use of federal funds. In 1981, Congress consolidated these programs into the Title V Maternal and Child Health Block Grant Program, which utilizes both federal and state funds to support direct service provision to mothers and infants. Increasing Medicaid coverage of direct health services for low-income women allowed for redirection of MCH Block Grant Funds towards supportive programming. In Louisiana, these include the Women, Infants and Children program (WIC), the Nurse Family Partnership, the Pregnancy and Risk Assessment Monitoring System (PRAMS), the Maternal, Infant, Early Childhood Home Visiting Program, and others. In 1993, the Partners for Healthy Babies campaign began, which had a great impact on encouraging Louisiana women to access early and adequate prenatal care.

Historically, the state-run Charity Hospital system served much of the uninsured and Medicaid population in Louisiana since the first Charity Hospital opened in New Orleans in 1736. However, Hurricane Katrina in 2005 set off a series of events that completely altered the way the Charity Hospital system functioned. The storm damaged “Big Charity” in New Orleans was forced to close and the Interim LSU Hospital took over providing similar services. These events led the way for a redesign of the entire Charity Hospital system. In 2012, the state legislature passed a plan to cut Medicaid funding by $523 million, with funding to the public health care system cut by $329 million, forcing 9 of the 10 public hospitals to enter public-private partnerships in order to stay open.

Figure 2. Timeline of Maternal and Child Health in Louisiana
The newly constructed Medical Center of Louisiana at New Orleans consolidated the functions of the closed Charity and University Hospitals, leading to increased fragmentation of services that presents barriers for the uninsured to receive health care in Louisiana.\textsuperscript{27}

It was not until 1965 that the Louisiana Department of Health and Human Resources (now the Department of Health and Hospitals) ordered the desegregation of all state hospitals; however, some hospitals – including Charity Hospital – took years to fully integrate.\textsuperscript{28} Data from 1966 also shows that fewer than 10\% of Louisiana’s hospitals were compliant with federal integration guidelines, meaning mostly Whites received the benefits of MCH programs.\textsuperscript{29} Many hospitals finally opened their doors to Black patients in the late 1960’s and early 1970’s in response to a federal requirement for hospitals to become racially integrated in order to receive Medicaid funds.

Despite these advances, racism continued to permeate local policies, institutional practices, and cultural representations. Black midwives were blamed for high infant mortality rates in the South and pushed out of practice by changing government policies.\textsuperscript{30} As hospital births increasingly became the norm for White women, Black women continued to be the target of discrimination in Louisiana’s hospitals. It was not until the late 1960’s and 1970’s that Black physicians were allowed to practice in Louisiana\textsuperscript{32} and state medical colleges began to desegregate.\textsuperscript{33}

The racial oppression and purposeful denial of equitable health and well-being outlined above has endured and adapted over time. The physical consequences of this historical trauma (the notion that a racial event – such as enslavement, war, genocide – experienced by a population in one generation can impact the health of the population many generations later) includes epigenetic alterations in gene expression, which may play a role in perpetuating disparities in adverse birth outcomes.\textsuperscript{34,35} Today, the system of opportunities and resources in Louisiana continue to perpetuate racial inequality despite anti-discrimination legal intervention, and vast health disparities persist.
Organization of the Report

Viewed through the lens of structural racism, racial disparities in maternal and child health is an issue that requires increased collaboration between various entities within and outside the MCH world to collectively tackle root causes. This report highlights the structural, social, and cultural contexts that place some Louisiana women at greater risk for an adverse birth outcome than others. Data are presented through a series of social determinant indicators related to birth outcomes. Each indicator is presented by race/ethnicity when data are available. For some indicators, data are not presented because the number of adverse birth outcomes was too small to calculate a reliable estimate. Throughout the report, comparisons made between racial and ethnic groups use Non-Hispanic White women as the reference group because they experience the lowest rates of adverse birth outcomes.

The indicators are grouped by levels of the social-ecological model (Figure 3), which allows us to highlight the range of factors operating on multiple levels that put women at risk for adverse birth outcomes. The report begins with broad, statewide indicators that characterize the socioeconomic conditions and inequalities resulting from the society in which Louisiana women live, grow, and work (Section 1). Section 2 addresses factors at the local neighborhood and community and interpersonal levels that influence birth outcomes. Finally Section 3 describes individual-level factors (income, education, and health insurance coverage) in relation to adverse birth outcomes. The overlapping rings in the figure illustrate how factors at one level influence factors at another level. In addition, the social-ecological model suggests that in order to prevent adverse birth outcomes and reduce the disparities in rates of preterm birth and low birth weight it is necessary to act across multiple levels at the same time to ensure long-term and sustainable health equity. In the final section of the report, we provide examples of best practices and programs that have been successful in improving birth outcomes at each level, as well as recommendations to inspire action and changes to improve birth outcomes for all women in Louisiana.

Figure 3.
The social-ecological model and organization of this report
The conditions in which Louisiana women are born, grow, live, work, and age are shaped by policy choices that distribute money, power, and resources at local, national, and global levels. Health disparities arise when the distribution of resources unfairly benefits some groups more than others.
Poverty, Unemployment, Education

High levels of unemployment, poverty, and low levels of educational attainment characterize Louisiana’s population. The state ranked last for overall health in the 2015 United Health Foundation report, based on some of the lowest prevalence of high school graduation and insurance coverage and highest prevalence of children in poverty.

Within the state, some parishes fare better than others. Figure 4 shows how the percentage of babies born preterm or low birth weight is consistently higher in parishes with the highest levels of unemployment, poverty, and lowest levels of education.

Figure 4. Percentage of infants born preterm or low birth weight by parish-level socioeconomic indicators
Structural Racism

Comparing socioeconomic indicators including poverty, education, and employment between parishes demonstrates the negative health impact of poorer conditions on all women relative to those in wealthier parishes; however, the picture is incomplete. The unequal distributions of such indicators between groups of women within each parish is one way to measure the degree of structural racism, or the systematic exclusion of people of color from access to resources and opportunities. In Louisiana, Blacks are consistently under-represented in educational attainment where across all parishes, the average proportion of Blacks with a college education is half that of Whites. While the proportion of Blacks who are employed is only 0.91 times lower on average than the proportion of Whites, the percentage who are employed in professional or managerial positions is half that of Whites and in some parishes, as much as 0.14 times lower. Voting is a measure of political participation which has been linked to better health status at the population-level (possibly because having a greater political voice influences politician’s responsiveness to citizen’s needs and concerns and constituents benefit from resources allocated in their favor). Across all parishes, Blacks were less likely to vote, on average, compared to Whites in the 2012 presidential election. Living in areas where racial inequality in these domains is large has health implications for all women in the community, regardless of race, as they experience greater rates of preterm birth and low birth weight compared to women in areas where opportunities are more racially equitable (Figure 5).

Figure 5. Excess adverse birth outcomes per 1,000 births among women in parishes with large racial inequality in structural conditions compared to women in parishes with small racial inequalities.

*P<0.05, indicating statistical significance.
Access to Prenatal Care

It has been well documented that receiving adequate prenatal care early in pregnancy lowers the risk of adverse birth outcomes. Recognizing this, the U.S. government’s Healthy People 2010 initiative has made a concentrated effort to improve prenatal care access. The goal of the initiative is that at least 90% of pregnant women will receive prenatal care within the first three months of pregnancy. Louisiana is not far off from achieving the 90% target with an estimated 87% of pregnant women receiving prenatal services in their first trimester. However, when examining the data by race, racial disparities emerge. Racial and ethnic inequality in access to healthcare in the United States have been well documented.

Research on racial and ethnic disparities in health consistently show that racial and ethnic minority populations have worse access to health services and receive worse quality of care than Whites. As previously noted, access to care and receiving quality services is an important factor for reducing adverse health outcomes, especially during pregnancy. In Louisiana, Black and Hispanic pregnant women are less likely to receive prenatal care services in their first trimester than White women. Statistics from 2010 indicate that 80% of Blacks and Hispanics receive prenatal care services in their first trimester compared to 92% of White women. Moreover, it is important to note that even after accounting for difference in socioeconomic and access-related factors, Black women tend to receive worse quality of care than Whites. Thus, when attempting to tackle racial inequities within the healthcare system the quality of services provided needs to be addressed in addition to access-related barriers.

The shortage of providers accepting Medicaid and the prohibitive costs of healthcare without insurance coverage prevent many low-income women from accessing prenatal care services. Looking at the distribution of obstetric (OB) providers across the state, there are 20 parishes that have no OB provider who accept Medicaid. The ratio of Medicaid OB providers to women in the state ranges from 1 OB doctor for every 21 women enrolled in the state Medicaid eligibility expansion program for pregnant women, Louisiana MOMs, to 1 OB for every 900 women enrolled in the program (Figure 6).
COMMUNITY CONDITIONS & INTERPERSONAL FACTORS
Concentrated Disadvantage, Racial Residential Segregation, Violence, and Patient/Provider Interactions

The neighborhoods women live in shape their daily experiences, opportunities, and behaviors with profound implications for their health and that of their children. Relationships between members of a household, neighborhood, or broader community also influence women’s health in important ways.
Concentrated Disadvantage

Locally, neighborhoods and interpersonal contexts can be a source of support for pregnant women and their children, but under certain conditions, they can also induce stress. These local contexts are often shaped by the larger structural forces discussed in Section 1. Research has found a connection between adverse neighborhood and interpersonal environments and birth outcomes. Neighborhoods with high poverty, crime and violence both outside and within the home, few job opportunities, and limited transportation options contribute to the health risks faced by Black women and may impact the level of support they receive. In addition, inadequate access to high quality comprehensive health care, parks, healthy food, and other resources may place them at higher risks for an adverse birth outcome.\textsuperscript{42-44}

Poverty is a substantial contributor to poor health, and women living in impoverished neighborhoods are more likely to experience adverse birth outcomes.\textsuperscript{45,46} Impoverished neighborhoods are often characterized by other factors that together shape the resources and opportunities available to residents, which in turn influence the health of the community. Concentrated disadvantage captures the cumulative impact of not only poverty but also other aspects of community well-being including use of public assistance, female-headed households, unemployment, and number of children in the neighborhood.\textsuperscript{47} Women in communities where concentrated disadvantage is high are more likely to have higher rates of low birth weight babies.\textsuperscript{48} Data from eight of Louisiana’s nine major metropolitan areas (Alexandria, Baton Rouge, Hammond, Houma, Lafayette, Monroe, New Orleans, and Shreveport), utilizing US Census tract as our definition of neighborhood as is commonly done in US-based studies\textsuperscript{49}, show that women living in areas of high concentrated disadvantage are at a greater risk of delivering low birth weight or preterm babies (Figure 7).

Figure 7. Risk of adverse birth outcomes among women living in high concentrated disadvantage areas relative to women in areas of low concentrated disadvantage.
Racial Residential Segregation

Housing discrimination is still evident in segregated areas, and Blacks remain the most highly segregated racial group regardless of socioeconomic status (SES). More institutional forms of housing discrimination such as affordable housing, bank loans, and real estate transactions may also limit the housing choices for racial and ethnic minorities in the U.S.50-52 Racially segregated communities, often characterized by poor economic, health, and social investments, are associated with poorer birth outcomes, particularly low birth weight and very low birth weight.53,54 State and national research has observed adverse birth outcomes among minority mothers living in segregated neighborhoods and neighborhoods with high concentrated disadvantage, regardless of maternal education level, socioeconomic status, and adequate prenatal care. Both Black and Hispanic women living in neighborhoods with high levels of racial isolation are at higher risk of having a low birth weight infant.54 Women living in highly segregated cities are 18% more likely to have a preterm birth and 30% more likely to have a low birth weight baby compared to women in less segregated cities.

If highly segregated cities became more integrated, there would be 15% fewer preterm births in these cities. If highly segregated cities became more integrated, there would be 23% fewer low birth weight infants in these cities.
Violence

The statewide and neighborhood conditions described in preceding sections can be viewed as forms of structural violence, or the systemic ways in which social structures harm or otherwise disadvantage individuals by constraining individual agency as a result of unequal distributions of power and resources.55

Structural violence is often intertwined with behavioral violence, or individuals committing acts of violence. Both contribute to an unhealthy environment for women, particularly those who experience physical, sexual or emotional violence prior to or during pregnancy. These women are more likely to experience an adverse birth outcome.56-59 The home and the neighborhood can be sources of violence. Violent crime in the neighborhood has been associated with risk for low birth weight infants,60 while intimate partner violence may lead to both low birth weight and infant mortality.61 Young Black women in particular face disproportionately high levels of intimate partner violence, with rates as high as 40%.62-64 Black women are also more likely to be victims of pregnancy-associated homicide,65,66 including intimate partner homicide.67 Since Hurricane Katrina in 2005, local providers have reported seeing more patients struggling with domestic violence68, with implications for both the victim and her children. Prenatal exposure to violence may make children more susceptible to stress later in life.61

Data collected in New Orleans’ urban areas show that women living in high-crime areas are more likely to experience adverse birth outcomes (Figures 9a, 9b). According to the Pregnancy and Risk Assessment Monitoring System (PRAMS) only half of the 6.9% of women in Louisiana who reported being abused by their husband or intimate partner said that the abuse stopped during pregnancy.
Patient/Provider Interaction

The interpersonal context between patients and medical providers may contribute to racial disparities in adverse birth outcomes. Patients who trust their health care providers report higher levels of satisfaction and, in turn, are more likely to adhere to medical advice and return for follow-up appointments.

Studies suggest that for many Black women, perceived racism may be at the root of low levels of physician trust.\textsuperscript{69-70} Perceived racism may not only affect the delivery of health care, but also the quality of care. For example, compared to White women, Black women in Louisiana less frequently report receiving health behavior advice from their prenatal care providers, and women who receive insufficient health behavior advice are at a higher risk of delivering a low birth weight infant.\textsuperscript{38}

Even though nearly 81% of Black women receive prenatal care at some point during their pregnancies, the persistent racial gap in birth outcomes suggests that the source of these discrepancies may be attributed more to the quality and delivery of care than merely the accessibility of care.\textsuperscript{71} Research has even shown that provider knowledge of race-based medical findings may negatively affect their treatment of patients within those racial groups.\textsuperscript{72} As indicated in the Louisiana Public Health Institute Interpregnancy Care Study, an evaluation of care of reproductive age women who are between pregnancies, patients expressed anxiety about being transparent with healthcare providers.

\begin{quote}
I think people need to stop being so judgmental, then women would be more open and honest about their history before pregnancy and whenever they find out. You know whenever you find out you’re pregnant and they ask you what have you done up until that point it’s important for you to be honest about it, but when your doctor is sitting there judging you about everything that you say, it’s really hard to be honest, and if there was less judgment and less people being so harsh on you, then it would be easier to be honest.

– Client, LPHI IPC Study
\end{quote}

\begin{quote}
One of the biggest barriers is the way women are treated by the system – they are put down and need to be treated respectfully.

– Midwife, LPHI IPC Study
\end{quote}
Racial disparities in birth outcomes are often reinforced by differences in the quality and delivery of health care, including patient-physician interactions. Due to the percentage of non-White student enrollment in medical schools, patients’ options for non-White health care providers are few. In Louisiana, Blacks and Latinos are by far the lowest ethnicities enrolled in medical schools, at 4% for Blacks and just 1% for Latinos (Figure 10). Nationally, about 6% of medical students are Black, and 5% are Latino.73

Black mothers in Louisiana report that their medical providers are discussing issues like smoking, illegal drug use, alcohol use, and HIV testing during pregnancy with them more often than White mothers report discussing these issues with their physicians (Figure 11). These data may indicate physician implicit bias, unintended biases in decision-making as a result of cultural stereotypes even if not consciously endorsed, and may help explain some of the racial disparities in health and birth outcomes throughout the state.
INDIVIDUAL LEVEL FACTORS

Income & Education and Health Insurance Coverage

Individuals with higher incomes and more education are typically healthier than people with fewer resources. However, and even among Louisiana’s highest earning and highest educated residents, racial disparities remain.
The relationship between maternal education and adverse birth outcomes is complex and likely driven by the intersections between education and income or employment. Higher educational attainment often leads to greater income and reduced job insecurity. Research also suggests that employment during pregnancy is associated with lower stress levels and reduced risk of preterm birth. Furthermore, having a higher income can reinforce the behaviors and circumstances that foster positive birth outcomes, like purchasing and eating nutritious foods, seeking prenatal care, or exercising safely in one’s neighborhood.

However, Black women experience adverse birth outcomes at disproportionately higher rates than White women even if they achieve comparable levels of educational attainment, income, and employment. These findings suggest that the reasons behind racial disparities in birth outcomes include and extend beyond indicators of socioeconomic status to encompass a multitude of interacting factors that produce a cumulative effect over the course of a woman’s life. Data from Louisiana show that Black women are much more likely to deliver preterm or low birth weight babies compared to their White peers with equivalent educational levels (Figure 12a-b). For both populations of White and Black women, as education increases, risk for an adverse birth outcome decreases. Still, even the most highly educated population of Black women (those with a bachelor’s or higher degree) experience an excess of 18 preterm births and 30 low birth weight infants per 1000 births compared to White women with less than a high school education.
Health Insurance Coverage

Arguably one of the most critical barriers preventing access to prenatal care in the U.S. is the lack of health insurance. Almost a quarter of women in Louisiana have no health insurance. Among those who do have insurance, 64% are covered by Medicaid and 31% by private insurance. Despite the large percent of women on Medicaid, the state lacks providers who accept it. According to a national survey by the Centers of Disease Control and Prevention, the percent of new providers in Louisiana accepting Medicaid, 56.8%, is significantly lower than the national estimate of 68.9%. As mentioned in Access to Prenatal Care, the shortage of providers accepting Medicaid and the prohibitive costs of healthcare without insurance coverage prevent many low-income women from accessing prenatal care services. Furthermore, recent closures of public hospitals and changes in the state Medicaid eligibility policy have left many without health insurance coverage making access to pregnancy care that much more difficult. When examining health insurance status by race, we find that 33.1% of Black women and 32.5% of Hispanic women have no health insurance compared to 18% of White women. Among Black who do have health insurance, 84.5% and 82.1% are on Medicaid compared to 37.7% of Whites. However, even after taking into consideration insurance status and other access-related barriers, racial disparities in adverse birth outcomes persist. Figures 13a, 13b show that Black women are more likely to have low birth weight and preterm babies than White women regardless of insurance status, implicating the role of additional risk factors above and beyond individual-level socioeconomic status (for example, racial discrimination and factors at the neighborhood/community and structural levels, as demonstrated in previous sections).
Recommendations

Opportunities for better health begin where we live, learn, work, and play. Below is an evolving and non-exhaustive list of recommendations aimed at setting a fair and adequate baseline of health for all of Louisiana’s residents. Recommendations are organized by sections of this report.

Societal Conditions

- Implementation of policies that increase investment in early childhood education may begin to reduce the fundamental inequality of opportunity and income inequality faced by many Louisiana families.

- Dismantling the system of structural racism requires policies that to promote racial equity in resources and opportunities. Such policies should have a universal goal (for example, increasing the number of homeowners), with strategies to achieve the goal that target people of color (for example, incentives for first-time homebuyers, especially in underserved communities).

- Policies that increase civic participation for people of color and/or remove any barriers to participation will ensure that everyone has the opportunity to make the choices that allow them to live a long, healthy life.

- Home-visiting programs such as the Nurse-Family Partnership, broader availability of doula and midwifery care, and better coordination of care across services may improve timely access to prenatal care and increase women’s likelihood of a healthy pregnancy and newborn.

Community Conditions and Interpersonal Factors

- Efforts to restructure community environments and to bolster cohesiveness and social support will help close the racial gap in adverse birth outcomes.

- Increasing access to housing and other basic needs like safe spaces to interact, transportation, schools, and grocery stores will contribute to a health-promoting infrastructure.

- Screening and counseling for interpersonal and domestic violence are among the suite of women’s preventative health services included with mandatory insurance coverage and zero cost sharing under provisions of the Patient Protection and Affordable Care Act of 2010. Physicians should be encouraged to screen and refer women to local agencies specializing in violence prevention.

- Criminal justice reform including improving police relationship with communities, re-entry programs and programs to reduce recidivism, and independent police monitors may contribute to safe and healthy neighborhood environments.

- Improved education and training of medical professionals may help to prevent bias in patient-provider interactions will improve the quality of care that women receive, while recruiting more people of color into the health professions is important to ensure that the provider population mirrors the population that they serve.

Individual-Level Factors

- Expansion of Medicaid income eligibility levels will ensure increased insurance coverage for women throughout their life-course including transitions from preconception care, prenatal, postpartum, interpregnancy, and primary preventive care.

- Increasing the availability of linguistically appropriate care is imperative to address barriers faced by the growing population of Spanish-speaking women in Louisiana.

- Programs such as the Grady Model for Interpregnancy Care which focus on improving women’s income and employment by providing personalized assistance with processes of pursuing education, completing job applications and interviews have been shown to reduce the occurrence of adverse birth outcomes.
APPENDICES

Data Sources, References
Data Sources

Figures 1a and 1b. 2009-2012 Live Births, Fetal Deaths, and Deaths: Louisiana Center for Health Statistics.

Figure 4. Employment, poverty, and educational attainment data are from American Community Survey 5-year estimates 2009-2013. Birth outcomes are from analysis of Louisiana live birth records 2011-2012.


Figure 6. Medicaid Quality Management, Statistics and Reporting, Louisiana Department of Health and Hospitals.

Figure 7. Concentrated disadvantage is derived from indicators in American Community Survey 5-year estimates 2009-2013. Birth outcomes are from analysis of Louisiana live birth records 2011-2012.

Figure 8. Racial residential segregation is estimated from indicators in American Community Survey 5-year estimates 2009-2013. Birth outcomes are from analysis of Louisiana live birth records 2011-2012.

Figure 9a and 9b. Estimates of violent crime rates are from the City of New Orleans Police Department. Birth outcomes are from analysis of Louisiana live birth records 2011-2012.

Figure 10. Estimates of the Louisiana state population by race are from American Community Survey 5-year estimates 2009-2013. Estimates of the Louisiana medical school population by race are from the Kaiser Family Foundation, Distribution of Medical School Graduates by Race/Ethnicity. Available at: [http://kff.org/other/state-indicator/distribution-by-race-ethnicity/](http://kff.org/other/state-indicator/distribution-by-race-ethnicity/)

Figure 11. Louisiana Pregnancy Risk Assessment and Monitoring Survey, 2012.

Figure 12a and 12b. Birth outcomes and maternal educational attainment by race are from analysis of Louisiana live birth records 2011-2012.

Figure 13a and 13b. Birth outcomes and maternal insurance type by race are from analysis of Louisiana live birth records 2011-2012.
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