

Authors: Zea Malawa, MD, MPH, Perinatal Equity Medical Director, San Francisco Department of Public Health
Monica De La Cruz, MPH, Doctoral Student, University of California, Berkeley, School of Social Welfare
Deborah Karasek, PhD, Assistant Professor, Department of Obstetrics, Gynecology & Reproductive Health, University of California, San Francisco

Title of proposal: Abundant Birth Project: A monthly cash supplement during pregnancy and the post-natal period provided to Black mothers (and other Black pregnant people) to address the persistent racial disparities in birth outcomes.

The Connection Between Racism, Income, and Birth

San Francisco can only prosper when all our children have a fair chance to be born healthy and can reach their full potential

In San Francisco today, far too many Black people are shut out of the resources and opportunities they need – such as housing, respectful and quality healthcare, nourishing food, good jobs, and livable wages – to have healthy pregnancies or births. The consequences are devastating. Black mothers in San Francisco accounted for only 4% of the city's births between 2007-2016 but made up half of San Francisco's maternal deaths.¹ Furthermore, the premature, or preterm, birth rate among Black women in San Francisco was nearly double that of White women (13.8% versus 7.3%) for 2012-2016.¹

When babies are born even just a few weeks premature, the impact can last a lifetime. Babies born premature face increased risks of health problems throughout their lives, including physical and intellectual development delays; behavior and psychological issues; neurological, lung and intestinal disorders; and challenges with their vision and hearing.² They are less likely to survive, grow up healthy, or achieve the same long-term educational and economic success as their full-term peers.² The more preterm babies born in our city, the less healthy we are as a community.

¹ San Francisco Department of Public Health, Maternal, Child and Adolescent Health Epidemiology Tableau Dashboard. (Accessed August 2018). SF Preterm Birth 5-Year Dashboard by Social Determinants 2018. Retrieved from <http://in-sfghtableau/#/workbooks/581/views>.

² Moster, D., Lie, R. T., & Markestad, T. (2008). Long-term medical and social consequences of preterm birth. *New England Journal of Medicine*, 359(3), 262-273.

The Centers for Disease Control and Prevention³ identify being “Black” as a risk factor for premature birth, but the literature increasingly indicates that exposure to racism is the true risk factor.^{4,5,6,7} Income inequality has been identified as a manifestation of structural racism, with important public health ramifications, including adverse maternal health outcomes for Black women.^{8,9}

San Francisco has some of the highest levels of racial income inequality in the nation.¹⁰ This is a product of well-documented racialized policies and practices that have limited wealth-building opportunities for people of color. As a result, the median household income in San Francisco’s Black communities is less than \$30,235 per year, compared to the White median income of \$121,204.¹¹ Ample evidence points to socioeconomic status as a fundamental cause of poor health¹² and as a key contributor to Black-White disparities in birth outcomes.^{13,14} A 2010 meta-analysis found that in 93 of 106 studies, there was a significant association between socioeconomic disadvantage (measured by education, income, or occupation) and increased risk of adverse birth outcomes

³ CDC.gov. (2018). *Preterm Birth | Maternal and Infant Health | Reproductive Health | CDC*. [online] Available at: <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm> [Accessed 7 September 2018]

⁴ Braveman, P., Heck, K., Egerter, S., Dominguez, T. P., Rinki, C., Marchi, K. S., & Curtis, M. (2017). Worry about racial discrimination: A missing piece of the puzzle of Black-White disparities in preterm birth? *PLoS ONE*, *12*(10), e0186151. <http://doi.org/10.1371/journal.pone.0186151>

⁵ Collins, J. W., David, R. J., Handler, A., Wall, S., & Andes, S. (2004). Very Low Birthweight in African American Infants: The Role of Maternal Exposure to Interpersonal Racial Discrimination. *American Journal of Public Health*, *94*(12), 2132–2138.

⁶ Institute of Medicine (US) Committee on Understanding Premature Birth and Assuring Healthy Outcomes; Behrman, R. E., & Butler, A. S., editors. *Preterm Birth: Causes, Consequences, and Prevention*. Washington (DC): National Academies Press (US); 2007. 4. Sociodemographic and Community Factors Contributing to Preterm Birth. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK11388>

⁷ Oparah, J. C., Arega, H., Hudson, D., Jones, L., Justice, O. B. W. B., & Oseguera, T. (2018). *Battling over birth: Black women and the maternal health care crisis*. Praeclarus Press.

⁸ Cooper, R. S. (2001). Relationship between Premature Mortality and Socioeconomic Factors in Black and White Populations of US Metropolitan Areas. *Public Health Reports*, *116*(5), 464-473. doi:10.1093/phr/116.5.464

⁹ Wallace, M. E., Mendola, P., Liu, D., & Grantz, K. L. (2015). Joint Effects of Structural Racism and Income Inequality on Small-for-Gestational-Age Birth. *American Journal of Public Health*, *105*(8), 1681-1688. doi:10.2105/ajph.2015.302613

¹⁰ Palomino, J. (2015). *Incomes rise across S.F., except for African Americans*. [online] SFChronicle.com. Available at: https://www.sfchronicle.com/bayarea/article/Incomes-rise-across-S-F-except-for-African-6548522.php?utm_campaign=sfgate&utm_source=article&utm_medium=https%253A%252F%252Fwww.sfgate.com%252Fbayarea%252Farticle%252Fstark-San-Francisco-income-gap-between-whites-6549370.php [Accessed 6 Feb. 2019].

¹¹ U.S. Census Bureau; American Community Survey, 2017 American Community Survey 1-Year Estimates, Table GCT0101; generated by Iris Wong; using American FactFinder; ; (08 November 2018).

¹² Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of health and social behavior*, *80*-94.

¹³ Blumenshine, P., Egerter, S., Barclay C. J., Cubbin, C., & Braveman, P. A. (2010) Socioeconomic Disparities in Adverse Birth Outcomes: A Systematic Review. *Am J Prev Med*. 2010;39(3):263-272. doi:10.1016/j.amepre.2010.05.012

¹⁴ Lu, M. C., & Halfon, N. (2003). Racial and ethnic disparities in birth outcomes: a life-course perspective. *Matern Child Health J*. 2003;7(1):13-30.

(measured by birth weight, gestational age, and intrauterine growth).¹³ Despite this evidence, there is a paucity of work that considers directly addressing poverty as a means of improving birth disparities.

A recent study in Manitoba, Canada, found that an unconditional income supplement provided during pregnancy resulted in reductions in low birth weight and preterm birth.¹⁵ Similarly, studies of the Earned Income Tax Credit (EITC) provide promising evidence for our proposed policy. EITC provides a refundable tax credit to low-income families in the U.S. and is the closest comparable program to an unconditional income supplement. Studies find that the refunds are associated with reductions in maternal financial stress, improved access to prenatal care, and reductions in low weight births and maternal depression.^{16,17} Receipt of the EITC is shown to have differential effects by race and ethnicity, with nearly four times the reduction in the low birth weight for Black infants, compared to White infants for families receiving the EITC.

Chronic and acute stress have been identified as important drivers of adverse birth outcomes, so it is unsurprising that educational and clinical interventions have failed to eliminate the racial inequities in preterm birth.⁶ Economic stress may be particularly acute during pregnancy, given the increased costs of healthcare and preparing for a child. A racial wealth gap that is the result of centuries of economic exclusion leaves Black families more vulnerable to economic stress during pregnancy.⁹

Research has also found that living below the poverty line disproportionately increases a pregnant woman's risk of being exposed to environmental stressors such as pollution, crime, and domestic violence.¹⁸ In turn, the chronic maternal strain associated with these stressors may increase the risk of preterm birth, slow fetal growth, and adverse child health outcomes.¹⁹

San Francisco has the third-highest level of income inequality in the U.S., exposing low-income Black families to housing and food insecurity and economic stress. This, in turn, impacts maternal stress and child health.²⁰

Ample evidence points to socioeconomic status as a fundamental determinant of poor health and as a key contributor to Black-White disparities in birth outcomes,¹⁴ yet few interventions attempt to

¹⁵ Brownell, M. D., Chartier, M. J., Nickel, N. C., Chateau, D., Martens, P. J., Sarkar, J., ... & Katz, A. (2016). Unconditional prenatal income supplement and birth outcomes. *Pediatrics*, 137(6), e20152992.

¹⁶ Hoynes, H., Miller, D., & Simon, D. (2015). Income, the earned income tax credit, and infant health. *American Economic Journal: Economic Policy*, 7(1), 172-211

¹⁷ Evans, W. N., & Garthwaite, C. L. (2014). Giving mom a break: The impact of higher EITC payments on maternal health. *American Economic Journal: Economic Policy*, 6(2), 258-90.

¹⁸ Strully KW, Rehkopf DH, Xuan Z. Effects of Prenatal Poverty on Infant Health: State Earned Income Tax Credits and Birth Weight. *Am Sociol Rev.* 2010 Aug 1;75(4):534–62

¹⁹ Aizer A, Stroud L, Buka S. Maternal Stress and Child Outcomes. *Journal of Human Resources.* 2016;51(3):523-555. doi:10.3368/jhr.51.3.0914-6664R.

²⁰ Kendall, M Income inequality in Silicon Valley is among nation's highest. *The Mercury News.* 2018 [cited 2019 Sep 3]. Available from: <https://www.mercurynews.com/2018/02/15/income-inequality-in-the-bay-area-is-among-nations-highest/>

directly alleviate poverty and financial stress as a means to advance birth equity. Over the decades, disparities in birth outcomes have remained stubbornly unchanged in the face of medical innovations, Obamacare, or Title V-funded home-visiting programs. Pregnancy is a critical period for the development of health, and structural racism is a primary driver of economic stress and inequality during pregnancy. Structural interventions that address the racial wealth gap are urgently needed and have promise to narrow longstanding inequities in birth outcomes.

The Abundant Birth Project

We propose that the City and County of San Francisco, and any other local health jurisdictions facing persistent birth disparities, provide a \$1,000 monthly cash supplement to Black pregnant people from the first trimester until two years post-partum. To qualify, participants must be within the first two trimesters of pregnancy when applying, must intend to parent the pregnancy, must identify as Black, and must have a household income of <\$100,000.

Clients could self-refer to the program or could be referred by a provider. The application would involve a brief interview over Zoom, proof of pregnancy, and proof of residency. During the Zoom interview, applicants would be asked to confirm their racial identity by answering the following questions: What is your racial or ethnic identity? Have you ever identified as Black on any official documents (such as birth certificates, school documents, financial aid applications, employment applications, etc.). If so, which documents? If not, why? How do your parents racially identify? What does it mean for you to be Black in America? Can you tell me about your family history?

A panel of stakeholders with overrepresentation of Black mothers (and other Black birthing parents) from the community would establish standards for the responses to the racial identity questions. When an applicant's eligibility is ambiguous, the panel would review the case and vote to grant or deny entrance into the program.

The cash would be provided via a renewable debit card which is reloaded monthly. In addition to cash, clients would be offered supplies for pregnancy, coaching, and support with connecting to other available programs. The cash transfers would be unconditional so that parents could make dignified and individualized choices on how best to meet their family's needs.

This policy challenges the conventional approach to addressing health disparities within marginalized populations by addressing social determinants directly, rather than using medical approaches. It also provides an opportunity to contribute to the growing national conversation surrounding basic income as a poverty remediation and strategy for health equity.

Program Development Rooted in Community

Right now, we are piloting a pregnancy income supplement in San Francisco, The Abundant Birth Project. To design our pilot and ensure it would work well for the users, we first sought to learn more about the experience of Black mothers (and other birthing parents) in San Francisco. We hired and trained four Community Researchers (CRs). These are women who identify as Black mothers, have close ties to San Francisco, and who are interested in learning to be researchers. In partnership with the CRs, the team designed study materials and recruited Black women to participate in in-depth interviews and in two design-thinking workshops. Design thinking is an approach to problem-solving that challenges assumptions and focuses on empathy, iteration, and creativity. The process often uncovers solutions and strategies that are innovative and not initially apparent.

Over several months, the CRs conducted 16 in-depth interviews with Black pregnant and parenting (pregnant within the last five years) people in San Francisco. The CRs created an environment of safety and community which allowed interview participants to openly share their experiences and provided valuable insights for the design phase.

The ABP research team utilized a Rapid Assessment Process, a team-based approach to qualitative data analysis and sensemaking, to identify themes and synthesize the data from the interviews.

Some notable findings from this phase of research include:

- Housing insecurity is a major concern for many Black mothers in San Francisco. More than half of the interviewees experienced homelessness at some point in their lives. Many reported that the COVID-19 pandemic was increasing their concerns about housing.
- Pregnant and parenting Black people in San Francisco faced significant economic challenges due to San Francisco's high cost of living and financial exclusion. There's a gap for families who do not qualify for services because their income is too high, but who also struggle to meet their basic needs because they do not earn enough.
- Social service staff did not always represent the community they serve. While social services are usually helpful, many experienced stigmas when receiving them.

We trust Black mothers (and other Black birthing parents) as experts in their own lived experiences. Therefore, we felt it was important to use and center their expertise to design an effective income supplement pilot. We used the findings from the interviews to conduct two virtual design-thinking workshops. We had 15 participants in our workshops recruited from the sample of interview participants. The results of these workshops led to the development of our program prototype. This project required us to work to change societal narratives around deservedness. Early on, it was difficult to secure funding because funders were wary of giving Black mothers cash without conditions or restrictions. This reaction is not uncommon or unexpected. American politicians have long pushed a narrative of Black women as "welfare queens" who take advantage of public benefits programs. However, the data from the Economic Policy Institute shows that Black mothers on average work more hours per year than White or Latinx mothers.²¹ Still, many Americans hold a stereotype of Black mothers as lazy and irresponsible, and this narrative often serves as a justification for cutting benefits programs that are critical for families trapped in low-wage

²¹ Wilson, V. (2017). African American Women Stand Out As Working Moms Play a Larger Economic Role in Families. Working Economics Blog. *Economic Policy Institute*.

employment. To address these problematic narratives, the Abundant Birth Project and its partners have intentionally driven a narrative shift through media coverage of the project.^{22,23,24,25}

Birthing a New Paradigm

A cash supplement provided to Black mothers (and other Black birthing parents) during pregnancy could mitigate the health impacts of economic instability by directly giving mothers access to cash to meet their families' needs. It also recognizes that they should have the power and autonomy to make the best available choices for their families. Additionally, this policy could generate novel evidence and excitement about the impact of a pregnancy income supplement that is co-designed by community members. Finally, this policy could determine if programs aimed at modifying social determinants can impact individual health outcomes.

We believe this policy would not only narrow the racial disparities in birth outcomes, but it would also decrease stress levels during pregnancy, improve financial security during early childhood, improve breast-feeding rates, and create a sense of hope and well-being among recipients. In addition, this policy would acknowledge that racism is at the root of birth disparities and would shift the blame for bad birth outcomes away from individual Black mothers and onto the systems that create the fraught environments in which Black people must birth. Lastly, this pregnancy income supplement would begin to repair the economic harm created by centuries of racist and exploitative policies in this country.

The Abundant Birth Project is one of many pilot projects that test the effectiveness of a form of universal basic income (UBI). UBI experiments have been around for decades and have been tested across the world, but they remain controversial. For example, recipients of a monthly guaranteed income from the recently completed Stockton SEED pilot reported lower income volatility and increased ability to weather an unexpected expense.²⁶ Given that income is one of the most important social determinants of health, UBI programs can provide a path forward to addressing health inequities.²⁷ Past UBI experiments have demonstrated positive impacts on the health of participants as well as evidence of positive impact on pregnancy and birth outcomes.²⁶ We hope that the findings from the evaluation of the Abundant Birth Project will add to the evidence of the impact of UBI programs, specifically as a way to promote health equity in the Black community.

²² Mitchell, S. C. (2020, September 22). 150 lower-income pregnant Black and Pacific Islander women in San Francisco to get \$1,000 monthly. *CNN*. <https://edition.cnn.com/2020/09/21/us/san-francisco-abundant-birth-project-trnd/index.html>

²³ Bhattacharya, J. (2021, March 30). Want to Pass Guaranteed Income Policy in the U.S? Start With Black Women. *Ms. Magazine*. <https://msmagazine.com/2020/04/16/want-to-pass-guaranteed-income-policy-in-the-u-s-start-with-black-women/>

²⁴ Abrams, A., & Vesoulis, A. (2021, March 18). A San Francisco Experiment Will Give Some Pregnant Women \$1,000 a Month. Could Other Cities Be Next? *Time*. <https://time.com/5947417/guaranteed-income-pregnant-women/>

²⁵ Bhattacharya, J., Price, A., & Villarosa, A. (2021, May 10). Open Forum: Having kids is becoming a white privilege in California. *San Francisco Chronicle*. <https://www.sfchronicle.com/opinion/article/Open-Forum-Having-kids-is-becoming-a-white-16162934.php>

²⁶ West, S., Baker, A. C., Samra, S., & Coltrera, E. (2021). Preliminary analysis: SEED's first year. *Stockton, CA: Stockton Economic Empowerment Demonstration*, 500.

²⁷ Hasdell, R. (2020) What we know about Universal Basic Income: A cross-synthesis of reviews. Stanford, CA: Basic Income Lab.

No single solution will reverse this country's long history of anti-Black practices by government, financial institutions, and employers. Nevertheless, a paradigm shift is required to address maternal and infant health disparities, one which emphasizes upstream solutions rather than placing responsibility on the communities most affected by these structural issues. We believe a pregnancy income supplement for Black people can drive this shift and make it possible for every mother to have what they need for safe, healthy pregnancies.